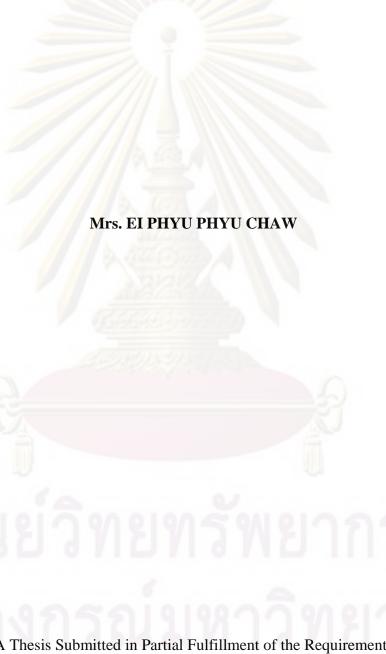
KNOWLEDGE, ATTITUDE AND PRACTICE OF COMBINED ORAL CONTRACEPTIVES (COCS) AMONG MYANMAR MIGRANT MARRIED WOMEN OF REPRODUCTIVE AGE AT RANONG PROVINCE IN THAILAND



A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Public Health Program in Public Health College of Public Health Sciences
Chulalongkorn University
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ความรู้ ทัศนคติ และการปฏิบัติตนในการใช้ยาเม็ดคุมกำเนิดชนิดฮอร์โมนรวมในสตรีวัยเจริญพันธุ์ ที่แต่งงานแล้วของผู้อพยพชาวพม่า ในจังหวัดระนอง ประเทศไทย

นางสาวอิ พยู พยู จอร์

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาสาธารณสุขศาสตรมหาบัณฑิต สาขาวิชาสาธารณสุขศาสตร์

> วิทยาลัยวิทยาศาสตร์สาธารณสุข จุฬาลงกรณ์มหาวิทยาลัย ปีการศึกษา 2552 ลิขสิทธิ์ของจุฬาลงกรณ์มหาวิทยาลัย

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Province In Thailand

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อิพยูพยู จอร์:กวามรู้ ทัศนกติ และการปฏิบัติ ...ในการใช้ยาเม็ดกุมกำเนิดชนิดขอร์โมน รวมในสครีวัยเจริญพันธุ์ที่แต่งงานแล้วของผู้อพยพชาวพม่าในจังหวัดระนอง ประเทศไทย (KNOWLEDGE, ATTITUDE AND PRACTICE OF COMBINED ORAL CONTRACEPTIVES (COCS) AMONG MYANMAR MIGRANT MARRIED WOMEN OF REPRODUCTIVE AGE AT RANONG PROVINCE IN THAILAND) อ. ที่ปรึกษาวิทยานิพนธ์หลัก: ศาสตราจารย์ นายแพทย์สรุศักดิ์ ฐานีพานิชสกุล, 101 หน้า

การศึกษาภาคตัดขวางนี้ศึกษาความรู้ทัศนกติและการปฏิบัติตนในการใช้ยาเม็ดคุมกำเนิด ชนิดฮอร์โมนรวมในแรงงานข้ามชาคิหญิงวัยเจริญพันธุ์ที่แต่งงานแล้วชาวพม่าที่อาศัยอยู่ในอำเภอ เมือง จังหวัคระนอง ปร<mark>ะเทศไทย โดยการใช้แบบสอบถามกับกลุ่มคั</mark>วอย่าง จำนวน 300 ราย ในช่วง เคือนกุมภาพันธ์2553 จากการศึกษาพบว่า ร้อยละ 50.4 มีการใช้ยาเม็ดคุมกำเนิดชนิดฮอร์โมนรวม (COCs) เหตุผลที่สำคัญในการเลือกใช้คือ การแนะนำจากเพื่อนและบุคลากรวางแผนครอบครัว และการตัดสินใจใช้นั้นพบว่ามากกว่าครึ่งตัดสินใจที่จะใช้ COCs ด้วยตัวเอง ผู้คอบแบบสอบถาม ส่วนใหญ่มีความพึงพอใจต่อข้อมูลที่ได้รับเกี่ยวกับ COCs เนื่องจากการให้ข้อมูลอย่างเป็นกันเอง และเป็นข้อมูลที่ประสิทธิภาพในค้านความค้องการเกี่ยวกับการวางแผนครอบครัว และการใช้ยา คุมกำเนิดพบว่า ผู้ตอบรายง<mark>า</mark>นต้องการให้มีกลินิกบริการการวางแผนครอบครัว และด้องการข้อมูล เพิ่มเติมเกี่ยวกับการวางแผนครอบครัว ร้อยละ 50.2 ของผู้คอบมือายุ ระหว่าง 20-29 ปี ในค้านการ เข้าถึงบริการพบว่าร้อยละ 45.4 มีการซื้อ COCs จากร้านขายยา ร้อยละ 98.9 สามารถที่จะจ่ายเงิน ชื่อยาชนิครับประทานได้ ร้อยละ 88.9 มีความพึงพอใจต่อบริการที่ได้รับค้านความรู้ ทัศกติ เกี่ยวกับ COCs พบว่าร้อยละ 52.2 มีความรู้ในระคับค่ำ ในขณะที่เพียงร้อยละ 6.4 มีความรู้ใน ระคับสูง ร้อยละ 68.6 มีทัศนุกติระคับกลาง ร้อยละ19.3 มีทัศนุกติในเชิงบวก ร้อยละ12.1 มีทัศนุกติ ในเชิงลบ ในกลุ่มตัวแปรอิสระพบว่า กลุ่มอาชุระดับการศึกษา สถานที่อยู่ การเดินทาง และความ สะควกในการซื้อมีความสัมพันธ์กับความรู้ในการใช้ COCs อย่างไรก็ตามระยะห่างจากแหล่งที่ขาย COCs มีความสัมพันธ์กับทัศนคติต่อการใช้ COCs กลุ่มอายุ อาชีพ จำนวนบุตร ระยะเวลา ที่อาศัย อยู่ในประเทศไทย และระยะห่างจากแหล่งบริการ COCs มีความสัมพันธ์กับการใช้ COCs ความรู้ เกี่ยวกับ COCsไม่มีความสัมพันธ์ ถึงแม้ว่าทัศนคติค่อการใช้ COCs จะมีความสัมพันธ์กับการใช้ COCs อย่างมีนัยสาคัญก็ตาม

สาขาวิชา <u>สาธารณสุขศาสตร์</u>	_ลายมือชื่อนิสิค	Shyuchan	
ปีการศึกษา <u>2552</u>	ลายมือชื่อ อ.ที่ปรึก	าษาวิทยานีพนธ์หลัก <u>Հ๛</u>	n.

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KEYWORDS: COMBINED ORAL CONTRACEPTIVES/ KNOWLEDGE/ ATTITUDE/ PRACTICE/ MYANMAR MIGRANT WOMEN/ RANONG PROVINCE / REPRODUCTIVE AGE

EI PHYU PHYU CHAW: KNOWLEDGE, ATTITUDE AND PRACTICE OF COMBINED ORAL CONTRACEPTIVES (COCS) AMONG MYANMAR MIGRANT MARRIED WOMEN OF REPRODUCTIVE AGE AT RANONG PROVINCE IN THAILAND. THESIS ADVISOR: PROF. SURASAK TANEEPANICHSAKUL, M.D., , 101 pp.

This study is cross sectional study and was collected in Muang District in Ranong Province in February, 2010. 300 Myanmar migrant married women of reproductive age were asked by using structured questionnaire. This study resulted that the practice of combined oral contraceptives usage was 50.4 % among Myanmar migrant married women of reproductive age in Muang District, Ranong Province.

Majority50.2 % of the respondents were distributed in the age group of 20 to 29 years. In terms of accessibility, 45.4 % of the respondent got COCs from drug stores. 98.9 % of women could afford combined oral contraceptives and 88.9 % of them also satisfied the service they got. In terms of knowledge and attitude towards COCs, 53.2 % of them had low level of knowledge while 6.4 % had high level of knowledge of COCs. 68.6 % of the respondents in this study had moderate attitude towards COCs.

Among the independent variables, age group and education level, places, transportation and convenience to get COCs were related with the knowledge of COCs. The respondents' educational level, registration status and availability of COCs except distance away from the sources were associated with attitude towards COCs. Age group, occupation, number of living children, duration of stay in Thailand and distance away from the sources of COCs had relationship with practice of COCs among Myanmar migrant women. Knowledge of COCs was not related with the practice of COCs although attitude towards COCs had relationship with the practice of COCs significantly.

Field of Study: PUBLIC HEALTH

Student's Signature.

Academic Year: 2009 Advisor's Signature

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LIST OF ABBREVIATIONS

ARCM Asian Research Center for Migration

CCSDPT Committee for Coordination of Services to Displaced Persons

in Thailand

COCS Combined Oral Contraceptives

CPR Contraceptive Prevalence Rate

FHI Family Health International

IOM International Organization for Migration

IUCD Intrauterine contraceptive device

MICS Thailand Multiple Indicator Cluster Survey

MOIP Ministry of immigration and population

MOPH Ministry of Public Health

SEARO South East Asia Regional Office

UN United Nations

UNFPA United Nations Population Fund

WHO World Health Organization

WVFT World Vision Foundation Thailand

CHAPTER I

INTRODUCTION

1.1. Background

World Population

The world's population has doubled its size over the past forty years, reaching six billions in 1999. Rapid population growth strains essential resources and impedes economic progress in developing countries (WHO, 2000). The pattern of fertility decline in the next decades is critical in shaping the ultimate size of the world population. A significant increase in contraceptive prevalence is an important factor in fertility decline (UN, 1999).

Migration

Migration is a multifaceted and complex global issue which happens in every country all over the world. Since 2000, the migrant population is dramatically increasing in Thailand. Registered migrant population is 1,280,053, registered camp population is 120,853 and estimated non-registered migrant population is more than 1 million. In this migrant population, women take large proportion which comprises 48.32 per cent (MoPH, 2005). They were employed in jobs typically shunned by Thai workers (i.e., as workers in fisheries, warehouses, small factories and restaurants/bars). Myanmar women, on the other hand, were working as domestic workers or sex workers. Generally, migrant population as a whole is vulnerable group of engaging risky behaviors. Most of them live under stressful conditions such as poor housing, poor working conditions, and absence of welfare benefits. Moreover, many migrant people cannot have access to the primary health care, antenatal care nor family planning services (Stern, 1998).

Reproductive Health

Worldwide

As the global community focuses on achieving the Millennium Development Goals in 2015, improvements in sexual and reproductive health will constitute an essential foundation for these efforts. Contraception is an integral part of reproductive health and contraceptive use is an important determinant of the level of fertility. The increase in contraceptive practice reflects the growing desire of couples to have birth spacing and limit their family size (MOIP, 2002). In recent decades, enormous strides have been made in the development of safer and more effective contraceptives, and in the provision of affordable and accessible family planning services. Yet still estimated 123 million couples, mainly in developing countries do not use contraceptives, despite wanting to space or limit their childbearing. In addition, there are up to 27 million unintended pregnancies each year among people who use contraceptives, and some 300 million couples are dissatisfied with the methods they use (WHO, 2004).

Unmet need is conventionally defined as the percentage of women in marital or consensual unions who (or whose partners) are not using any contraceptive method even though they are at risk of conceiving (that is, are sexually active, fecund, not currently pregnant) and do not want to be pregnant any time soon. If unmet need for contraception were met, it is estimated that maternal mortality would drop by 20 to 35 percent. These unmet needs for contraception are the major cause of unwanted pregnancies which in turn causes 13 percent of maternal deaths worldwide due to unsafe abortion. Women with smaller, healthier families are likely to have increased opportunities for participation in educational, economic, and women' status is a dynamic one: improving women's educational and economic opportunities can also have an important impact on the acceptability and use of contraception. (WHO, 1995)

Thai

Thailand's family planning program has been very successful. In the year 2001, it was found that 79.2 percent of women in their fertility ages had adopted family planning. However, there is still a high unmet need for contraception among young people, with 46.8 per cent of induced abortions reported in Thai hospitals occurring among women younger than 25. Contraceptive use is also low among members of hill tribes, crossborder migrants and people living in remote areas and in the southernmost provinces (UNFPA, 2006).

Myanmar

In 2005, total population in Myanmar is 50.5 millions and the population growth rate is 1.14 per cent. Maternal mortality rate is decreased from 580 per 100,000 live births in 1990 to 360 per 100,000 live births in 2000 (WHO, 2006). But it is still higher in Myanmar compared to the neighboring countries in South-East Asia. The leading cause of maternal mortality is abortion which is illegal in Myanmar and 50 per cent of maternal death and 20 per cent of hospital admission resulting from complications of unsafe abortion (WHO, 2007).

In 2001, the contraceptive prevalence rate for any method including traditional methods is 37 per cent (UN, 2005). The pills is the second most used method and contributed 8.6% among all contraceptive methods used by married women in Myanmar. Despite of increasing use of contraception, the unmet need for birth spacing remains significant with the total 20% of married women wants to use contraception for either to limit their births or to delay their next pregnancy (WHO, 2007). This suggests to the lack of acceptable long-term methods of contraception. The main constraints are lack of information about reproductive health, limited resources and social and cultural barriers. There are several underlying causes of high maternal mortality such as lack of knowledge and awareness, difficult access to the health care facilities and family planning service, unsatisfactory care and lack of proper referral (WHO, 2007).

Border Area, Ranong Province

In Thai-Myanmar border area, annual growth rate of population is 10.1% and crude birth rate is 31.5 per thousand live births which are higher than those rates not only in Thailand but also in Myanmar (CCSDPT, 2006). Despite increasing utilization of birth contraception, the rate of abortion in border area is increased from 39.29 per thousand live births in 2004 to 82.83 per thousand live births in 2006 (CCSDPT, 2006) as consequences of increasing migration and low utilization of contraception. Thailand Ministry of Health has recorded the rate of abortion in Myanmar migrant women is 2.4 times higher than that of local Thai population (Belton & Maung, 2007).

Ranong Province is located on the southwest coast of Thailand adjacent to the southern town of Myanmar, Kawthaung. The population of Ranong is 170,000 and the number of migrants varies from 40,000 to 100,000 depending on the economy (ARCM, 2000). Women represented approximately 38 percent of the official migrant workforce in 2000, while others worked unofficially in commercial sex work or traveled with their families and were not employed (ARCM, 2000) Proportion of appropriate birth spacing practice among Myanmar migrant women in Ranong is 79.2% (Soe, 2009). However, only 18,203 of approximately 60,000 migrants had insurance to cover health care costs. The MOPH reported that it was unable to reach the migrants because too few are insured and its overall budget is inadequate (ARCM, 2000). Migrants primarily access the World Vision clinic for outpatient/preventive care such as vaccinations, antenatal care and contraceptives for those who request them. Most people who are sick go directly to the hospital and some migrants are referred by World Vision Clinics. If migrants were registered it cost them 30 baht for care at the hospital, and if not they had to pay for services (Naing, 2003).

1.2. Rationale

Health problems in migrant workers are not only problems of infectious diseases but also the problems of reproductive health that the authorities should pay attention. Reproductive health of migrants has been mentioned often but studied little, although it is related to the life cycle of every people especially women and it has impact on health in every aspect.

In Ranong, 64.4 percent of women who are married or in union use contraception which is still less than targeted contraceptive prevalence rate. Regarding contraceptive method of choice in Ranong, the most popular modern method is pills (25.1 percent), followed by female sterilization (16.1 percent), and injections (12.6 percent). (MICS, 2006) However, regarding the Myanmar migrant reproductive health, appropriate birth spacing practice was 79.2% and contraceptive method of choice of Myanmar migrant women were 34.1 % for OC pills and 40% for Depo injection (Soe, 2009).

In this research, the emphasis is on the combined oral contraceptives because combined oral contraceptives method is the most popular method among the modern contraceptives methods and second most common methods of choice among Myanmar migrant women in Ranong. Besides, it is the most effective and easiest way among birth spacing methods by self healthcare services. It also saves time consumption for both users and healthcare providers.

Some studies has been done on reproductive health of Myanmar migrant women in provinces such as Tak, Ranong, Samut Sakorn and Kanchanaburi, and migrant camp areas in Thailand-Myanmar border, but still little has known details about combined oral contraceptive usage among Myanmar migrants women in Ranong province in recent years. Therefore, the knowledge, attitude and practice of combined oral contraceptives usage among Myanmar married migrants of reproductive age at Ranong province in Thailand is conducted for my research to determine the current situations concerning reproductive health in Thai- Myanmar border area.

1.3. Research question

- 1. What are the knowledge, attitude and practice of combined oral contraceptive usage among Myanmar migrant married women of reproductive age at Ranong province in Thailand?
- 2. What are the factors related to the knowledge, attitude and practice of combined oral contraceptives usage among Myanmar migrant married women of reproductive age at Ranong province in Thailand?

1.4. Research objectives

General Objective

To determine the knowledge, attitude and practice of combined oral contraceptive usage among Myanmar migrant married women of reproductive age at Ranong province in Thailand.

Specific Objectives

- 1. to determine the knowledge related to combined oral contraceptives
- 2. to determine attitude towards to combined oral contraceptives
- 3. to determine practice of combined oral contraceptives usage
- 4. to examine the relationship between socio-demographic, external factors and knowledge, attitude, practice of COCs among Myanmar migrant married women
- 5. to provide base line information about combined oral contraceptive usage among Myanmar migrant women for health authorities for further promoting contraceptive usage and family planning knowledge to Myanmar migrant women.

