YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF APPLIED ECONOMICS
MASTER OF PUBLIC ADMINISTRATION PROGRAMME
(NAY PYI TAW CAMPUS)

MODERN CONTRACEPTIVE METHODS OF FAMILY PLANNING AMONG WOMEN IN NAY PYI TAW

(Case Study: Thit Poke Pin Village Tract in Lewe Township)

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EMPA - 3 (18th BATCH)

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MODERN CONTRACEPTIVE METHODS OF FAMILY PLANNING AMONG WOMEN IN NAY PYI TAW (Case Study: Thit Poke Pin Village Tract in Lewe Township)

This thesis is submitted as a partial fulfillment towards the requirements for the degree of Master of Public Administration (MPA)

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This is to certify that this thesis entitled "**Modern Contraceptive Methods of Family Planning Among Women in Nay Pyi Taw (Case Study: Thit Poke Pin Village Tract in Lewe Township)**", submitted in partial fulfilment towards the requirements for the degree of Executive Master of Public Administration (EMPA) has been accepted by the Board of Examiners.

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ABSTRACT

Family planning through contraception offers women the opportunity to gain time between childbirths by deciding when to get pregnant in relation to their other life obligations. This study aimed to identify the family planning situation in Nay Pyi Taw and current status of modern contraceptive methods of family planning in Lewe township and to analyze the use, need, impacts and perceptions on the modern contraceptive methods among married women in Lewe township. A cross-sectional quantitative method is used for this study. A sample of 150 randomly selected married women aged 15-49 who are currently using short-term contraceptive methods was interviewed with structured questionnaire. In summarizing, the modern contraceptive methods are available but inaccessible in the study area where married women have misinformation, lack of counseling, lack of contraceptive supplies.

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LIST OF ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
ASEAN	Association of Southeast Asian Nations
BHS	Basic Health Staff
CBHW	Community-based Health Workers
COCs	Combined Oral Contraceptive Pills
CPR	Contraceptive Prevalence Rate
DMPA	Depomedroxyprogesterone Acetate injection
DoPH	Department