Conceptual Framework

Independent variables

Dependent variables

Socio-demographic

Factors

- -age
- -education
- -occupation
- -family income
- -number of living children
- -desired number of children
- -duration of stay in

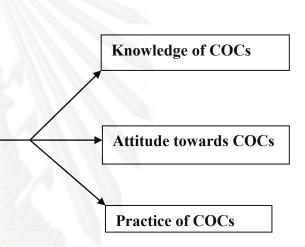
Thailand

- -registration status
- -Thai language skills

External factors

- -information support from
- health centers
- -availability of COCs
- -convenience to get the

COCs



1.5. Variables

Independent Variables

Socio-demographic Factors

- -age
- -education
- -occupation
- -family income
- -number of living children
- -desired number of children
- -duration of stay in Thailand
- -registration status
- -Thai language skills

External factors

- -information support from health centers
- -availability of COCs
- -convenience to get the COCs

Dependent Variables

- -Knowledge on COCs
- -Attitude towards COCs
- -Practice of COCs

1.6. Operational Definitions

In this study, the operational definitions of the terms used refer to the following:

Migrants: It refers to a person who moves from one place to another so as to find work by Concise Oxford English Dictionary.

Myanmar migrant women: in this study, this refers to Myanmar women who come from Myanmar to Thailand either to work or as dependent and staying in Ranong Province at the time of study.

Married women refer to women who married by law or culturally to become men's partners in marriage.

Women of reproductive age or Women of child bearing age: This refers to all women aged 15 to 49 years by World Health Organization (WHO).

Combined Oral Contraceptives: it refers to Combined Oral Contraceptive Pill (COCP), often referred to as the birth-control pill, or simply "the pill", is a birth control method that includes a combination of an estrogen (oestrogen) and a progestin (progestogen), hormones like those in a woman's body (Trussell, 2007).

Combined Oral Contraceptive current use refers to the using of combined oral contraceptive pills by the respondents at the time of interview with or without gap in the course of using from the last uptake.

Combined Oral Contraceptive ever use refers to ever used of COCs by the respondents in her life time but not using them currently.

Practice of combined oral contraceptive use: it refers to the respondent's customary habit of the continuous use of COCs within last six months until the time of interview without interrupted.

No Practice refers to the respondent did not have continuous use of COCs within last six months until the time of interview without interrupted.

Age refers to the respondent's age in years at the time of interview. It was grouped into: (15-19), (20-29), (30-39), (40-49).

Educational Level refers to the respondent's highest formal educational attainment. It is classified into 5 groups as never go to school, primary school level (1-4 yrs of school age), secondary school level (5-8 yrs of school age), high school level (9-10 yrs) and higher education.

Occupation refers to the respondent's type of work (whether get earning or not). It is divided into 6 groups: fishery related worker, construction worker, general worker, factory worker, housewife, and others.

Family income refers to the monthly total family earning: This is grouped into: (<5,000 baht), (5,000-10,000 baht), and (>10,000 baht).

Number of living children refers to the number of living children the respondent has. This would be classified into: 0, 1, 2 and ≥ 3 .

Desired number of children refers to the number of children the respondent would like to have if she has the opportunity to choose. This is divided into: 0, 1, 2 and ≥ 3 .

Duration of stay in Thailand refers to the length of time the respondent has been staying in Thailand at the time of interview. This is divided into ≤ 3 year and ≥ 3 year.

Registration Status refers to the status of respondents whether they are legally registered as migrant workers or not.

Thai Language skills is categorized into 4 categories which are cannot communicate at all, can communicate basically, can speak fluently but cannot read and write, and fluently in Thai language.

Knowledge on COCs: In this study, knowledge of COCs refers to the respondent's ability to explain or indicate about COCs. It is included the general usage, benefits and side-effects and complications of COCs. It is indicated by the total score obtaining from responding knowledge questionnaire. The score was 1 for correct answer and 0 for incorrect answer. The level of knowledge was classified into following three groups - High knowledge $:\geq 80\%$ of total score $(\geq 16 \text{ score})$

- Moderate knowledge : between 80% to 60% (16 to 12 score)

- Low knowledge : < 60% of total score (< 12 score)

Attitude towards COCs use: it refers to the respondent's opinion of agreement or disagreement to the statement concerning COCs to delay next pregnancy or to limit her births. This variable is also assessed in 3 categories such as agree, disagree and uncertain according to 3 point Likert scale (McDowel & Newell, 1996). The attitude part consists

of 10 questions and the questions are mixed as both negative and positive aspects. For positive questions, the score was given 3 for agree, 2 uncertain, 1 for disagree. For negative questions, the score was given 3 for disagree, 2 for uncertain and 1 for agree. It is indicated by the total score obtaining from responding attitude questionnaire. For 10 items, possible score was range from 10 to 30. The standard point for the attitude was mean \pm standard deviation. The score \leq mean - standard deviation refers to negative attitude. The score \geq mean + standard deviation refers to positive attitude and the score within mean + standard deviation and mean - standard deviation refers to moderate attitude (Soe, 2007).

External factors

In this study, it refers to the outside factors that might have influence on the use combined oral contraceptive by migrant women. They are subdivided into the following:

Availability of combined oral contraceptives: it refers in this study to places to get COCs, distance away from sources and transportation to get COCs. Places to get COCs are divided into drug store, government clinic, NGO clinic, private clinic and others. Distance away from sources is categorized into too far, not too far and near according to their perceptive. Transportation to get COCs is differentiated into walking, public vehicle, private vehicle and ask someone to buy and others.

Convenience to get the contraceptive: it refers to convenience of women to go to the place where she can get the combined oral contraceptives. It is divided into yes and no.

Information support from health centers: it refers to where does the respondent has received information on family planning and contraception from health centers or not. It is divided into health centers and other than health centers.

CHAPTER II

REVIEW OF LITERATURE

The history and context of background theory and its application in this study, history of family planning and contraceptive use, and relevant papers on oral contraceptives usage all over the world especially in Asian countries were reviewed. From the literature review in relevant concepts, theories and research papers about contraceptive use, it is found that there were only few papers studied focus only on oral contraceptive use, and most of them were generalized to all methods, and some of them were dated back to 1980s.

2.1. Background Theory

2.1.1. Review on family planning history and contraceptive use worldwide

The world population will likely increase by 2.5 billion over the next 43 years passing from the current 6.7 billion to 9.2 billion in 2050 (UN, 2006). Fertility is one of the determining factors of the future population size, compositions and structure. The past and present use of contraception influence fertility trends (MOIP, 2002). During the first part of the 20th century, family planning focused on the need of married couples to space children and limit family size. In 1960, the era of modern contraception began when both the birth control pill and intrauterine device (IUD) became available. These effective and convenient methods resulted in widespread changes in birth control. By 1965, the pill had become the most popular birth control method, followed by the condom and contraceptive sterilization.

2.1.2. Combined Oral Contraceptive Pills

Combined Oral Contraceptive Pills (COCs) are the most common used form of hormonal contraception, with 70 million users worldwide (IPPF, 1997). According to Health Encyclopedia, oral contraceptives are the most widely use method of reversible birth control. OCs is one of the best methods of contraception with a failure rate of 0.1–0.4 per 100 woman—years of use. In most developing countries, low-dose OCs is widely

accessible and acceptable and there is considerable evidence of their safety (Shah, 2009). The contraceptive effect of OCs is reversible: when pills are discontinued, fertility returns quickly, making them ideal for delaying and spacing pregnancies (FHI, 2003). Young women were interested in learning more about oral contraceptives, including not only how to use them but also what their immediate and long-term side-effects were. Most of the women were very concerned about the impact of oral contraceptives on their health and future reproductive capacity.

The Combined Oral Contraceptive Pill (COCP), often referred to as the birthcontrol pill, or simply "the pill", is a birth control method that includes a combination of an estrogen (oestrogen) and a progestin (progestogen), hormones like those in a woman's body. When taken by mouth every day, these pills inhibit normal female fertility (Trussell, 2007). They were first approved for contraceptive use in the United States in 1960, and are a very popular form of birth control. They are currently used by more than 100 million women worldwide (Mosher et al., 2004). Combined oral contraceptive pills should be taken at the same time each day. If one or more tablets are forgotten for more than 12 hours, contraceptive protection was reduced. Most brands of combined pills are packaged in one of two different packet sizes, with days marked off for a 28 day cycle. For the 21-pill packet, a pill is consumed daily for three weeks, followed by a week of no pills. For the 28-pill packet, 21 pills are taken, followed by week of placebo or sugar pills. A woman on the pill will have a withdrawal bleed sometime during the placebo week, and is still protected from pregnancy during this week. There are also two newer combination birth control pills such as Yaz 28 and Loestrin 24 Fe that have 24 days of active hormone pills, followed by 4 days of placebo. The placebo pills allow the user to take a pill every day; remaining in the daily habit even during the week without hormones. Placebo pills may contain an iron supplement, as iron requirements increase during menstruation. The withdrawal bleeding that occurs during the break from active pills was thought to be comforting, as a physical confirmation of not being pregnant.

The effectiveness of COCs, as of most forms of contraception, can be assessed two ways. Perfect use or method effectiveness rates only include people who take the pills consistently and correctly. Actual use or typical use effectiveness rates are of all COC users, including those who take the pills incorrectly, inconsistently, or both. The typical use pregnancy rate among COCP users varies depending on the population being studied, ranging from 2-8% per year. The perfect use pregnancy rate of COCPs is 0.3% per year. COCs provide effective contraception from the very first pill if started within five days of the beginning of the menstrual cycle.

There are three main areas of possible adverse effects which are circulatory disease, liver disease and adverse effects on some cancers and contraindications to COCs are related to these effects. The potential side effects are alteration in the menstrual pattern, breast tenderness, depression, nausea or vomiting, headaches, vaginal discharge, melasma and teratogenicity but these side effects are not concerned only due to COCs but also to the other factors (IPPF, 1997). A 2000 British review article concluded there is no evidence that modern low-dose pills cause weight gain, but that fear of weight gain contributed to poor compliance in taking the Pill and subsequent unintended pregnancy, especially among adolescents. No evidence was found that oral contraceptives cause weight gain (FHI, 2006). Current medical reference textbooks on contraception and major organizations such as the American ACOG, the WHO, and the United Kingdom's RCOG agree that current evidence indicates low-dose combined oral contraceptives are unlikely to increase the risk of depression, and unlikely to worsen the condition in women that are currently depressed. The use of oral contraceptives (birth control pills) for five years or more decreases the risk of ovarian cancer in later life by 50%. Combined oral contraceptive use reduces the risk of ovarian cancer by 40% and the risk of endometrial cancer by 50% compared to never users. The risk reduction increases with duration of use, with an 80% reduction in risk for both ovarian and endometrial cancer with use for more than 10 years. The risk reduction for both ovarian and endometrial cancer persists for at least 20 years. Taking oral contraceptives also reduces the risk of colorectal cancer, and improves conditions such as pelvic inflammatory disease, dysmenorrhea, premenstrual syndrome, and acne.

The facts that clients should know how to use the pills are important. The clients should take one pill each day. If she miss active pills 1 day or 2 days in a row or start a pack 1 or 2 days late, she should take a pill as soon as she remember and continue taking 1 pill each day. There is no need for additional contraceptive protection. If she miss 3 or more active pills in a row or start a pack 3 or more days late, she should take a pill as soon as possible, continue taking 1 pill each day, and use condoms or avoid sex for the next 7 days. In addition, if she missed these pills in week 3, finish the active pills in the pack and start a new pack. If she missed these pills in the first week of a new pack and had unprotected sex, consider using emergency contraception. If she miss any reminder pills, throw away the missed pills and continue taking pills, 1 each day. Some COC users experience side effects. Side effects are not harmful or signs of illness, and they often go away after about three months. The most common side effects are headaches, dizziness, nausea, breakthrough bleeding or spotting, breast tenderness, mood changes, weight change, amenorrhea. Complications are rare. Counseling is needed for the client to return immediately if she experiences the following symptoms such as abdominal pain (sharp), chest pain (severe), headache (severe), eye problems (blurred vision, brief loss of vision), sharp leg pain and instruct the client to stop taking pills, use a backup method, and return to the clinic immediately. COCs do not offer protection from STIs including HIV (FHI, 2009).

Although it is the policy of most countries to encourage contraceptive use, not all have provided support or allocated the necessary resources to family planning services. As a result, many women who want to stop having children or to delay their next birth are not using effective methods of contraception. In spite of a variety of temporary contraceptive methods available for fertility regulation, the decision about its use and the method to choose is likely to be heavily influenced by various factors. These factors range from personal characteristics to behavioral factors like attitude and practice. Factors that take an account on individual's decision concerning practice and choice of contraception includes age, parity, age of youngest child, reproductive intentions (spacing or termination of childbearing), relationship with partner, influence of other person in

decision-making process, importance of method convenience, and user's familiarity and level of comfort with her or his body and reproductive system (UNFPA, 2001) The major determinants of contraceptive use vary largely across regions and cultural environments. Hence, in this study, only the selected factors which are important to Myanmar women according to previous literature are included. This chapter reviews the findings from previous studies on some selected factors which may trigger the oral contraceptive use such as socio-demographic characteristics, knowledge of combined oral contraceptive methods, attitude and practice of combined oral contraceptive use.

2.2. Review on relevant studies

2.2.1 Oral Contraceptive use

The oral contraceptive used percentage is the highest in the study in Iran (Tehrani et al., 2001). The oral contraceptive method is the highest percentage (99.1%) among the contraception methods which Myanmar migrant women heard. The OC pill is the second highest prevalence rate used by Myanmar migrant women by the study of Soe (2009). The studies of Soe (2007) and Phyu (2008) also found the same result. Regarding contraceptive method of choice in Ranong, Thailand, 62.3 percent of married women in Ranong use modern methods and the most popular modern method is oral contraceptive (25.1 percent), followed by female sterilization (16.1 percent), and injections (12.6 percent)(MICS, 2006). Regarding the Myanmar migrant reproductive health, appropriate birth spacing practice was 79.2% and contraceptive method of choice of Myanmar migrant women in Ranong were 34.1 % for OC pills and 40% for Depo-Provera injection(Soe, 2009).

2.2.2 Socio-demographic factors

Age

Age of the women is one of the important factors to influence contraceptive use. Couples who are in their early years are less likely to use contraceptive when fecundity is low. Oral contraceptives use among women aged between 25 and 35 was about double that of women in the age groups 15-24 and 36-49 years (Thang & Huong, 2001). Phyu (2007) support that the older the age group, the lesser the tendency to use the contraception. In Myanmar, survey in the rural area by Wai (1995) revealed that >20% of women between 25-39 years used contraception, while only <20% of women who were under 25 and more than 40 years were using contraception. Contraceptive use decreased with the increase in the age group which was statistically significant (Phyu, 2007). Although, the study result in Myanmar migrant women in Thailand by Win (2002) and Soe (2009) indicated that age is not related to contraceptive use. In Ranong, groups of married women aged 35-39 years (74.0 percent) and 40-44 years (74.0 percent) are the most likely to use contraception among all age groups(MICS, 2006) but in Myanmar migrant 15-24 years had most percentage of birth spacing by Soe (2009). In conclusion, most of the related studies showed that age of women is strongly associated with her contraceptive uptake with the peak age between 25 to 40 though some studies revealed no connection between these two variables.

Education

The relationship of education and fertility is complex and its total effect may act through several channels. Soe (2007) showed that there was significance difference between educational status of the migrant women and contraceptive use (p-value = 0.04). Khouangvichit (2002) found that in Lao PDR, the women's education has a strong significant effect on contraceptive with women who had primary and higher education were predicted to use contraception 2 times higher than who had no education. It is consistent with other surveys in Bangladesh by Parveen (2000) and in Pakistan by Hakin et al(2003). There was also consistent positive association in Myanmar by Wai (1995) and in Ethiopia (p=.0000) by Beekle and McCabe (2006). It was found by Koc (2000) in

Turkey that it revealed positive association between the educational level of both spouses and the use of contraceptive methods. On the other hand, there was no significant association between education level and contraceptive use by Vanhnolrath (2003) and so was in Myanmar migrants in Ranong by Soe (2009), and in Phuket by Phyu (2007). In Ranong Thailand, 67.0 percent of women who have a secondary education level or higher use contraception (MICS, 2006). As a general rule, it is fair to conclude that the higher the education of women, the higher the contraceptive prevalence. This would be through having earned occupation and higher knowledge level although this association cannot be proved among Myanmar migrants.

Occupation

In most developed countries, women's economic activity was positively related to fertility. Significant relationship between employment, education and desired fertility and fertility-related behavior is evident in many studies. These were proportionately low use of contraceptives among the currently working women in both Sri Lanka and Thailand survey by Tripathi (1996). It was similar in Myanmar by Wai (1995) as housewives were more favorable to use contraception than agricultural workers. Soe (2007) found that there was significance difference between housewife and working women and contraceptive use (p-value = 0.006). Housewives were more likely to use contraception (80.4%) than working women (67.4%). For this variable, there are some relationship between working women, housewives, and the knowledge, attitude and practice of contraceptive use but the association is completely reversed in many studies in different countries.

Family Income

The one who uses modern contraceptive is better in financial status than nonusers and users of traditional or natural methods. Economic factor is also one of the primary determinants of contraceptive practice. Among low-income postpartum Mexican women, household wealth was a determinant of contraceptive use (odds ratio=0.6) described by Barber (2007). But contraceptive use did not increase by income in the study in Myanmar migrants in Ranong by Soe (2009). The researcher stated that this was possibly because

the price of service was cheap or free of charge and everybody can access regardless of income. The same result was noticed in Myanmar migrants in Thailand by Phyu (2007). But Soe (2007) showed that there was no significance difference between income group and contraception use (p-value = 0.497). Still, a number of studies showed significant result in relation to income and contraceptive uptake. In Bhutan by Lhamu (2004), income was related to contraceptive use. In Ranong, 75.1 percent of women from wealthy households use contraception. (MICS, 2006)

Number of living children

The number of children the women have provides information on family size and it also plays an important role in determining whether or not to use contraception by the women. The study in Indonesia by Helweldery (2004) stated that regarding this issue, the use of modern contraception increases with the number of living children increases. In Tehran survey by Tehrani et al. (2001), the greater number of children reduced the estimated risk of not using contraception. The same pattern was noticed in Sri Lanka and Thailand with significantly increasing use in women with 4 or more children. However, in Lao PDR survey by Khouangvichit (2002), the number of living children had negatively significant effect on contraceptive use. The number of children would not increase the use of contraception. Phyu (2007) found that the percentage of use decreased steadily with the increased number of children alive they had. The same was noticed by Soe (2009) and Win (2002), in Myanmar migrants in Thailand. However, the study of Soe (2007) support that the use was increased with increasing number of living children From these studies, it can be generally said that the more children women have, the more likely they are to practice contraceptives even if this hypothesis is not true for Myanmar migrant women.

Desired number of children

In many studies, the ideal number of children in the respondent's social environment showed a strong association with contraceptive use. In a Peailueang (2002) study among immigrant women and native Thai women in Kanchanaburi Province, immigrants were more likely to intend to have more children (more than 2) than were

natives and, consequently, contraceptive prevalence was lower among immigrants. Similarly, Phyu (2007) found that desired family size seemed to play a more important role then present number of children in determination of contraceptive use for migrant women in Phuket.

Duration of stay in Thailand

The foreign migrant workers that had come to Thailand for a long time had more access to health care because they can speak local language more, and can receive better health information from Thai people. Among Myanmar migrant in Kanchanaburi Province, immigrants did not show any fertility adaptation pattern related to time spent in Thailand, stated by Peailueang (2002). It is also the same as in the study by Phyu (2007).

Thai language skills

The ability to communicate with local language stimulates the increase accessibility to get family planning services. The average time to learn local language is observed as 3 years by experts. However, in Traguldee (2000) study on Myanmar migrant female workers, there was no difference in reproductive self-care for family planning among married migrants of \leq 3 years and \geq 3 years. And Soe (2007) also shows that, there was no significance difference between language skill and contraception use.

Registration Status

The registration status of the Myanmar migrant women may affect the accessibility to get family planning services. Registered migrants can get government health care services and no need to avoid police arrest. But unregistered migrants are afraid of arrest by police when they go out for their health care. But Soe (2007)'s result shows that there was no significance difference between migrant status of the respondents and contraception use (p-value = 0.509). In Phyu (2007) study also shows the similar result that there is no association between registration status and the usage of contraceptives.

In conclusion, as these are findings from many studies indicating relationship between contraceptive use and various socio-demographic factors, in this study, the researchers try to find out if there is any association between knowledge, attitude, practice of combined oral contraceptive use and socio-demographic factors such as age, education, occupation, family income, number of living children, duration of stay in Thailand, Thai language skills and registration status of Myanmar migrant married women.

2.2.3 Knowledge about combined oral contraceptives (COCs)

Knowledge is defined by the Concise Oxford English dictionary as

1. Information and skills acquired through experience or education, the sum of what is known, Philosophy true, justified belief, as opposed to opinion.

2. Awareness or familiarity gained by experience.

Knowledge and use of contraception are the most commonly used indicators in assessing the success of family planning programs at all levels by national and international organizations. One would not make a practice of which he knows nothing about. We can say that knowledge is fundamental to practice or uptake of a certain behavior. Even though having knowledge about contraception is not the synonym of using it, it is the initial step in the process of practicing a certain health care behavior. Once a person has awareness on something, it is a preliminary sign of successive steps, attitude, perception, which can finally lead to practice or behavior. Consequently, success or failure in contraceptive use depends on how much people know about contraceptive methods. Among Congo women by Kayembe et al. (2006), teenagers were less knowledgeable of modern methods, while a noticeable proportion reported unwanted pregnancies, though this was not significant in multivariate analysis. In the study among Myanmar migrants in Thailand by Caouette and Pack (2002) showed that migrants had a significant increase in knowledge, access to and use of modern contraceptives in Thailand, than in Myanmar. Win (2002) also found high knowledge among migrant workers, and it was favorable to the use of contraception. Regarding knowledge of contraceptive methods and use by Soe (2009) and Soe (2007), there was significance difference between knowledge towards contraception and use of contraception. The use of contraception increased as the knowledge of contraception increased. To sum up, we can clearly obverse that knowledge plays an important role in whether a women use

contraception or not. In this study, if socio-demographic factors are related to the knowledge on oral contraceptive use and again the knowledge are included as one of the main variables to evaluate the level of this knowledge of Myanmar migrant women.

2.2.4 Attitude towards combined oral contraceptive (COCs)

An attitude is defined in business dictionary as predisposition or a tendency to respond positively or negatively towards a certain idea, object, person, or situation. Attitude influences an individual's choice of action, and responses to challenges, incentives, and rewards (together called stimuli). The attitude towards combined oral contraception is the important determinant of practicing COCs use. The one who had positive attitude towards COCs was more likely to use it than the one who had negative attitude. The study done among women seeking pregnancy tests in Missouri revealed that negative attitudes towards contraception have been found to influence contraceptive use and infrequent contraceptive users are more likely to have negative attitudes toward contraception, to worry about side effects(Sable et al., 1997). The study conducted in Myanmar migrant in Thailand showed that 48.6% of the respondents had a moderate level of attitude towards contraceptive use. There was not so different number of respondents between negative attitude and positive attitude, 25.3% and 26% respectively. There was no significant association between current use and level of attitude with pvalue 0.237 (Khaing, 2002). Similarly, Soe (2007) shows that there was no significance difference between attitude towards contraception and current use of contraception (pvalue = 0.435). But in Myanmar migrants in Ranong, Soe (2009) found that attitude and birth spacing were associated. Attitude is one behavioral factor that can influence the practice of COCs usage and the one with positive attitude towards COCs were more likely to use than the one with negative attitude towards combined oral contraceptive.

2.2.5 External Factors

External factors such as availability to health care service, convenience to get the combined oral contraception and information support from health centers are factors which have great influence on COCs use of women. In Pakistan, low quality of available

health care services or difficult in availability is the major factor for unmet need of contraceptive use by Pasha et al., 2001. Access to pills therefore may be a positive factor in pill promotion. Thus, the availability of pills and the distribution mechanism should both be examined, as the contraceptive distribution mechanism at the grassroots level will favor the promotion of the pill for contraceptive purposes. There was no significance difference between convenience to go to the source for getting contraception and current used of contraception (p-value = 0.476) by Soe (2007). Kayembe et al. (2006) said that advice from someone in Congo also gave rise to desired action. In addition, there were further evidence in Pakistan by Hakin et al. (2003) as well as by Pasha et al. (2003) as visit and information advice from health worker on contraceptives in past 12 month was the cause for using contraception. The same story was told in Mexico by Barber (2007) where women who received family planning information during prenatal care were significantly more likely to use contraceptive in postpartum period than were those who did not (odds ratio=2.2). In the study in Congo by Kayembe et al. (2006), it is found that those who have discussed contraception with someone during the past 12 months were 3 times more likely to be current users (adjusted OR=3.18, 95%CI=1.52-6.64). And also in Phyu (2007) study, there was statistically significant association between frequency of information got and contraceptive use (p=0.003). Migrant workers are mobile populations that have little free time, employers often fail to understand the health needs of their staff, the illegal status of some of the people make contacting them difficult and community attitudes can prevent discussion as well as the prohibitive cost of providing education and services. Because most of the migrant workers come to Thailand to work and provide their families left in Myanmar, they have to stand on their own feet no matter what happen here and support from family and friends is the one they even do not dare to imagine to obtain, and they dare not risk anything which will end up jobless. Depends on these findings in studies in Myanmar migrant workers, in this study, whether the external factors have any influence on their knowledge, attitude and practice of combined oral contraceptives in Myanmar migrant women was analyzed.

CHAPTER III

METHODOLOGY

3.1. Research Design

The research design is the quantitative, descriptive, cross-sectional study design. The data was collected by the face to face interviews to the individuals with the structured questionnaires.

3.2. Study Area

This study was taken placed in Muang District, Ranong Province, Thailand. There are five districts in Ranong Province as Muang Ranong, La-aun, Kapur, Kraburi, Suksamran. Muang district is also the heart of the local economy and commands significant influence over rest of the province (ARCM, 2000). Among the 9 sub-districts in Muang, the study was taken place in Paknum and Bangrin because most of the Myanmar migrants live in these two sub-districts.

3.3. Study Population

The population in this study was Myanmar migrant married women of reproductive age group between 15 to 49 years residing at Paknam and Bangrin sub-districts in Muang District, Ranong Province, Thailand. There were approximately 80,000 migrant workers and over 53,000 were registered Myanmar migrants in Muang District in 2007 according to Muang district health office, Ranong Province. The overwhelming majority of migrants were from Myanmar, primarily of Burman, and also Mon, Dawei, and to a lesser extent, Karen, descent. Myanmar tends to live in Myanmar communities and was not integrated with the local Thai population.

3.4. Sampling Technique

There are 5 districts in Ranong Province. But only Maung District was selected purposively as it is also the heart of the local economy and commands significant influence over rest of the province. Among the 9 sub-districts in Muang, Paknum and Bangrin were selected again intentionally because most of the Myanmar migrants live in these two sub-districts. For collecting the sample, simple random sampling method was used to interview married women of reproductive age (15- 49 years) who currently or ever used COCs residing at Paknam and Bangrain, Muang District, Ranong Province, Thailand due to the difficulty of producing a sampling frame as this population contains a mixture of both registered and unregistered migrants not being stable residents and not much information of the study population are available.

Inclusion criteria

- Myanmar migrant married women who are between reproductive age of 15-49 years and currently married status.
- Myanmar migrant married women who use COCs currently or had ever used COCs in her life time.
- Myanmar migrant women, who are mentally sound, want to give verbal consent and willing to participate.
- Myanmar migrant women who can speak Myanmar language fluently

Exclusion criteria

- Myanmar migrant women who have pregnancy at the time of interview
- Myanmar migrants women who are widows, divorced, separated and singled.
- Myanmar migrant women who are not mentally sound, who do not want to give verbal consent and not willing to participate.
- Myanmar migrant women who had hysterectomy and menopause although they are within reproductive age

3.5. Sample and sample size:

The sample size was calculated by the formula below:

$$N = \underline{Z^2 \alpha/2 p \times q}$$

d2

(Daniel W W, 8th edition)

n = minimum sample size

 α = level of significance = 0.05

 $Z^2\alpha/2$ = critical value for 95% confidence level = 1.96

d = error allowance = 0.05

p = proportion of targeted population estimated to have practice of oral

ontraception

= 25.1% = 0.251(Prevalence of oral contraceptive use in Ranong) (MICS, 2006)

$$q = 1 - p = 1 - 0.251 = 0.749$$

From above formula,

$$N = Z^2 \alpha / 2p \times q$$

 d^2

$$N = (1.96)^2 \times (0.251) \times (0.749)^2$$

 $(0.05)^2$

$$= 288.88$$

Total sample size = 289

Collected sample = 300

3.6. Measurement tools

The structured questionnaires were based on extensive literature review. Some standard questions were adopted from literature and some were constructed in support of the study's conceptual framework. The draft questionnaire was pre-tested prior to data collection.

In the questionnaires,

- Socio-demographic characteristics such as age, education, occupation, family income, number of living children, desired number of children, Duration of stay in Thailand, Registration status and Thai language skills
- external factors such as availability of COCs, convenience to get the COCs, information support from health centers
- Knowledge about combined oral contraceptives and its use, benefits, weakness and side-effects
- Attitude towards combined oral contraceptive use
- Current usage of combined oral contraceptive pills were asked.

3.7. Data Collection

After contacting with Muang District Health Office,Ranong and World Vision Clinic, Ranong, Migrant Health Volunteer (MHV) helped as the interviewers who were female of the same ethnic background. The researcher trained the interviewers before the data collection on study question, objectives, methodology, and questionnaires to reduce interviewer bias. The data was collected by the researcher and 5 trained interviewers by means of face to face interview to the sample of 300 married women in February 2010 in Muang District, Ranong Province, Thailand. The questionnaire was translated into Myanmar language. All the respondents were asked the same questionnaire. The researcher tried with the help of Migrant Health Volunteer (MHV) to find the women of reproductive age who have been used COCs as much as possible due to the difficulty of producing a sampling frame according to inclusion criteria of this study. The participants were approached at their households at their convenient time. After completion of

interview, the interviewer checked the error or the omission of interviewer and the questionnaire was checked by the researcher immediately after interview.

3.8. Data Analysis

Questionnaire was coded before entering the data to computer by the researcher. The sample database was checked by double entry. For data analysis, SPSS software was used. Descriptive statistic such as frequency, percentage, mean and standard deviation were used. In order to determine the relationship between the independent and dependent variables, Chi-square test and Fisher's exact test were used.

3.9. Ethical consideration

All participants' right to self-determination and autonomy were respected. The decision to participate or not, was not revealed to any local authorities. The participation was strictly voluntary. The interviewers explained the objectives, benefits of this study and procedure of the interview. The researcher translated the participant information sheet into Myanmar language and the interviewers read out the translated participant information sheet and obtain informed verbal consent from the respondents before starting interview because they may not able to read and write Myanmar language. No incentive was provided to avoid any favor of getting answer. The respondent could ask question to interviewer anytime she wants. The names of respondent were not recorded and data was coded. The respondents were feel free to participate or withdraw any time throughout the interview. Privacy was maintained throughout the interview. All the data were kept confidentially except for the further health education or implementation for migrant workers and none of the questionnaires could be traced back to the respondents.

3.10. Limitation

This study was done among Myanmar migrant women in Amphur Muang, Ranong Province only so that the findings could not be generalized to the whole Myanmar migrant population. Because of the time constraint, the study was based on the convenience due to the mobile population, there might be bias in this study. This study was the cross sectional study; it could not include the changes among migrant population over time.

3.11. Benefit of the Study

This study will provide base line information specific to combined oral contraceptive usage among Myanmar migrant women for health authorities for further promoting contraceptive usage and family planning knowledge to Myanmar migrant women.

3.12 Reliability and Validity

Reliability

Reliability is the consistency of a set of measurements or measuring instrument, often used to describe a test. The research questionnaires was pre-tested of its consistency by assessing the participants' understanding and time spending with a group of 30 married Myanmar migrant women who, hopefully, assumed to have more or less similar characteristics to the actual sample group. The reliability coefficient of this research tools was calculated using the Cronbach's Alpha Coefficient method and the value is 0.7.

Validity

The research instruments were presented to the research advisors and experts for assessment of its content, clarification and appropriate wording. Validity reflects whether the study questionnaire link to the objectives of the study logically by the research advisors and the experts for the scope and the criteria.

CHAPTER IV

RESULTS

This cross sectional study was done to assess the knowledge, attitude and practice of combined oral contraceptive usage among Myanmar migrant married women and the factors related to the knowledge, attitude and practice of combined oral contraceptives usage among Myanmar migrant married women of reproductive age at Ranong province in Thailand. The result of this study is divided into 6 parts.

- 4.1. The first part is the socio demographic characteristics of Myanmar migrant married women of reproductive age at Muang District, Ranong Province
- 4.2. The second part provides the practice of combined oral contraceptives (COCs)
- 4.3. The third part describes the knowledge of combined oral contraceptives (COCs)
- 4.4. The forth part shows the attitude of combined oral contraceptives (COCs)
- 4.5. The fifth part includes the external factors of combined oral contraceptives (COCs) usage
- 4.6. The relationship between socio-demographic, external factors and knowledge, attitude, practice of COCs among Myanmar migrant married women of reproductive age at Muang District, Ranong Province.

Initially total number of 300 women who met the inclusion criteria was recruited but after excluding those with invalid sample, valid 280 samples is left to be analyzed. Table1 shows that the number and percentage of respondents in each Sub-district. 49.29% of respondents were from Paknum Sub-district and the remaining 50.71% were from Bangrain Sub-district.

Table 1: Distribution of respondents by the places of study (n=280)

Places of study	Number	Percentage
Paknum	138	49.29 %
Bangrin	142	50.71 %
Total	280	100 %

4.1 Socio demographic characteristics

The socio-demographic characteristics of the respondents in this study are shown in Table 2. In order to form the general ideas of the population's characters, some socio-demographic characteristics are discussed here. These personal characteristics are age, education, occupation, family income, number of living children, desired number of children, duration of stay in Thailand, registration status and Thai language skills.

Age

Regarding the age, all the respondents were in their reproductive age which was one of the inclusion criteria, from the youngest 15 years to the oldest 49 years. The average mean age of the respondents was 27.35 years with the standard deviation of 7.143. Half of the respondents fell in the age group of 20 to 29 years of age with 28.6% of all followed by 30- 39 years of age group as the second largest group. The least was the women in the oldest age group 40-49 with only 6.4% of all and the teen age group was 14.3%.

Education

For educational level, 6.1% of respondent have never go to school and majority of respondents (43.6%) were in primary education and 38.2% finished secondary education. 10.7% of the respondents attained high school level and the least were higher education which is 1.4% only.

Occupation

Majority of the women surveyed (30.7%) were housewives. 28.9% were fishery related workers such as peeling of the shrimps and fishes and 4.3% were construction workers. 17.5 % of the women worked as general workers, 13.6 % of the women were engaged in factories. The remaining 5 % were shopkeepers, teachers, working in gardens, hotels and in NGOs.

Table 2: Socio-demographic characteristics of the respondents (n=280)

Variables	Number	Percentage
Age		
15-19 yrs	40	14.3 %
20-29 yrs	142	50.7 %
30-39 yrs	80	28.6 %
40-49 yrs	18	6.4 %
Mean± S.D	27.35 ± 7.143	
Education		
Never go to school	17	6.1 %
Primary	122	43.6 %
Secondary	107	38.2 %
High School	30	10.7 %
University	4	1.4 %
Occupation		
Fishery related worker	81	28.9 %
Construction workers	12	4.3 %
General workers	49	17.5 %
Factory workers	38	13.6 %
Housewife	86	30.7 %
Others	14	5.0 %
Family income per month		
≤5000 Baht	60	21.4 %
5000-10000 Baht	198	70.7 %
≥10000 Baht	22	7.9 %
Mean \pm S.D	7383 ± 2539	
Number of living children		
0	61	21.8 %
1 6 9 1 2 1 7 9 9 9	103	36.8 %
2	70	25.0 %
≥3	46	16.4 %
Mean ±S.D	1.4 ± 1.1	
Desired Number of children		
1 6 7 7 6	9	3.2 %
2	123	43.9 %
≥3	148	52.9 %
Mean ±S.D	2.7 ± 0.9	

Family income per month

The level of economic status of the respondents had been assessed on the basic of monthly total family income. Total monthly family income ranged from 2000 Baht to 18000 Baht. As they were working as laborer in various sectors, Majority 70.7 % of the women had monthly family income between 5000-10000 Baht and 24.4 % had income of < 5000 Baht and. Only 7.9 % had monthly family income > 10000 Baht.

Number of living children

The number of living children is an important factor for practice of contraceptive usage of migrant women. The average number of children among all participants was 1.36 which was much below compared with the Myanmar standard which was 3. The respondents who had no child were 21.8 % and those with 1 child were 36.8 % which is the most common. 25% had 2 living children and 16.4% had more than or equal to 3 children.

Desired number of children

The average number of children the respondents wanted to have is 2.5, much higher than the actual number of children they were now having, 1.36. What is interesting was that there were no women who did want to have any children. Over half of the respondents (52.9%) wanted to have 3 or more 3 children. A few (3.2 %) of women wanted only 1 child .43.9 % of women wanted 2 children. This shows that Myanmar women preferred a rather large family. The highest number of children a woman wanted to bear was 6 children.

Registration status

Majority of Myanmar migrant women in this study were registered and it comprised 90.4 %. The remaining was residing as unregistered migrant which occupied only 9.6 % of the respondents. (Table 3)

Table 3: Migrant specific characteristics of the respondents (n=280)

Variables	Number	Percentage
Registration status		
Registered	253	90.4 %
Unregistered	27	9.6 %
Duration of stay in Thailand		
<3 yrs	89	31.8 %
>3 yrs	191	68.2 %
Mean± S>D	5.4 ± 3.6	
Thai language skill		
Cannot communicate	82	29.3 %
Can communicate basically	147	52.5 %
Can speak Thai fluently but cannot read and write	47	16.8 %
Fluently in Thai language	4	1.4 %

Duration of stay in Thailand

Regarding the duration of stay in Thailand, about one third 31.8 % of the women stayed 3 years or less. The respondents who live more than 3 years were the remaining two thirds 68.2 %. The average length of stay in Thailand in this group of 280 women was 1.68 years with the range minimum of 5 months and maximum of 20 years.

Thai language skills

For Thai language skill, 52.5% of Myanmar migrant women in this study could communicate basically and 29.3% of them could not communicate at all. The rest of respondents 16.8 % were fluent in Thai language but only 1.4% could read and write Thai language. Table 3 shows migrant specific characteristics of the respondents.

4.2 Practice of combined oral contraceptives

The current combined oral contraceptive usage among Myanmar migrant women surveyed was 62.9 % and the rest was not using combined oral contraceptive currently at the time of survey but has ever been used in her life time which reveals 37.1 % of the respondents. Table 4 describes the COCs usage among the respondents.

Table 4: Combined oral contraceptive (COCs) usage among respondents (n=280)

Combined Oral Contraceptives usage	Number	Percentage
Current usage	176	62.9 %
Have ever been usage	104	37.1 %
Total	280	100 %

Among the current COCs users, the women who used COCs continuously within last six months until the time of interview without interrupted had the practice of COCs. The practice of combined oral contraception among Myanmar migrant women in Ranong Province was shown in table 5. The percentage of women of reproductive age who used COCs continuously within last six months until the time of interview without interrupted was 50.4%. The respondents who did not use COCs continuously within last six months until the time of interview without interrupted were no practice of COCs which was 49.6%.

Table 5: Practice of COCs among the respondents (n=280)

Caral Sanara	Number	Percentage
Practice of COCs (≥6 months used currently)	141	50.4 %
No practice	139	49.6 %
Total	280	100 %

Why the respondents who had ever been used COCs, did not continue use COCs currently was the interested part of this study. The following table 6 shows the

description of the reasons why they did not use COCs currently. Most of these women gave the reason of that they want more children which was 32.7 %. The second most common reason 17.3% was that they had suffered side effects of COCs such as dizziness, headache, nausea, vomiting and irregular menstrual bleeding. The other reasons 23.1 % were usage of other methods of contraception, having sterilization and forget to take the pills regularly which leads to the discontinuation and pregnancy.

Table 6: Reasons of not currently using combined oral contraceptives (COCs) (n= 104)

Reasons of not currently use	Number	Percentage
Want more children	34	32.7 %
Health reason	14	13.5 %
Suffer side effects	18	17.3 %
Husband away	7	6.7 %
Husband objects	7	6.7 %
Others	24	23.1 %
Total	104	100 %

Table 7 reveals the reasons for usage of combined oral contraceptives rather than some other method of family planning among current and ever users this study. The common two reasons for usage of COCs were recommendation of friends or relatives which was 25.4 % and recommendation of the family planning workers which provided 21.1 % of all the respondents. 15.4 % used because of easily available. The other reasons were convenience to use 8.9 %, husband preferred 8.6 %, cheap 7.9 %. The remaining 6.8% of women used because of the side effects of other methods. This result is due to the promotion of family planning among Myanmar migrants workers with the use of peer educators.

Table 7: Reasons for usage of combined oral contraceptives (n=280)

Reasons for usage	Number	Percentage	
Recommendation of family planning workers	59	21.1 %	
Recommendation of friends/Relatives	71	25.4 %	
Easily available	43	15.4 %	
Husband preferred	24	8.6 %	
Convenience to use	25	8.9 %	
Side effects of other methods	19	6.8 %	
Cheap	22	7.9 %	
Others	17	6.1 %	
Total	280	100 %	

With regard to the decision making for using combined oral contraception, 53.2 % of the respondents who were current users and ever users decided by the respondent herself for using of COCs. Among them, 38.9 % decided by both partner and 6.8 % decided by the respondents' husband/partner. A small proportion of 1.1% got the decision from other people such as friends and relatives. (Table 8)

Table 8: Decision making for using COCs among the respondents (n=280)

Decision makers	Number	percentage
Herself	(149	53.2 %
Her husband/partner	19	6.8 %
Both partners	109	38.9 %
Others	3	1.1 %
Total	280	100 %

4.3 Knowledge about combined oral contraceptives method

Knowledge is one of the important factors in women's decision making of contraceptives uptake. Without the proper knowledge, a woman could not know which kind of contraceptive would be suitable for her to use. In collecting the data on this part,

the respondents were first asked whether they had heard about combined oral contraceptives to prevent pregnancy. If they heard of that method, then, they were further asked how many kinds of COCs had they ever know. Table 9 describes the percentage of the respondents for kinds of COCs. 57.9 % knew 2-4 kinds of COCs whereas 35 % knew only one kind. Only 7.1 % knew more than four kinds.

Table 9: Kinds of combined oral contraceptives had ever known (n=280)

Kinds of COCs	Number	percentage
Only 1 kind	98	35 %
2 – 4 kinds	162	57.9 %
>4 kinds	20	7.1 %
Total	280	100 %

Then the respondents were further asked about how combined oral contraceptives can be used to prevent pregnancy, advantages, side effects, complication, contraindication that were not suitable to use, and affects on reproductive organ cancer. The knowledge about contraceptive methods consisted of 20 questions and the score was 1 for correct answer and 0 for incorrect or not sure answer. If the total score of the knowledge was more than or 80% (≥ 16), the person was noted as having high knowledge of COCs. Between 60% and 80% of total score (16-12) was noted as moderate knowledge and less than 60% (<12) of the total score was noted as low knowledge. The knowledge score ranged from 0 to 20. Half of the questions were positive questions mixed randomly with half negative questions.

Table 10: Levels of knowledge among Myanmar migrants women (n=280)

Level of knowledge	Number	percentage
Low knowledge	149	53.2 %
Moderate knowledge	113	40.4 %
High knowledge	18	6.4 %
Total	280	100

The knowledge of the respondents were assessed that the main proportion of women at 53.2 %was classified into low knowledge whereas 40.4 % had moderate knowledge and a few of them had high knowledge (6.4 %). Regarding the knowledge level of the respondents using COCs, it indicated noticeably that women with high knowledge of combined oral contraceptives were too little although 62.9 % of them were current COCs users and all of them had been used COCs in their life time. (Table 10)

Table 11 reveals that the number and percentage of Myanmar migrant women who answered correctly to each question. Majority of the women knew the benefits of combined oral contraception and they had knowledge about combined oral contraceptive methods to some extent. Most of them over 90 % had knowledge about COCs can reduce unwanted pregnancy. More than 80 % know its effectiveness of contraception and advantages of COCs. 76.4 % of the respondents could answer correctly for the negative question that using oral contraceptive pill can protect against sexually transmitted diseases (STDs) including HIV/AIDS. But A few 17.5 % knew that COCs can prevent the risk of endometrial and ovarian cancer.

Regarding to how to use COC, 94.3 % answered correctly that COCs should be taken a pill everyday to avoid becoming pregnant. 84.3 % and 80.4 % of the respondents could answer correctly to the questions that COCs can be taken at any time daily and it is important to understand how to do if women miss the pills respectively.

For side effects of COCs, approximately half of them could answer correctly. 58.9 % of them can answer correctly for negative question that the complications of COCs are common. Some misbelieves related to COCs such as weight gain; depression and reproductive organ cancer were answered correctly only 14.3 % and 21.4 %. Only 32.9 % got score for the question that COCs will not give more chance to have cervical cancer. Only one third of the respondents took aware of the contraindications related to COCs. It might be assumed that most of the respondents had limited or inaccurate information about COCs.

Table 11: Correct answers of knowledge about combined oral contraceptives (n=280)

ems	S 0 111 11 -1	Correct answers	
		Number	Percentage
1.	Using combined oral contraceptive pills can reduce	259	92.5
	unwanted pregnancy and unintended pregnancy.		
2.	COCs is the best temporary contraception method with	236	84.3
	least failure rate if perfect use according to instructions		
3.	COCs cannot return of fertility by stopping its use.*	210	75.0
4.	COCs can interfered to the sexual relation.*	237	84.6
5.	Using oral contraceptive pill can protect against sexually	214	76.4
	transmitted diseases (STDs) including HIV/AIDS.*		
6.	COCs can prevent the risk of endometrial and ovarian	49	17.5
	cancer		
7.	COCs should be taken a pill everyday to avoid becoming	264	94.3
	pregnant.		
8.	COCs can be taken at any time daily.*	236	84.3
9.	It is important to understand how to do if women miss the	225	80.4
	pills		
10.	COCs should be used not even understanding how to use	120	42.9
	the pills thoroughly.*		
11.	The side effects of COCs are seriously harmful to users.*	147	52.5
12.	. COCs can cause dizziness and nausea	158	56.4
13.	. The side effects of COCs will go away after about three	100	35.7
	months of its use		
14.	. The complications of COCs are common.*	165	58.9
15.	. COCs will not increase the risk of depression	60	21.4
16.	COCs will not give more chance to have cervical cancer.*	92	32.9

Table 11: (continued) Correct answers of knowledge about combined oral contraceptives (n=280)

Items	Correct answers	
	Number	Percentage
17. COCs will not cause weight gain	40	14.3
18. COCs is not suitable to severe hypertensive patients	122	43.6
19. COCs can be used by liver disease patients.*	90	32.1
20. COCs can be used by breast-feeding mother.*	99	35.4

(*) Negative items

4.4 Attitude towards combined oral contraceptives use

The attitude towards combined oral contraceptives (COCs) is the important determinant of its usage. In order to know the attitude towards COCs usage among Myanmar migrant women, all the respondents were asked about their opinion for agree or disagree the statements regarding combined oral contraceptive. This variable is also assessed in 3 categories such as agree, disagree and uncertain according to 3 points Likert scale (McDowel & Newell, 1996). The attitude part consisted of 10 questions and the questions were mixed as both negative and positive aspects. For positive questions, the score was given 3 for agree, 2 uncertain, 1 for disagree. For negative questions, the score was given 3 for disagree, 2 for uncertain and 1 for agree. It was indicated by the total score obtaining from responding attitude questionnaire. For 10 items, possible score was range from 10 to 30. The standard point for the attitude was mean ± standard deviation. The score ≤ mean − standard deviation refers to negative attitude. The score ≥ mean + standard deviation referred to positive attitude and the score within mean + standard deviation and mean − standard deviation referred to moderate attitude. (Soe, 2007).

Levels of attitude towards contraception among Myanmar migrant women of reproductive age were shown in table 12. The score of attitude of respondents ranged from 16 to 30. Mean score of the attitude was 26.33 and standard deviation was 2.67. Majority of the respondents, 68.6% had moderate attitude towards oral contraception.

19.3% of the respondents had positive attitude and the other 12.1% had negative attitude towards combined oral contraceptives.

Table 12: Level of attitude towards contraception (n = 280)

Level of attitude	Number	Percentage
Positive attitude	54	19.3 %
Moderate attitude	192	68.6 %
Negative attitude	34	12.1 %
Mean \pm SD	$1.93 \pm .557$	

Table 13 shows that percentage of respondents' attitude towards each question regarding combined oral contraceptives usage. Most of the respondents agreed towards birth spacing 95%.89.3% of women agreed to prevent unplanned pregnancy by using COCs and 90% agreed that using COCs is convenient for most women. The percentages of respondents who agreed that COCs can reduce some cancer was only 15% and to take pills daily is not difficult were 89.6% respectively. For negative items, only 17.5% agreed that COCs is not as effective as other methods and 30% agreed that COCs can get overweight.11.4% agreed buying COCs is ashamed, a few 9.6% agreed cost is high and 4.6% agreed to get COCs is difficult for negative items towards COCs.

Table 13: Percentage of respondents on each item of attitude towards COCs usage (n=280)

Ite	ms	Percenta	ige	Mean	SD	
		Agree	Disagree	Uncertain	-	
1.	I believe that birth spacing can	95.0 %	3.2 %	1.8 %	2.92	.374
	improve mother's life.					
2.	It is a good thing to do to prevent	89.3 %	7.9 %	2.9 %	2.81	.556
	unplanned pregnancy by using					
	combined oral contraceptive pills.					
3.	I believe that COCs is not as effective	17.5 %	69.3 %	13.2 %	2.52	.776
	as other contraceptive methods. *					
4.	Using oral contraceptive is convenient	90.0 %	6.1 %	3.9 %	2.84	.507
	for most women					
5.	Using oral contraceptives is bad	30.0 %	47.5 %	22.5 %	2.18	.864
	because it can get overweight.*					
6.	I believe that COCs can reduce some	15.0 %	31.4 %	53.6 %	1.84	.662
	cancer					
7.	To take COCs pills daily is not	89.6 %	7.5 %	2.9 %	2.82	.546
	difficult					
8.	Buying COCs is ashamed for women.*	11.4 %	82.5 %	6.1 %	2.71	.660
9.	Cost for COCs is high.*	9.6 %	89.6 %	0.7 %	2.80	.595
10.	To get COCs is difficult.*	4.6 %	94.3 %	1.1 %	2.90	.432

^(*) Negative Items

4.5 External factors of combined oral contraceptives use

External factors include the availability, accessibility, and affordability of resources to facilitate the combined oral contraceptives. These factors influence the choice of combined oral contraceptive methods to practice family planning. Thus, they were assessed by using questions related to availability to COCs such as where and how can get COCs and how far away. For accessibility, convenience was asked.

In terms of source for having COCs among all respondents, 45.4 % stated that drug stores for receiving COCs. NGO was the second frequently used, approximately at 22.1 %. 14.3 % said that they got COCs from government clinic and 6.1 % got from private clinics. The remaining 12.1 % stated that they got contraception from other sources such as grocery stores and shops. The mean number of places with their reach to get COCs was 2.48 and range 1 to 5 places.

Regarding the transportation to get to the source of COCs, 48.2 % went to the source by walking because of the sources were not too far away from their home. Second most common 30 % was public vehicle such as bus, motorcycle taxi. Private vehicle such as bicycle were used by 13.6 % of them. Only 7.5 % asked someone to buy. A little 0.7 % used the other transportation system such as home visit by health care volunteers. Most 68.6 % said that it was not too far to get the source of and 23.9 % answered near. Only 7.5 % were too far to get COCs. (Table 14)

The respondents were asked that there were any difficulties to go to the source to get contraception. Nearly all 99.3% of the respondents noted that it was convenient to go to the source to get COCs while only 2 respondents were not convenience to get COCs.

Table 14: Availability and accessibility of resources to facilitate COCs

0.00	Number	Percentage
Places to get COCs	11/2	
Drug store	127	45.4 %
Government clinic	40	14.3 %
NGO clinic	62	22.1 %
Private clinic	17	6.1 %
Others	34	12.1 %
Transportation to get COCs		
Walking	135	48.2 %
Public vehicle	84	30 %
Private vehicle	38	13.6 %
Ask someone to buy	21	7.5 %
Others	2	0.7 %
Distance away from sources		
Too far	21	7.5 %
Not too far	192	68.6 %
Near	67	23.9 %
Convenience		
Yes	278	99.3 %
No	2	0.7 %

The majority of the users 98.9% said that they could afford to use COCs because the price of most COCs was not expensive. Moreover, 27.9% of the respondents got COCs free of charge by NGO family planning promotion service in some area. Majority of the women 67.9% spent 1-50 Baht, 9% paid 51-100 Baht and little 1.1% spent >100 Baht per month. The average cost was 19 Baht per month and it was ranged from free of charge to 160 baht. Table 15 describes the affordability to COCs.

Table 15: Affordability of combined oral contraceptives

200	Number	Percentage
Affordability	111111111111111111111111111111111111111	
Affordable	277	98.9 %
Not affordable	3	1.1 %
Cost		
0 Bahts(free of charge)	78	27.9 %
1-50 Bahts	190	67.9 %
50-100 Bahts	9	3.2 %
>100 Bahts	3	1.1 %
$Mean \pm SD$	26.61 ± 20.6	

For satisfaction to the information about COCs, 88.9 % of the respondents stated that they satisfied with their information about COCs. But 11.1 % of the respondents were not satisfied with it. The reasons why they were satisfied and not satisfied were shown in the Table 16. The women 24.1 % were satisfied because of friendly caring informers, 23.3 % were satisfied because of effective information. Satisfactory for short waiting time occupied 3.6 %, privacy 6 %, low cost 14.1%, and good service 5.6 % respectively. The respondents satisfied with free of Charge for COCs were 4.8 % and with can ask anytime were 18.5 %.

However, 41.9 % said that they did not satisfy because of ineffective information. 16.1 % was not satisfied with the reason for long waiting time and the same percent for the informers did not answer what I want to know. Only 6.5 % answered costly.

Table 16: Satisfaction to information about COCs and reasons

Variables	Number	Percentage
Satisfaction (n= 280)	_	
Yes	249	88.9 %
No	31	11.1 %
Total	280	100 %
Reasons for satisfaction(n=249)		
Friendly caring informer	60	24.1%
Short waiting time	9	3.6 %
• Privacy	15	6.0 %
• Low cost	35	14.1 %
• Effective information	58	23.3 %
Good services	14	5.6 %
• Can ask informers anytime	46	18.5 %
• Free of charge for contraception	12	4.8 %
• Others	0	0 %
Reasons for not satisfaction(n=31)		
Informer are not friendly		
 Long waiting time 	6	19.4 %
• Costly	5	16.1 %
	2	6.5 %
• Ineffective information	13	41.9 %
• Informers not answer what I want to know	5	16.1 %
• Others	0	0 %

The respondents were asked about the best place to obtain information about contraceptive methods. Among them, 58.2 % stated that health centers were the best places to obtain information. 14.3 % of respondents said that friends were the best to get knowledge about contraception and 11.1 % chose home and family members as the best place. Drug store was chosen as the best place by 7.9 % and TV, news was chosen by 4.6

% of the women surveyed. The remainders stated that other places such as Myanmar books and pamphlets concerning contraception and health training courses.

Table 17: Places to obtain information about contraceptives

Var	iables	Number	Percentage
Plac	ces to obtain information about contraceptives		
•	Home	31	11.1 %
•	Health center	163	58.2 %
•	TV/news	13	4.6 %
•	Friends	40	14.3 %
•	Drug store	22	7.9 %
•	Others	11	3.9 %

In this study, all the respondents were asked their need regarding family planning if there is a chance to get support from the government or NGO. Majority of the respondents, 28.2 % stated that they needed family planning clinic and 22.5 % of them needed information regarding family planning. 16.4 % wanted contraception with cheap price and 16.1 % needed sterilization and 15 % needed COCs free of charge. Little 0.7 % of them needed dissemination of condoms for free of charge although the condom was not frequently practiced among the respondents and the others 1.1% answered undetermined. (Table 18)

Table 18: Need among the respondents (n = 280)

Needs	Number	Percentage
Family planning information	63	22.5 %
Family planning clinic	79	28.2 %
Provide sterilization	45	16.1 %
Supply contraceptive with cheap price	46	16.4 %
Supply condoms free of charge	2	.7 %
Supply COCs free of charge	42	15 %
others	3	1.1 %

4.6 Relationship between socio-demographic, external factors and knowledge, attitude, practice of combined oral contraceptives

The relationship between some socio-demographic, external factors and knowledge, attitude, practice of COCs among Myanmar migrant married women was tested using Chi- Square and Fisher's exact test. The level of significance for the association was set up at p-value = 0.05

Following relationships were examined:

- 4.6.1 The relationship between socio-demographic factors and knowledge of COCs among Myanmar migrant married women.
- 4.6.2 The relationship between external factors and knowledge of COCs among
 Myanmar migrant married women.
- 4.6.3 The relationship between socio-demographic factors and attitude toward COCs usage among Myanmar migrant married women.
- 4.6.4 The relationship between external factors and attitude toward COCs usage among Myanmar migrant married women.
- 4.6.5 The relationship between socio-demographic factors and practice of COCs among Myanmar migrant married women.
- 4.6.6 The relationship between external factors and practice of COCs among
 Myanmar migrant married women.
- 4.6.7 The relationship between knowledge, attitude and practice of COCs among Myanmar migrant married women.

4.6.1 The relationship between socio-demographic factors and knowledge of COCs among Myanmar migrant married women

The results of the relationship between some socio-demographic factors and knowledge of COCs among Myanmar migrant married women indicated that age group and educational level of the respondents' socio-demographic characteristics had relationship with the level of knowledge of COCs significantly. The relationship between

socio-demographic factors and knowledge of COCs Myanmar migrant married women was presented in the Table 19.

There was significant relationship between age group and knowledge level of COCs among Myanmar migrant women (p value .002). Most of the respondents in different age group had low level of knowledge. 80 % of the teen age group 15-19 had low level of knowledge. Age group between 30-39 was highest percentage of high level of knowledge. The percentage of low level of knowledge decreased as the increase age group.

Education of the women is a factor determining whether they had high knowledge or low knowledge about COCs. So, there was significantly related between the level of education and the level of knowledge. The women who had never gone to school got 94.1% of low level of knowledge. The more increase the educational level, the more higher the level of knowledge of COCs. The highest percentage (17.6 %) of high level of education group had high knowledge level of COCs.

For determining the relationship between occupation and knowledge of COCs, it was categorized into workers and housewife. There was no significance difference between workers and housewife (p-value = .360). Therefore, the knowledge of COCs levels was not depended on whether working or staying at home of Myanmar migrant women.

A comparison of respondents' income and knowledge of COCs was presented in this study. The income was categorized into <5000 Baht, 5000-10000 Baht and >10000 Baht. There was no significance difference between income group and knowledge of COCs (p-value =.120). 60% of women having total family income <5000 Baht had low level knowledge of COCs while 27.3 % of women having >10000 Baht per month had low level knowledge of COCs but not significant.

Number of living children was also not associated statistically with knowledge level of COCs. 59 % of women who did not have any children had low level of knowledge and 45.7 % of women who had more than three children also had low level of knowledge at the time of survey. The distribution of percentages within the same levels

of knowledge was not so different. So, the level of knowledge of COCs did not depend on the number of living children of the respondents.

There showed no association between duration of stay in Thailand, registration status, Thai language skills and knowledge level of COCs. However, it was found that the knowledge level of COCs revealed not so difference between the respondents who had been staying in Thailand 3 years or less and more than 3 years in each category. Regarding to registration status of the respondents, there was no significant association between them as majority of the respondents were registered. And also whether women can communicate or not with Thai language did not determine the level of knowledge of COCs.



Table 19: Relationship between socio-demographic factors and knowledge of COCs

Socio-demographic	Knowled	ge level			P
	High	Moderate	Low	Total	value
	N %	N%	N%		
Age group		i			.002
15-19 yrs	3(7.5)	5(12.5)	32(80.0)	40(100)	
20-29 yrs	7(4.9)	59(41.5)	76(53.5)	142(100)	
30-39 yrs	7(8.8)	42(52.5)	31(38.8)	80(100)	
40-49	1(5.6)	7(38.9)	10(55.6)	18(100)	
Education					< 0.00
Never go to school	1(5.9)	0(0)	16(94.1)	17(100)	
Primary	5(4.1)	39(32.0)	778(63.9)	122(100)	
secondary	6(5.6)	58(54.2)	43(40.2)	107(100)	
High	6(17.6)	16(47.1)	12(35.3)	34(100)	
Occupation					.360
Workers	14(7.2)	82(42.3)	98(50.5)	194(100)	
Housewife	4(4.7)	31(36.0)	51(59.3)	886(100)	
Family income					.120
< 5000 Bahts	4(6.7)	20(33.3)	36(60.0)	60(100)	
5000-10000 Bahts	12(6.1)	79(39.9)	107(54.0)	198(100)	
10000 >	2(9.1)	14(63.6)	6(27.3)	22(100)	
Number of living children					.518
0	6(9.8)	19(31.1)	36(59.0)	61(100)	
1 9	7(6.8)	42(40.8)	54(52.4)	103(100)	
2	3(4.3)	29(41.4)	38(54.3)	70(100)	
> 3	2(4.3)	23(50.0)	21(45.7)	46(100)	

Table 19: (continued) Relationship between socio-demographic factors and knowledge

Socio-demographic	Knowledge level				
	High N %	ModerateN%	LowN%	Total	value
Duration of stay in Thailand	5				.641
≤3 yrs	5(5.6)	33(37.1)	51(57.3)	89(100)	
>3 yrs	13(6.8)	80(41.9)	98(51.3)	191(100)	
Registration status					.281
Registered	18(7.1)	103(40.7)	132(52.2)	253(100)	
Unregistered	0(0)	10(37.0)	17(63.0)	27(100)	
Thai language <mark>skil</mark> ls					.198
Cannot communicate at all	2(2.4)	36(43.9)	44(53.7)	82(100)	
Can communicate	16(8.1)	77(38.9)	105(53.0)	198(100)	

4.6.2 The relationship between external factors and knowledge of COCs among Myanmar migrant married women

The relationship between external factors and knowledge of COCs among Myanmar migrant married women was described in Table 20. The knowledge of COCs was not associated with the information get place. Whether the respondents got information about COCs from health centers or other than health centers was not influence to the level of knowledge of COCs. Although the level of knowledge of COCs was associated with convenience to get COCs (P value= .034)

Table 20: The relationship between external factors and knowledge of COCs

		Knowledge	level		P
	High	Moderate	Low	Total	value
	N %	N %	N %		
Places to get COCs	3 f				.008
Drug store	3(2.4)	50(39.4)	74(58.3)	127(100)	
Government clinic	4(10.0)	18(45.0)	18(45.0)	40(100)	
NGO clinic	10(16.1)	26(41.9)	26(41.9)	62(100)	
Private clinic	0(0)	4(23.5)	13(76.5)	17(100)	
Others	1(2.9)	15(44.1)	18(52.9)	34(100)	
Distance away from sources					.162
Too far	3(14.3)	11(52.4%)	7(33.3)	21(100)	
Not too far	13(6.8)	72(37.5)	107(55.7)	192(100)	
Near	2(3.0)	30(44.8)	35(52.2)	35(52.2)	
Transportation					.043
Walking	8(5.9)	60(44.4)	67(49.6)	135(100)	
Public vehicle	4(4.8)	35(41.7)	445(53.6)	84(100)	
Private vehicle	5(13.2)	13(34.2)	20(52.6)	38(100)	
Ask someone to buy	0(0)	5(23.8)	16(76.2)	21(100)	
Others	1(50.0)	0(0)	1(50.0)	2(100)	
Convenience					.034
Yes	17(6.1)	113(40.6)	148(53.2)	78(100)	
No	1(50.0)	0(0)	1(50.0)	2(100)	
Information get places					.472
Health centre	8(4.9)	67(41.1)	88(54.0)	163(100)	
Others	10(8.5)	46(39.3)	61(52.1)	117(100)	

Regarding to the availability to get COCs among Myanmar migrant women, the result appeared that there was relation between places to get COCs and knowledge levels.

The p value is .008 and it is statistically significant. There was also significant relationship between the transportation to get COCs and the level of knowledge of COCs (P value= .043) but the distance away from sources had no significant relation with the knowledge of COCs.

4.6.3 The relationship between socio-demographic factors and attitude toward COCs usage among Myanmar migrant married women.

The study of the relationship between some socio-demographic factors and attitude of COCs among Myanmar migrant married women indicated that some respondents' socio-demographic characteristics had relationship with attitude of COCs significantly. The relationship between socio-demographic factors and attitude of COCs Myanmar migrant married women was presented in the Table 21.

There is no relation between age group and attitude of COCs among Myanmar migrant women (p value=.140). Most of the respondents in different level of age group had moderate attitude. Age group of 30-39 had highest percentage of positive attitude. The percentage of negative attitude decreased as the increase age group.

Education of the women is a factor determining whether they had positive attitude or negative attitude about COCs. Persons with higher educational level had better attitude than other. There was significantly related between the level of education and attitude towards COCs in the study (p value .045). 17.6 % of women who had never gone to school got positive attitude whereas 26.5 % of high education level had positive attitude. The more increase the educational level, the more percentages of positive attitude of COCs with significant association.

For determining the relationship between occupation and attitude of COCs, it was categorized into workers and housewife. There was no significance difference between workers and housewife (p-value = .234). The distribution of level of attitude between workers and housewife was shown in Table 21.

Table 21: Relationship between socio-demographic factors and attitude of COCs

Socio-demographic	11/10	Attitude lev	el		P
	Positive	Moderate	Negative	Total	value
	N %	N%	N%		
Age group		i =			.140
15-19 yrs	5(12.5)	28(70.0)	7(17.5)	40(100)	
20-29 yrs	28(19.7)	92(64.8)	22(15.5)	142(100)	
30-39 yrs	19(23.8)	57(71.2)	4(5.0)	80(100)	
40-49 yrs	2(11.1)	15(83.3)	1(5.6)	18(100)	
Education					.045
Never go to school	3(17.6)	10(58.8)	4(23.5)	17(100)	
Primary	18(14.8)	83(68.0)	21(17.2)	122(100)	
Secondary	24(22.4)	74(69.2)	9(8.4)	107(100)	
Higher	9(26.5)	25(73.5)	0(0)	34(100)	
Occupation					.234
Workers	33(17.0)	139(71.6)	22(11.3)	194(100)	
Housewife	21(24.4)	53(61.6)	12(14.0)	86(100)	
Family income					.289
<5000 Bahts	11(18.3)	45(75.0)	4(6.7)	60(100)	
5000-10000	41(20.7)	129(65.2)	28(14.1)	198(100)	
>10000 Bahts	2(9.1)	18(81.8)	2(9.1)	22(100)	
Number of living	3				
children					.298
0	14(23.0)	45(73.8)	2(3.3)	61(100)	
1	19(18.4)	68(66.0)	16(15.5)	103(100)	
2	12(17.1)	50(71.4)	8(11.4)	70(100)	
>3	9(19.6)	29(63.0)	8(17.4)	46(100)	

Table 21: (continued) Relationship between socio-demographic factors and attitude of COCs

Socio-demographic	BUNN	Attitude le	vel		P
	Positive	Moderate	Negative	Total	value
	N %	N%	N%		
Duration of stay in Thailand	//// /				.118
≤3 yrs	17(19.1)	56(62.9)	16(18.0)	89(100)	
>3 yrs	37(19.4)	136(71.2)	18(9.4)	191(100)	
Registration status					.011
Registered	51(20.2)	176(69.6)	26(10.3)	253(100)	
Unregistered	3(11.1)	16(59.3)	8(29.6)	27(100)	
Thai language skills					.402
Cannot communicate at all	13(15.9)	61(74.4)	8(9.8)	82(100)	
Can communicate basically	41(20.7)	131(66.2)	26(13.1)	198(100)	
and fluently			7		

4.6.4 The relationship between external factors and attitude towards COCs among Myanmar migrant married women.

The relationship between external factors and attitude towards COCs among Myanmar migrant married women was described in Table 22. The attitude towards COCs was not associated with the convenience and information get place. The attitude towards COCs was not affected although almost all respondent 99% were convenient to get COCs. Whether the respondents got information about COCs from health centers or other than health centers was not influent to attitude towards COCs.

Table 22: Relationship between external factors and attitude towards COCs among Myanmar migrant married women

	Attitude level				
Availability of COCs	Positive	Moderate	Negative	Total	P
	N%	N %	N %		value
Places to get COCs	//// W				<.001
Drug store	25(19.7)	81(63.8)	21(16.5)	127(100)	
Government clinic	4(10.0)	34(85.0)	2(5.0)	40(100)	
NGO clinic	17(27.4)	44(71.0)	1(1.6)	62(100)	
Private clinic	0(0)	7(41.2)	10(58.8)	17(100)	
Others	8(23.5)	26(76.5)	0(0)	34(100)	
Distance away from sources					.138
Too far	3(14.3)	17(81.0)	1(4.8)	21(100)	
Not too far	42(21.9)	130(67.7)	20(10.4)	192(100)	
Near	9(13.4)	45(67.2)	13(19.4)	67(100)	
Transportation to get COCs					.011
Walking	35(25.9)	85(63.0)	15(11.1)	135(100)	
Public vehicle	9(10.7)	64(76.2)	11(13.1)	84(100)	
Private vehicle	10(26.3)	26(68.4)	2(5.3)	38(100)	
Ask someone to buy	0(0)	15(71.4)	6(28.6)	21(100)	
Others	0(0)	2(100)	0(0)	2(100)	
Convenience					.630
Yes	54(19.4)	190(68.3)	34(12.2)	278(100)	
No	0(0)	2(100)	0(0)	2(100)	
Information get place					.559
Health centre	33(20.2)	113(69.3)	17(10.4)	163(100)	
Others	21(17.9)	79(67.5)	17(14.5)	117(100)	

Regarding to the availability to get COCs among Myanmar migrant women, the result appeared that there was a relation between places to get COCs and attitude towards COCs. The p value is <0.001 and it is statistically significant. Women who got COCs from NGO had 27.4 % of positive altitude while no woman who bought private clinics had positive attitude towards COCs. There was also a significant relationship (P value= .138) between the transportation to get COCs and attitude towards COCs but the distance away from sources had no significant relation with the attitude of COCs. Table 22 showed the relationship between external factors and attitude towards COCs among Myanmar migrant married women in Ranong province.

4.6.5 The relationship between socio-demographic factors and practice of COCs among Myanmar migrant married women.

Table (23) presented the relationships between selected socio-demographic characteristics and practice of combined oral contraceptives usage. The result showed that age was significantly associated with COCs use (p=.006). The practice of COCs use was more than half within age groups but in the age group 40-49 only 11.1 % of women had practice of COCs.

Regarding educational status of women and COCs use, approximately half of the women with each educational status had practice of combined oral contraceptives. The distribution of practice of COCs in each educational status was nearly the same percentage as showed in Table 24. This could be seen that the practice of COCs usage was not related with the educational level as there was no significant relationship (P value= .713).

For determining the relationship between occupation and practice of COCs usage, Fisher's exact test was used for its association. The various kinds of occupation were categorized into workers and housewife. There was significance difference between workers and housewife (p-value = 0.011). 38.4 % of housewife used COCs, while 55.7 % of working women had practice of COCs.

Table23: Relationship between socio-demographic factors and practice of COCs among

Myanmar migrant married women

Socio-demographic	Practice of COCs			P value
characteristics	Practice N % No practice		Total	
		N %		
Age group				.006
15-19 yrs	20(50.0)	20(50.0)	40(100)	
20-29 yrs	78(54.9)	64(45.1)	142(100)	
30-39 yrs	41(51.2)	39(48.8)	80(100)	
40-49 yrs	2(11.1)	16(88.9)	18(100)	
Education				.713
Never go to school	9(52.9)	8(47.1)	17(100)	
Primary	62(50.8)	60(49.2)	122(100)	
Secondary	56(52.3)	51(47.7)	107(100)	
Higher	14(41.2)	20(58.8)	34(100)	
Occupation				.011
Workers	108(55.7)	86(44.3)	194(100)	
Housewife	33(38.4)	53(61.6)	86(100)	
Family income				.539
<5000 Bahts	34(56.7)	26(43.3)	60(100)	
5000-10000	96(48.5)	102(51.5)	198(100)	
>10000 Bahts	11(50.0)	11(50.0)	22(100)	
Number of living children				.005
0	21(34.4)	40(65.6)	61(100)	
1	55(53.4)	48(46.6)	103(100)	
2	45(64.3)	25(35.7)	70(100)	
>3	20(43.5)	26(56.5)	46(100)	

Table 23: (continued) Relationship between socio-demographic factors and practice of COCs among Myanmar migrant married women

Socio-demographic characteristics	Practi		P	
	Practice N %	No practice N %	Total	value
Duration of stay in Thailand	i a			.06
≤3 yrs	37(41.6)	52(58.4)	89(100)	
>3 yrs	104(54.5)	87(45.5)	191(100)	
Registration status				.396
Registered	130(51.4)	123(48.6)	253(100)	
Unregistered	11(40.7)	16(59.3)	27(100)	
Thai language skills				.208
Cannot communicate at all	36(43.9)	46(56.1)	82(100)	
Can communicate basically and	105(53.0)	93(47.0)	198(100)	
fluently				

A comparison of respondents' income and practice of COCs was presented in this study. There was no significance difference between income group and practice of COCs (p-value =.539). Half of the women whose income was >10000 had practice while another half not had practice of COCs. 56.7% of women with income <5000 Baht used CCOs but 43.3 % of those women had not practice of COCs. This may be due to the cheap price of COCs and in some area, COCs were provided by the NGO free of charge in family planning promotion.

Number of living children was associated statistically with practice of combined oral contraceptives use. Over half of women (65.6 %) who did not have any children were not using COCs at the time of survey. This may be mainly due to they want to have child as soon. The more children they had, the higher the percentage of practice of COCs. But not true to the women with 3 or more children.

Revealing the relation between practice of COCs usage and registration status, 51.4 % of registered migrant women used COCs currently whereas 40.7 % of unregistered migrant women used COCs at the time of study so that no significant association between the registration status and the COCs usage at the time of interviewed.

There resulted association between duration of stay in Thailand and practice of COCs (P value=.06). It was found that practice of COCs revealed difference between the respondents who had been staying in Thailand 3 years or less and more than 3 years in each category. However, communication with Thai language did not determine practice of COCs as there was no significant relationship (P value= 208).

4.6.6 The relationship between external factors and practice of COCs among Myanmar migrant married women.

The relationship between external factors and practice of COCs among Myanmar migrant married women was described in Table 24. For the relationship between external factors and practice of COCs, information get places and convenience were not significantly related to the practice of COCs. The percentages of practice COCs users and no practice were nearly the same however almost all were convenience to get COCs. Transportation and places to get COCs had no significant association with the practice of COCs at the time of interviewed with P value 0.052 and 0.215 respectively. There is relation between distance away from the source and practice of COCs usage with P value=<.001. Therefore distance away from sources can influence to the usage of COCs.

Table 24: Relationship between external factors and practice of COCs among Myanmar migrant married women (n= 280)

00	Practice	Practice of COCs		P value
Availability of COCs	Practice	No practice	Total	
	N %	N %		
Places to get COCs	2.1.8			.052
Drug store	63(49.6)	64(50.4)	127(100)	
Government clinic	26(65.0)	14(35.0)	40(100)	
NGO clinic	27(43.5)	35(56.5)	62(100)	
Private clinic	12(70.6)	5(29.4)	17(100)	
Others	13(38.2)	21(61.8)	34(100)	
Distance away from sources				<.001
Too far	3(14.3)	18(85.7)	21(100)	
Not too far	92(47.9)	100(52.1)	192(100)	
Near	46(68.7)	21(31.3)	67(100)	
Transportation to get COCs				215
Walking	60(44.4)	75(55.6)	135(100)	
Public vehicle	48(57.1)	36(42.9)	84(100)	
Private vehicle	19(50.0)	19(50.0)	38(100)	
Ask someone to buy	12(57.1)	9(42.9)	21(100)	
Others	2(100)	0(0)	2(100)	
Convenience				1.00
Yes	140(50.4)	138(49.6)	278(100)	
No	1(50.0)	1(50.0)	2(100)	
Information get places				.731
Health centre	84(51.5)	79(48.5)	163(100)	
Others	57(48.7)	60(51.3)	117(100)	

4.6.7 The relationship between knowledge, attitude and practice of COCs among Myanmar migrant married women

Table 25 shows the relationship between knowledge level and attitude towards COCs of the respondents and practice of combined oral contraceptive pills. Regarding knowledge of COCs, the practice of COCs was same percentage among the women who had high level and moderate level of knowledge towards contraception (44.4 %). The practice of combined oral contraception increased in the low knowledge level of COCs and the proportion of practice was 55.7 %. But there was no significance difference between knowledge towards contraception and practice of COCs (p-value = 0.162).

This study also shows that there was significance difference between attitude towards COCs and practice of combined oral contraceptives (p-value = 0.009). Combined oral contraceptive pills usage was highest among the respondents who had negative attitude towards COCs and used (73.5 %). The proportion of 40.7% of women having positive attitude used COCs while 49 %of respondents with moderate attitude used COCs currently. This result is so strange that the underlying causes were not well understood for the reversed relationship of this finding.

Table 25: Relationship between knowledge and attitude levels of the respondents and practice of COCs

	Practice of CC	OCs		P value
	Practice N %	No practice N %	Total	
Knowledge levels of COCs				.162
High	8(44.4)	10(55.6)	18(100)	
Moderate	50(44.2)	63(55.8)	113(100)	
Low	83(55.7)	66(44.3)	149(100)	
Attitude levels of COCs				.009
Positive	22(40.7)	32(59.3)	54(100)	
Moderate	94(49.0)	98(51.0)	192(100)	
Negative	25(73.5)	9(26.5)	34(100)	

Table 26: Relationship between knowledge and attitude levels of the respondents

	Attitude level			P value	
	Positive	Moderate	Negative	Total	_
	N %	N%	N%		
Knowledge levels		9			< .001
High	7(38.9)	11(61.1)	0(0)	18(100)	
Moderate	31(27.4)	75(66.4)	7(6.2)	113(100)	
Low	16(10.7)	106(71.1)	27(18.1)	149(100)	

Table 26 showed the relationship between respondents' knowledge and attitude towards combined oral contraceptives. It might be assumed that the one who had more knowledge about COCs were more likely to have positive attitude towards it. 10.7 % of those with low level of knowledge had positive attitude whereas 38.9 % of those with high level of knowledge had positive attitude. On the other hand 18.1 % of low knowledge had negative attitude and no one with high knowledge had negative attitude. The relationship between knowledge and attitude was statistically significant (P value= <.001).

CHAPTER V

DISCUSSION, SUMMARY AND CONCLUSIONS

5.1 Discussion

The main aim of this study was to determine the knowledge, attitude and practice of combined oral contraceptive usage among Myanmar migrant married women of reproductive age at Ranong province in Thailand. And also this study explored the relationship between socio-demographic factors and knowledge, attitude, practice of COCs among Myanmar migrant married women. It was hoped that this study can provide base line information specific to combined oral contraceptive usage among Myanmar migrant women to health authorities for further promoting contraceptive usage and family planning knowledge to Myanmar migrant women.

In this research, the emphasis was on the combined oral contraceptives because combined oral contraceptives method was the most popular method among the modern contraceptives methods in Ranong and second most common method of choice among Myanmar migrant women in Ranong. The participants in this study were Myanmar married women of reproductive age of 15-49 years, by interviewing the sample of 300 Myanmar migrant women in order to highlight about combined oral contraceptive pills. Two different places, Paknum and Bangrin Sub-districts, were selected again intentionally because most of the Myanmar migrants lived in these two sub-districts. Fortunately, these areas were the catchment area of World Vision NGO so that it might be assumed that it might have some impact on this study. The data was collected by the researcher and 5 trained interviewers by means of face to face interview of the respondents.

There were 6 discussion parts in this chapter.

- 5.1.1. Discussion on the practice of combined oral contraceptives among Myanmar migrant married women
 - 5.1.2. Discussion on knowledge of combined oral contraceptives (COCs)

- 5.1.3. Discussion on attitude towards combined oral contraceptives
- 5.1.4. Discussion on the relationship between socio-demographic factors and knowledge, attitude, practice of COCs among Myanmar migrant married women
- 5.1.5. Discussion on the relationship between external factors and knowledge, attitude, practice of COCs among Myanmar migrant married women
- 5.1.6. Discussion on the relationship between knowledge, attitude and practice of COCs among Myanmar migrant married women.

5.1.1. Discussion on the practice of combined oral contraceptives among Myanmar migrant married women

This study showed that practice of combined oral contraceptives usage was 50.4% among the inclusion criteria of Myanmar migrant married women who used COCs within last six months until the time of interview without interrupted. This finding percentage was more than the (39.7%) percentage of oral pills current used by Myanmar migrant women studied by Soe (2007). Similar to her, Soe (2009) found that 34.1 % current contraceptive users choose oral pills among birth spacing practice of Myanmar migrant women. This difference might be due to the success of family planning program of the World Vision Clinic, Ranong. They provided COCs at low cost and free of charge for their catchment area of the study site. Moreover, the affect of inclusion criteria of this study might be another aspect for this higher COCs used percentage. But in the study of Win (2002), oral pills current used percentage was 61.2% which was higher than the result of this finding.

The reasons why the respondents, who had ever been used COCs in her life time, did not use COCs currently was the one of the interested part of this results. Most of these women gave the reason of that they want more children which was 32.7 %. This finding was consistent with the findings of Win (2002) and Soe (2007). The second most common reason 17.3 % was that they had suffered side effects of COCs such as headache, dizziness, nausea and vomiting. This was due to the reason of these respondents that oral pills cause lots of problems like dizziness, headache, vomiting and

irregular menstrual bleeding. The other reasons 23.1 % were due to usage of other contraceptive methods, sterilization and most of them forget to take the pills regularly which lead to the discontinuation and afraid to be pregnant. The main two reasons for usage of combined oral contraceptives rather than some other method of family planning among current and ever users this study was recommendation of friends and family planning workers. This might be due to the promotion of family planning among Myanmar migrant workers though peer educators by the World Vision NGO.

The decision making for combined oral contraceptive use was made by the respondents herself (53.2 %) and both (28.7%) in this study. The result of this study was supported by the survey done in Myanmar in which the decision making processes for contraceptive use were usually made by the wife or both partners; as the gender equality relatively high and little discrimination against women in Myanmar (WHO, 1997).

5.1.2 Discussion on knowledge of combined oral contraceptives (COCs)

The data on the results of combined oral contraceptive methods presented in this study were mostly based on the respondents' correct understanding of the questions asked, their willingness to answer the questions and cultural factors. There might be some impact of their psychological situation at the time of interview on their answers as there was a tendency to play down certain questions or distorted the answers according to their emotion or socially expected behavior especially where sexuality and reproductive life was involved.

The knowledge of the respondents were assessed that the main proportion of women at 53.2 % was classified into low knowledge whereas 40.4 % had moderate knowledge and a few of them had high knowledge (6.4 %). Regarding the knowledge level of the respondents using combined oral contraception, it indicated noticeably that women with high knowledge of combined oral contraceptives were too little although 62.9 % of them were current COCs users and all of them had been used COCs in their life time. This finding was consistent with the study of Soe (2007) with only 7.4 % of women had high knowledge level of contraception.

Majority of the women knew the benefits of combined oral contraception and they had knowledge about combined oral contraceptive methods to some extent. Most of them know its effectiveness of contraception and advantages of COCs. Two thirds of the respondents could answer correctly for effect of COCs to sexual relation. Only a few knew that COCs can prevent the risk of endometrial and ovarian cancer. Most of the respondents knew how to use COCs but nearly half answer that COCs should be used not even understanding how to use the pills thoroughly.

For side effects of COCs, approximately half of them could answer correctly. This suggested that they had limited information on side effects and complications of COCs among Myanmar migrant women. Some misbelieves related to COCs such as weight gain; depression and reproductive organ cancer were answered correctly only one fifth. This indicated that it was need to correct Myanmar migrant women for misbelieves related to COCs. Only one third of the respondents took aware of the contraindications related to COCs. It might be assumed that most of the respondents had limited or inaccurate information about COCs. Information and IEC materials emphasized on side effects, complications and contraindication of combined oral contraceptives were needed to introduce to its users. Development of the effective education program specific to combined oral contraceptives should be considered for the combined oral contraceptive users.

5.1.3 Discussion on attitude towards combined oral contraceptives

Considering the investigation of women's attitude, it was found that those who had moderate attitude were the highest (68.6 %), the positive attitude (19.3 %) and negative attitude (12.1 %). The attitude towards combined oral contraceptives was the most important determinant of practicing COCs. Most of the respondents 95% agreed towards birth spacing.89.3% of women agreed to prevent unplanned pregnancy by using COCs and 90% agreed that using COCs was convenient for most women. This showed the success of family planning promotion program of this area. But a few (15 %) agreed that COCs can reduce some cancer and more than of them (53.6 %) were uncertain for

that statement. 30 % of the women believed that using oral contraceptives was bad because it can get overweight. This might be the impact of the usage of old generation of oral contraceptive pills with higher combination of hormones. A few 17.5 % of the respondent believed that COCs was not as effective as other contraceptive methods. It was likely because of forgotten to take the pills regularly and they did not know how to do if they forgot to take the pills for more than 2 days. Attitude towards cost of COCs was quite positive for only 9.6 % of the respondent agreed that cost for COCs was high. For attitude towards accessibility to COCs, most of them disagreed that getting COCs was difficult and buying COCs was ashamed for women. This can be concluded that most women had positive attitude towards getting and using COCs but effectiveness of COCs had negative attitude.

5.1.4 Discussion on the relationship between socio-demographic factors and knowledge, attitude, practice of COCs among Myanmar migrant married women

The results of this study found that practice of COCs was related significantly to age group, occupation, number of living children and duration of stay in Thailand. The knowledge of COCs had relationship with age group and education level whereas attitude towards COCs had relationship with education level and registration status.

Age of migrant women showed the linear relationship with combined oral contraceptive use in the bivariate analysis. This was consistent with the study in Lao PDR by Vanhnolrath (2003) but not with the Soe (2009)'s study of birth spacing practice among Myanmar migrants in Ranong which showed no association. Most of the women with practice of COCs fell into 20-39 years indicating that most of the women were in their most productive age groups in their life relying on their physical strength to struggle for a job and money while away from their home country. It was found that the older the age group, the lesser the tendency to use the COCs. Only a few percentage 11.1 % lies in the age group of 40-49 years. This was probably because the older age group had been sterilization or used other methods of contraceptives. On the other hand, the education

programs on reproductive health from World Vision NGO mostly targeted towards the newly married younger age group. Regarding with the knowledge of COCs, the result showed significant relationship between age group and knowledge level that p value was .002. The age group increase as the percentage increase within the high level of knowledge. The attitude had no relationship with the age group of COCS users similar with the finding of Win (2002) for contraceptive use among Myanmar migrants. The distribution of the percentage of age group within the levels of attitude had no significant pattern. But most of the respondents had moderate attitude towards COCs.

Education does not display a consistent correlation with the practice of COCs usage in this finding as in the study of birth spacing practice among Myanmar migrants in Ranong by Soe (2009). The only significant difference in that with women high school or higher education was less likely to use COCs than the women with other education levels. It was likely that most of the migrant in this study left their homeland with little education and had limited access to local schooling facilities. There was no clear indication for the effect of educational advancement on the practice of COCs because most of the respondents had primary and secondary education. But education plays a significant role in the knowledge of COCs with the p value < .001. The more the women educated, the higher the level of knowledge they had. As the migrants from Myanmar tend to be less educated and less literate than their population of origin, more than half of the respondents in this study had primary education and secondary education. Only a few percentages had high school level and higher education. Generally, education was recognized as the vehicle by which people learn about the family planning, which might lead to demand for fewer children. The educated women were expected to use more contraception as they desire fewer children compared with illiterate women. The education had association with knowledge level of COCs although 5.9 % of never go to school women had high knowledge, 17.6 % of higher educated women had high level of knowledge. This was different with the finding of Win (2002) that there was no relationship between the education and knowledge of contraception. There was also obvious difference in the attitude level comparing among the levels of education was

found in this study. The educated women had more percent of positive attitude towards COCs than less educated women. In reverse, 23.3% of never go to school women had negative attitude whereas no women with higher education level had negative attitude towards COCs.

The percentage of combined oral contraceptive use was higher among workers (55.7 %) while (38.4 %) used among housewife, so these showed difference in working group and housewives, indicating that this factor influence the practice of COCs. Though this was provided by the migrant study by Win (2002) and other study by Hakin et al. revealed there were various associations between the occupation and contraceptive use. This might went to the fact that all the women were migrants, wanted to control their fertility despite their differences in types of work, as their main goal staying here was to make a living and provide the parents and families back in home country. Whether working outside or staying as housewife did not influence on both knowledge and attitude levels as there was no significant association between occupation and them. This result was likely due to the family planning promotion reached not only workplaces but also homes to give health education about family planning.

Average family income was 7383 Baht and almost two-third of them got monthly income between 5000 Baht to 10000 Baht as they were labor working in various sectors. The result from this study showed that there was no significance difference of COCs use between the group of women who had total family income \leq 5000 Baht, 5000-10000 Baht and > 10000 Baht. The percentage of COCs usage was 56.7 % in the women who had \leq 5000 Baht while 48.5 % and 50 % of women with family income between 5000-10000 Baht and >10000 Baht. This finding was consistent with the result from the study done in Indonesia (Schoemaker, 2005) and in Ethiopia (Beekle & Mccabe, 2006) as the percentage of use did not show much difference between diverse monthly income levels. This was possibly because the price of the contraception was cheap and sometimes free of charge, so everybody can access regardless of income. Income difference did not impact on both knowledge and attitude of COCs because the relationship between these

was not statistically significant. To explain this, it also needed to look at the respondents' situation as they were migrants and their purpose was to earn money.

There was relationship between number of living children and practice of COCs.64.3% of women with 2 children use COCs, as well as 43.5 % among women with >3 children used COCs. The direction of the relationship between increased number of children and decreased use of contraceptives was not yet well understood. One explanation might be those women with >3 children might have no interest in using COCs because their goal was large family. This finding was consistent with the study in Bangladesh by Parveen (2000) revealed that female adolescents with two or more children have less likely to use contraceptives (1.77 %) than those who has one child (2.35 %). But number of living children was not associated with the knowledge and attitude of COCs. The pattern of knowledge and attitude levels was not changed although they had more children.

Concerning the migrant specific factors, nothing displayed the significant relationship with practice of combined oral contraceptive use except duration of living in Thailand. Interestingly, women who had been staying in Thailand more than 3 years had 54.5 % of COCs use while those stay less than 3 years was 41.6 %. It was likely due to that 3 years was enough to overcome language barrier and to adopt a new life style in the new country based on social theories. But duration of stay in Thailand did not influence on the knowledge and attitude towards COCs.

Knowledge, attitude and practice of COCs levels were not altered by the fact of the respondents' communication skills of Thai language. However, in Ranong, almost all of the Myanmar migrants were living in their own communities and, moreover, could communicate in Myanmar language in World Vision clinic to get oral pills from voluntary health workers who were also living in Myanmar communities. The education programs conducted also gave special attention to new comers. Therefore, they did not have any problem for language barrier or adaptation to a new foreign community so that there might expect no change in their manner of contraceptive use overtime. The same explanation would apply to the registration status for not much difference in knowledge

and practice of COCs usage between registered and unregistered migrants. The sources to get COCs were not outside their community so that they were considerably safe to get the COCs whether they were registered or not. In addition, the respondents in this study were mostly registered because the communities' heads (fishery jetty owners/ factory owners) where most of the unregistered were expected to be living did not allow outsiders to go inside the communities. Whether the migrant women were registered or unregistered, they came for the purpose of earning money; all of them want to control fertility. For relationship of registration status with attitude towards COCs, p value was .011 which was statistically significant. But attitude towards COCs had relationship with registration status and migrant women who did not have registration had more negative attitude towards COCs than registered women. This might be due to the fact that they were afraid of to be arrested while they went to get COCs.

5.1.5 Discussion on the relationship between external factors and knowledge, attitude, practice of COCs among Myanmar migrant married women

Regarding with the external factors, availability, convenience and information from health centers were studied for their association with knowledge, attitude levels and practice of COCs as they can influence on decision making regarding use of combined oral contraceptives. Places to get COCs, distance away from sources and transportation to get COCs were categorized as availability to COCs. There was relationship between practice of COCs and distance away from source of COCs. The knowledge level was association with places, transportation and convenience to get COCs. The attitude towards COCs was related with the places and transportation to get COCs among the external factors.

In terms of place to get COCs, for private and government clinics, more than half of the COCs users had practice while drug stores, NGO and other sources, nearly half of the respondents had practice. The percentage of practice of OC pills was not obviously difference between different places as there was no relationship between them. This result was similar with the result of Soe (2009) in birth spacing study. Although,

knowledge and attitude levels of COCs were associated with different places of the source of COCs. The respondents who got CCOs form NGO attributed 16.1 % in high knowledge level but no one who got COCs from private clinic was high knowledge level. Similarly, women who got COCs form NGO were 27.4 % in positive attitude towards COCs but no one who got COCs from private clinic had positive attitude. This might be the fact that NGO contributed family planning information to migrant women who got COCs from it by Myanmar language.

For distance away from the sources of COCs by the perception of respondents, nearly one third of the respondents resided near the source and over two thirds of them reside not too far from the source; however, knowledge and attitude towards combined oral contraception was not difference between them. But practice of COCs was influenced by the distance away from the sources of COCs.68.7 %of respondents who live near the sources had practice of COCs while only 14.3 % of women who live too far away from the COCs sources had practice of combined oral contraceptives.

The knowledge and attitude towards COCs had significant difference between different means of transportation such as by walking, public vehicle, private vehicle. The respondent who got COCs by ask someone to buy had 76.2 % of low level of knowledge because of little chance to get knowledge of COCs. No one who asked someone to buy COCs had positive attitude towards COCs. But transportations did not associated with the practice of COCs. The percentage of women who had practice of COCs was not so different by means of transportation.

Majority of COCs users were convenience to go but the practice and attitude of combined oral contraception were not obviously different between the group of women who answered convenience and women who said not convenience. But the knowledge of COCs was related with the convenience to get COCs with p value .034. This relation was not known although all respondents answered that they were convenient to get COCs except two respondents. The knowledge, attitude and practice of COCs were not affected by information they got form health centers or other than health centers because of no significant association between them.

5.1.6 Discussion on the relationship between knowledge, attitude and practice of COCs among Myanmar migrant married women

Before discussion the results of the knowledge and attitude towards combined oral contraception, it should be noted that data on the results were established on the respondents' comprehension of the questions asked, their thoughts, and their willingness to answer the questions. It might be some impact environmental situation at the time of interview on their answers because there was a tendency to answer impatiently. In this finding, the fact that knowledge was associated with combined oral contraceptive use was not supported which was consistent with the study of contraceptives usage among Myanmar migrant women by Win (2002) and Phyu (2008). As contradicted to many study findings that knowledge of contraceptive methods had a positive effect on determining on the use of contraception as in Myanmar migrant women by Soe (2007), among Lao women by Vanhnolrath (2003) and in Bangladesh by Parveen (2000). The percentage of practice of COCs was not too different within the different levels of knowledge to COCs as there was no significant association in this study. Nevertheless, adequate knowledge on various methods should be provided to them in order to let them have more choices of their own to meet their individual needs.

The attitude towards the contraception was the most important determinant of practicing combined oral contraceptives. The study done in Missouri (Sable et al., 1997) revealed that infrequent contraceptive users were more likely to have negative attitudes towards contraception. In this study, there was significance difference between attitude towards COCs and practice of CCOs. However, the direction of relationship was contrary to the previous findings of relationship between attitude and contraceptive usage. It was likely due to half of the respondents in this study had practice of COCs and the women who had negative attitude also wanted to control the fertility while they were away from their home country and earning money. This was probably because migrant women did not have many choices in choosing methods as they had to rely on the methods provided to them from clinics and NGO whatever they had positive or negative attitude.

The relationship between knowledge and attitude was statistically significant (P value= <.001). This was not consistent with the findings of relationship between knowledge and attitude of contraceptive usage by Win (2002). It indicated that the one who had more knowledge about COCs were more likely to have positive attitude towards it. 10.7 % of those with low level of knowledge had positive attitude whereas 38.9 % of those with high level of knowledge had positive attitude. On the other hand 18.1 % of low knowledge had negative attitude and no one with high knowledge had negative attitude. The women who know well about the COCs had more tendencies to have positive attitude towards combined oral contraceptives than others. Therefore, knowledge of COCs played an important role in the attitude towards combined oral contraceptives. Again attitude towards COCs was an important factor to practice of combined oral contraceptives use among Myanmar migrant women of reproductive age at Ranong province, Thailand.

5.2 Summary and Conclusion

Many researchers have been done to assess the health and well being of the migrant population in different regions of Thailand. Maternal and child health of the migrant population is one of the major concerns. Many studies have been done on family planning and accessibility of health care service of migrant population in Thailand to make sure migrant women and child well being. This research was done in Muang district, Ranong province to assess the knowledge, attitude and practice of combined oral contraceptives (COCs) usage among Myanmar migrant women and factors related to them. The study population was 15-49 year old Myanmar married migrant women who use COCs currently or had ever been used COCs in her life time. A total sample of 300 was interviewed using structured questionnaire and 280 was left after excluding those with missing answers.

The questionnaire included the socio-demographic characteristics, external factors, knowledge about combined oral contraceptives (COCs), attitude towards COCs

and practice of COCs usage. The statistical package for social science (SPSS) were using for analysis of the data of this study. Chi-square test and Fisher Exact test were used for relationship between independent variables and dependent variables of this study.

This study resulted that the practice of combined oral contraceptives usage was 50.4 % among Myanmar migrant married women of reproductive age who had customary habit of the continuous use of COCs within last six months until the time of interview without interrupted in Muang District, Ranong Province. The main reason for not currently use is want more children. The most common reasons why they preferred COCs were recommendation of friends and family planning workers. Regarding to the practicing contraception, more than half of them made the decision herself for using COCs. Most of the respondents were satisfied with their information about COCs because mainly of friendly caring informers and effective information. A few of them were not satisfied because mainly of ineffective information. Concerning the need of the respondents towards family planning and contraception, the respondents reported that they need for provision of family planning clinics and more information on family planning.

In terms of knowledge and attitude towards COCs, half of the women knew of 2 to 4 kinds of combined oral contraceptives. Half of them had low level of knowledge while only a few had high level of knowledge of COCs. The rest had moderate level of knowledge about combined oral contraceptives More than two third of the respondents in this study had moderate attitude towards COCs.

All the respondents in this study were in the age range from 15 to 49 years and majority of the respondents were distributed in the age group of 20 to 29 years. More than one third of them had only one child with the mean 1.4 children although mean of desired number of children was 2.7. Nearly half of the women in this study came to Thailand with primary educational attainment from home country. More than two third of the women were working in fishery related work, construction, etc while one third of them were housewives. In this study, total monthly family income ranged from 2000 Baht to 18000 Baht although over two third of them had income between 5000-10000

Baht per month. Over two thirds of the respondents in this study had been stayed in Thailand for more than 3 years with most of the women were staying as registered migrants. Although they had been staying in Thailand for years, one third of them cannot communicate with Thai language at all and more than half of them can communicate only basically.

In terms of accessibility, more than half of the respondent got COCs from drug stores. Half of the respondents went to the source to get the COCs by walking. Two thirds of them stated that they resided not too far from the source for getting COCs and almost all of them said that it was convenience to go there. For cost of COCs per month, average cost was 26.6 Baht per month and it was ranged from free of charge to 160 baht. Nearly one third of the respondents got COCs for free of charge from NGO and most of the rest spent 1-50 Baht per month or per dose and only 4.3 % paid more than 50 Baht. Majority of them perceived that they could afford combined oral contraceptives and most of them also satisfied the service they got.

The relationship between independent variables and knowledge, attitude and practice of combined oral contraceptives is analyzed by chi-squared test and fisher's exact test. The result of this study determined the relationship between sociodemographic, external factors and knowledge, attitude and practice of combined oral contraceptives among Myanmar migrant women. Among the socio-demographic factors, age group and education level were related with the knowledge of COCs. Knowledge of COCs was influenced by the external factors of places, transportation and convenience to get COCs. Regarding to the attitude towards COCs, the respondents' educational level, registration status and availability of COCs except distance away from the sources were associated with attitude towards COCs. Some socio-demographic characteristics such as age group, occupation, number of living children, and duration of stay in Thailand had relationship with practice of COCs among Myanmar migrant women. Only distance away from the sources of COCs among the external factors had significant relationship with practice of COCs among Myanmar migrant women. Knowledge of COCs was not related with the practice of COCs although attitude towards COCs had relationship with the

practice of COCs significantly. Therefore, knowledge of COCs had indirect relationship with practice of COCs by attitude towards COCs.

5.3 Recommendation

From this study, practice of combined oral contraceptives usage is satisfactory of 50.4 %. Nearly one third of the respondents got COCs free of charge and more than half of the respondents rely on drug stores were found out. It can be cost and make them to stop utilizing. Some of the respondents believed that COCs was not as effective as other contraceptive methods. It was likely because of forgotten to take the pills regularly and they did not know how to do if they forgot to take the pills for more than 2 days. Government services and NGOs should focus on encouraging and promoting COCs usage by giving more information about combined oral contraceptives and provide COCs free of charge frequently as that was the main need from this community. As found from this study, there is a gap between practice and knowledge of COCs. So, provision of effective health education program specific to combined oral contraceptive method is necessary for COCs users in this community. For that matter, IEC materials emphasized on combined oral contraceptives should be produced and introduced to its users in the community of Myanmar migrant than usual by using multimedia. For IEC material, simple manual in Myanmar language should be provided. In this manual, complications and contraindications for combined oral contraceptives should be included more details for the COCs users. It was also needed to correct Myanmar migrant women for misbelieves related to COCs. This manual should be distributed to the COCs users through not only leaders of Myanmar community, peer health voluntary groups, but also drug stores and private clinic because places to get COCs had relationship with knowledge of COCs. Almost all of the respondents were depending on the services of World Vision Foundation and Clinic, where they could communicate freely in Myanmar language, therefore, strengthening the existing health infrastructure and manpower to meet the special needs of this specific population should be considered. It is the only NGO related to health in Ranong area, all Myanmar migrants relied on its services. Its

successful services were mainly relying on the strength of Social workers and Migrant health volunteers.

Because of time constraint, purposive sampling was used to find out the factors related to the combined oral contraceptives usage. Moreover, other common contraceptive methods such as injection method, Norplant and IUCD (Intra Uterine Contraceptive Device) should be studied in details for further promotion of contraception to prevent unplanned pregnancy.



REFERENCES

- Asian Research Center for Migration [ARCM]. (2000). Cross-border Migration and HIV Vulnerability in the Thai-Myanmar Border Sangkhlaburi and Ranong, Bangkok: Asian Research Center for Migration
- Barber, SL. (2007). Family Planning Advice and Postpartum Contraceptive Use among Low-Income Women in Mexico. *International Family Planning Perspectives* 33(1): 6-12
- Beekle, AT.& McCabe, C. (2006). Awareness and determinants of family planning practice in Jimma, Ethiopia. *International Nursing Review* 53(4): 269-276.
- Belton, S. & Maung, C. (2007). Burmese women's health on Thai-Burma border: Fertility and Abortion. *Health Care Women International* 28(4), 419-33.
- Caouette, TM. & Pack, ME. (2002). *Pushing past the definitions: Migration from Burma to Thailand*. Bacgiang:Refugees International and Open Society Institute.
- Committee for Coordination of services to Displaced Persons in Thailand [CCSDPT]. (2006). Annual Health Information Report (Myanmar-Thai border) at refugee camps, 2006. Bangkok: CCSDPT.
- Family Health International [FHI]. (2003). *Using Contraceptive Checklists in Community-Based Programs: Pills and Injectables*. Available from http://www.fhi.org/en/Topics/OC.htm [October 23, 2009]
- Family Health International [FHI]. (2006). *Oral Contraceptives and Weight Gain*.

 Available from http://www.fhi.org/en/AboutFHI/Media/Releases/pr2006/12706OCsandWeightGa in.htm [October 23, 2009]
- Family Helath International [FHI]. (2009). *Combined Oral Contraceptives (COCs) FAQ*Available from http://www.fhi.org/en/RH/FAQs/COC_faq.htm [October 27, 2009]
- Hakin, A., Salway, S. & Mumtaz Z. (2003). Women's Autonomy and uptake of contraceptive in Pakistan. *Asia-Pacific Population Journal*: 23(1) 63-82.

- Helweldery, S. (2004). Factors influencing contraceptive use among currently married women in Sulawesi, Indonesia Master's thesis, Institute of Population and Reproductive Health research, Mahidol University.
- International Planned Parenthood Federation [IPPF]. (1997). Family Planning Handbook for Health Professionals. London: IPPF.
- Kayembe, PK., Fatuma, AB., Mapatano, MA. & Mambu, T. (2006). Prevalence and determinants of the use of modern contraceptive methods in Kinshasa, Democratic Republic of Congo. *Contraception* 74(5): 400-406
- Khaing, S.W. (2002). Contraceptive use among Myanmar migrant women in Samut Sakorn Province, Thailand. Master'sthesis, Faculty of Public Health, Mahidol University.
- Khouangvichit, D. (2002). Factors affecting contraceptive use among married women in reproductive age in Lao PDR. Master's thesis, Institute of Population and Reproductive Health Research, Mahidol University.
- Koc, I.(July 2000). Determinants of contraceptive use and method choice in Turkey *Journal of Biosocial Science* 32(3): 329-342.
- Lhamu, MC. (2004). Factors affecting utilization of contraceptives among married women of reproductive age in Punakha district, Bhutan. Master's Thesis, College of Public Health Sciences, Chulalongkorn University
- Magnani, RJ., Hotchkiss, DR., Florence, CS. & Shafer, LA. (1999). The impact of the family planning supply environment on contraceptive intentions and use in Morocco. *Stud Fam Plann* 30(2): 120-32
- McDowel, I. & Newell, C. (1996). *Measuring Health, A guide to rating scale and Questionnaire*. (2nd ed). New York: Oxford University.
- MICS. (2006). *Thailand Multiple Indicator Cluster Survey:Dec 2005-May 2006*. Bangkok: National Statisticapl Office.
- Ministry of Immigration and Population [MOIP]. (2002). *Myanmar Fertility and Reproductive Health Survey (FRHS) 2001* (Preliminary report), Yangon: Ministry of Immigration and Population.

- Ministry of Public Health [MoPH]. (2005). WHO Thailand and Department of Disease Control, 2005. Overview of Thai-Myanmar Border health situation, 2005. Bangkok: MoPH.
- Mosher, WD., Martinez, GM., Chandra, A., Abma, JC. & Willson SJ. (2004). *Use of contraception and use of family planning services in the United States 1982–2002*. New York: Oxford University.
- Naing. (2003). *Meeting of World Vision Funds Thailand*, 2003: Bangkok, WVFT. (Unpublished manuscript).
- Parveen, SS. (2000). Factors affecting contraceptive use among married female adolescents in Bangladesh. Master's thesis, Institute of Population and Reproductive Health Research, Mahidol University.
- Pasha, O., Fariyal F. & Fikree, VS. (2001). Determinants of unmet need for family planning in squatter settlements in Karachi, Pakistan. Asia-Pacific Population Journal: 21(2)93-108
- Peailueang, SLN. (2002). Current and Future Fertility: Comparison of Natives and Immigrants in Kanchaburi Province, Thailand .Nakhon Pathom: Institute for Population and social Research, Mahidol University.
- Phyu, S. (2008). Temporary contraceptive use among married Myanmar Migrant women in reproductive age in Phuket province, Thailand. Master"s Thesis, Faculty of Public Health, Mahidol university.
- Sable, M.R., Libbus, M.K., & Chiu, J.Er. (2000). Factors affecting contraceptive use in women seeking pregnancy tests: Missouri, 1997. Family Planning Perspectives. 32(3), 124-131.
- Schoemaker, J. (2005). Contraceptive use among the poor in Indonesia. *International Family Planning Perspectives* 31(3): 106-114
- Shah, DS. (2009). *Monophasic versus multiphasic oral contraceptives: RHL commentary*. Geneva: World Health Organization. Available from http://apps.who.int/rhl/fertility/contraception/dscom/en/ [November 3, 2009]

- Soe, EM. (2009). Birth spacing practice among married Myanmar migrant women in Muang District, Ranong province, Thailand. Master's thesis, Faculty of Public Health, Mahidol University.
- Soe, HHK. (2007). *Utilization of contraception among myanmar migrant married women in Phang-nga province, Thailand.* Master's Thesis, College of Public Health Sciences, Chulalongkorn University.
- Stern, A. (1998). Thailand migration situation and its relations with APEC members and other countries in Southeast Asia. Bangkok: Asian Research Center for Migration.
- Tehrani, FR., Farahani, FKA. & Hashemi, MS. (2001). Factors influencing contraceptive use in Tehran, Iran. *Family Practice*. 18: 204-208
- Thang, NM. & Huong, VT. (2001). *Oral Contraceptive Pill in Viet Nam: Situation, Client Perspectives and Possibilities for Promotion*. Hanoi: National Committee for Population and Family Planning.
- Traguldee, J. (2000). Health knowledge and self care behavior of migrant female workers from Myanmar in Ratchaburi Province, Thailand. Master's Thesis, Faculty of Public Health, Mahidol University.
- Tripathi, LP. (1996). Determinants of contraceptive use; A comparative study of 1987

 DHS data from Sri Lanka and Thailand. Bangkok: National Statistical Office
- Trussell, James (2007) Contraceptive Technology (19th rev. ed.). New York: Ardent Media.
- UNFPA. (2006). Situation analysis of United Nation Population Fund-country program 2006: UNFPA
- UNFPA. (2006). Situation analysis of United Nation Population Fund-country program. New York: UNFPA.
- UNFPA.(2001). Contraceptive Method Mix. New York: UNFPA.
- United Nation [UN]. (1999). Economic and Social Affairs: Population growth and demographic structure. New York: UN.

- United Nations [UN]. (2005). Department of Economic and Social Affairs: World contraceptive use. New York: UN.
- United Nations [UN]. (2006). Revision of the official United Nations(UN) population estimates and projections. New York: UN.
- Vanhnolrath, P. (2003). Family planning practice among married women of reproductive age in Samneua Municipality, Houaphanh Province, Lao PDR. Master's thesis, Asian Institute of Health Development, Mahidol University.
- Wai, KT. (1995). Determinants of contraceptive use in Rural Myanmar, the role of Motivation and Attitudes. Master's thesis, Institute of Population and Family Planning Research Faculty, Mahidol University.
- Wang, XJ., Lou, CH. & Gao, ES. (2006). Relationship between contraceptive use behavior and related knowledge and cognition among vocational high school students. *Zhonghua Yu Fang Yi Xue Za Zhi*. 40(3): 184-8
- Win, KS. (2002). Contraceptive use among Myanmar migrant women in Samut Sakorn Province, Thailand. Master's Thesis, Faculty of Public Health, Mahidol University.
- World Health Organization [WHO]. (1995). Health Benefits of Family Planning, Available at http://www.who.int/reproductive-health/publications/health-benefits-family-planing/fpp-95-chapter. [November 21, 2009]
- World Health Organization [WHO]. (1997). Assessment of contraceptive methods mix in Myanmar. Yangon: Geneva: WHO
- World Health Organization [WHO]. (2000). *Population growth and Family planning: Six Billion and Beyond. The Contraception Report.10.* Available from http://www.contraceptiononline.org. [October 23, 2009]
- World Health Organization [WHO]. (2004). Research on reproductive health at WHO (2004) Biennial Report 2002-2003. Geneva: WHO
- World Health Organization [WHO]. (2006). *Myanamr. Mortality country fact sheet.* Geneva: WHO

World Health Organization [WHO]. (2007). South East Asia Regional Office [SEARO]:Myanmar and Birth Spacing: An overview. Available from http://searo.who.int/LinkFiles/Family_Planning_Fact_Sheets_Myanmar.pdf
[December 11, 2009]



APPENDICES

APPENDIX A

Participant Information Sheet

Title of research project... "Knowledge, attitude and practice of combined oral contraceptives (COCs) among Myanmar migrant married women of reproductive age at Ranong province in Thailand"...

Principle researcher's name.. Mrs. EI PHYU PHYU CHAW

Position... Master of Public Health (Student)

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You are being invited to take part in a research project. Before you decide to participate it is important for you to understand why the research is being done and what it will involve. Please take time to read or ask interviewers to read out the translated participant information sheet carefully and do not hesitate to ask if anything is unclear or if you would like more information.

This research project involves interview participants about knowledge, attitude and practice of combined oral contraceptives (COCs) usage among Myanmar migrant married women of reproductive age between 15-49 years who are COCs currently user or had ever used COCs and mentally sound, can speak Myanmar language fluently and want to give verbal consent and willing to participate. This study required 289 participants residing at Paknam and Bangrin Sub-districts, Muang District, Ranong province in Thailand.

The researcher or her interviewers will explain to you what the purposes of the study are and will answer any questions you may have about it.

All information about the questionnaire (Socio demographic characteristics, external factors, knowledge, attitude towards COCs and current usage COCs) was given before the interview begins so you may decide if you would like to participate. The interview will take about 30 minutes to finish.

Furthermore, all information obtained is confidential and will not be shared. It will not be used against you in anyway and will only be used for purposes of this study and no identifying information was collected. By giving the verbal consent, it means that you are willing to participate in this study and that you fit the criteria stated. You are free to withdraw from the study at any point in time, without giving the reason while receiving the same health care services.

If it is shown that you do not meet the inclusion criteria after the screening process, then unfortunately, your responses cannot be included in this study as it may alter the results of this study. If you need any advice, please do not hesitate to contact the researcher who will provide you with the information you may need.

No procedure was performed on you so you should not have any kind of side effects as a result. The benefit of the project is that this study will give the baseline information specific to COCs usage among migrant women for health authorities for further promoting contraception usage and family planning knowledge to Myanmar migrant women.

Information in the results was reported as a total picture and no participant was used as an example nor will any indentifying information about you be used.

Participation in this study is completely voluntary and there is no compensation for completing the questionnaire. All cooperation is highly appreciated. After the interview, the respondents may be provided with appropriate pamphlet.

If researcher does not follow or treat the participants according to all these items, the participants can report the incident to the Ethical Review Committee for Research Involving Human Research Subjects, Health Sciences Group, Chulalongkorn University (ECCU). Institute Building 2, 4th Floor, Soi Chulalongkorn 62, Phyathai Rd., Bangkok 10330, Thailand, Tel: 0-2218-8147 Fax: 0-2218-8147 E-mail: eccu@chula.ac.th.

APPENDIX B

QUESTIONNARIES

Topic: Combined Oral Contraceptive usage a	mong Myanmar migrant married women of
reproductive age in Ranong Province, Thailan	ıd
Identity No:	Interviewer:
Instruction: Please fill color with pencil in \square a	and fill in as appropriate.
Part 1: Socio-demographic characteristics	
1. How old are you now? Years	S.
2. Education	
1. [] never go to school	
2. [] primary education (1-4 years of school)	
3. [] secondary education (5-8 years of school	1)
4. [] high school level (9-10 years of school)	
5. [] higher education (university)	
3. Occupation 1. [] fishery related worker	4. [] factory worker
2. [] construction worker	5. [] housewife
3. [] general worker	6. [] others (please specify)
4. Family income per month (Total family inc	come per month) Baht/per month
5. How many children do you have now?	children
6. How many children do you want to have fo	or your family?children
7. How long have you been living in Thailand	? Months/Years

8. Registration status in Thailand	1.[] Registered	2.[] Unregistered
9. What is your Thai language skill?		
1. [] Cannot communicate at all		
2. [] Can communicate basically		
3. [] Can speak Thai language fluen	tly but cannot read a	nd write
4. [] Fluently in Thai language		
Part 2: Practice of combined oral	contraception	
10. Are you using combined oral con	ntraception now?	
1. [] Yes, go to Q. 13 2.	[] No,go to Q. 11	
11. If you are not currently using combined oral contraceptives in the		traceptive, have you ever used
1. [] Yes 2. [] No		
12. What was the most importa contraceptives?	ant reason of not	currently using combined oral
1. [] want more children	6. []]	nusband away
2. [] unaffordable	7. [] h	usband objects
3. [] health reasons	8. [] .	religious reason
4. [] suffer side effects (specify)	9[]o	thers (specify)
5. [] difficult to buy		
13. How long have you used combin	ned oral contraceptive	e pills? months

1	ou have decided to use combined oral contraceptives nily planning? (You can answer more than one)			
1. [] recommendation of family planning workers 5. [] convenience to use				
2. [] recommendation of friends / rela	atives 6. [] side effects of other methods			
3. [] easily available	7. [] cheap			
4. [] husband preferred	8. [] others (specify)			
15. Who decide you to use combined	oral contraception?			
1. [] Yourself 3	3. [] Your husband/partner			
2. [] Both partner	1. [] Others			
16. Who suggest you for thinking about to use combined oral contraceptives?				
1. [] Your husband/partner	4. [] Family member			
2. [] Health worker	5. [] Other (specify)			
3. [] Friends				
Part 3: Knowledge about combined oral contraceptive method(COC pills)				
17. Have you ever heard of combined oral contraceptive methods (COC pills)?				
1. [] Yes, go to Q 18 2. [] 2.No, go to Q 20				
18. How many kinds of COCs have you ever know?				
1 Only one kind 2 Two to fo	our 3 More than four			

19. Knowledge about combined oral contraceptives (COC pills).

No.	Statement	True	False	Uncertain
1	Using combined oral contraceptive pills can reduce			
1	unwanted pregnancy and unintended pregnancy.			
2	COCs is the best temporary contraception method with			
2	least failure rate if perfect use according to instructions			
3*	COCs cannot return of fertility by stopping its use			
4*	COCs can interfered to the sexual relation			
5	COCs should be taken a pill everyday to avoid becoming			
3	pregnant.			
6*	COCs should be used not even understanding how to use			
0	the pills thoroughly			
7*	COCs can be taken at any time daily			
8	It is important to understand how to do if women miss			
0	the pills			
9*	The side effects of COCs are seriously harmful to users			
10	COCs can cause dizziness and nausea			
11	The side effects of COCs will go away after about three	37		
11	months of its use			
12*	The complications of COCs are common.			
12	The complications of coes are common.			
13	COCs will not cause weight gain	715	16	
13	COCS will not cause weight gam		l d	
14	COCs will not increase the risk of depression			
		0.0	10	201
15	COCs can prevent the risk of endometrial and ovarian	117		2 7
	cancer			01 0
		l	1	

16*	Oral pill(COCs) will not give more chance to have cervical cancer.		
17*	Using oral contraceptive pill can protect against sexually transmitted diseases (STDs) including HIV/AIDS.		
18	COCs is not suitable to severe hypertensive patients		
19*	COCs can be used by liver disease patients		
20*	COCs can be used by breast-feeding mother		

Part 4: Attitude towards combined oral contraceptives use

20. How do you think about following

- A = agree
- UC = uncertain
- D = disagree

(According to 3 points Likert scale -McDowel Ian and Newell C)

No.	Statement	Agree	Disagree	Uncertain
1	I believe that birth spacing can improve mother's life.	Î		
2	It is a good thing to do to prevent unplanned pregnancy by using combined oral contraceptive pills.	<u> </u>	กร	6
3*	I believe that COCs is not as effective as other contraceptive methods	191	ยา	12

4	Using oral contraceptive is convenient for mos women	t			
5*	* Using oral contraceptives is bad because it can get overweight.				
6	I believe that COCs can reduce some cancer				
7	To take COCs pills daily is not difficult				
8*	Buying COCs is ashamed for women				
9*	Cost for COCs is high				
10*	To get COCs is difficult	10			
	Part 5: External factors of COCs usage 21. How many places are there within your reach where you can get the combined oral contraceptives?places				
22. V	Where do you usually get combined oral contraceptive	es?			
	1. [] from drug store 4. [] from private	clinic			
	2. [] from government clinic 5. [] others (specify)				
	3. [] from NGO				
23. I	23. How can you go to get combined oral contraceptives?				
	1. [] walking 4. [] ask someone to buy				
	2. [] public vehicle 5. [] other (specify) -			1010	

3. [] private vehicle

24. Is it convenience for you to get co	mbined oral contraceptives?
1. [] Yes 2. [] No	
25. How far away from your home to	get combined oral contraceptives?
1. [] too far 2. [] not too far	3. [] near
26. How much can it cost of the COC	s approximately?
1. Free of charge 2.Cost.	(per month/per dose)
27. How do you think about the cost of	of COCs?
1. [] affordable 2. [] not	affordable
28. Where are the best place/ places to	o obtain information about contraceptive methods?
1. [] home, family member	4. [] friends
2. [] health center	5. [] drug store
3. [] TV, news	6. [] others (specify)
29. Are you satisfied with your inform	nation about combined oral contraceptive method?
1. [] Yes, go to Q 30	2. [] No, go to Q 31

30. Why do you satisfy?				
1. [] friendly caring informers	5. [] effective information			
2. [] short waiting time	6. [] good services			
3. [] privacy	7. [] can ask informers anytime			
4. [] low cost	8. [] free of charge for contraceptives			
	9. [] others (specify)			
31. Why don't you satisfy?				
1. [] informers are not friend	lly 4. [] ineffective information			
2. [] long waiting time	5. [] informers not answer what I want to know			
3. [] costly	6. [] others (specify)			
32. What is the most important one about family planning that you need from the government or NGO?				
1. [] family planning inform	ation 5. [] supply condoms free of charge			
2. [] family planning clinic	6. [] supply COCs free of charge			
3. [] provide sterilization	7. [] others (please specify)			
4 [] supply contraceptives w	vith chean price			

Thank you very much for your kind co-operation.

APPENDIX C

Time frame

	Time Frame (Months)								
	Sep 09	Oct 09	Nov 09	Dec 09	Jan 10	Feb 10	Mar 10	Apr 10	Ma 10
1.Literature review	///	110							
2. Writing thesis proposal		1							
3. Submission for	6								
proposal exam	N.								
4. Proposal exam	M	91	4//						
5.Ethical consideration	187				M				
from Chulalongkom		2)123	PA						
University (CPHS)	2		A	W	4				
6.Pretest questionaire		99		7					
7.Field preparation and	900	2/4							
data collection		V			A	Ω			
8. Data analysis						J			
9. Thesis, article writing									
10. Final thesis exam					W				
11. Submission of article			9/						
for publication	٤	VI	3	M 8	9	17	17		

APPENDIX D

Budget

No.	Activity	Unit	Price	Unit (Number)	Total Budget (Bahts)
1.	Pre-testing	7/// 11/1			
	- Photocopy	Question	6	30	180
	- Stationery	set	400/set	1	400
2.	Data Collection	10,500,00			
	- Photocopy Quest.	Question	6	290	1740
	- Souvenir for	Set	10	290	2900
	respondent	Trip/p/d	200/ p/d	2 p×14 d	5600
	- Interviewers per diem	Round trip	1500/p/trip	2p×1 trip	3000
	- Travelling cost	Trip/per/day	300/d	14 days	4200
	- Transportation cost	Wallan Co			
	- Data Processing				
	Data collecting process	(U)) (U) (U)		Sub total	18020
3.	Document Printing	-			
	- Paper + Printing	Page	5/p	800	4000
	- Photocopy (exam+	Page	0.5/p	12×400	2400
	final				
	submit)	Set	400	1	400
	- Stationery	Set	150/set	6	900
	- Binding Paper (exam)	Set	200/set	6	1200
	- Binding Paper (submit		TIC		d
	Thesis Document			Sub total	8900
	process			000	- 0
Gran	nd total	11919	111	4/1 61	26920

VITAE

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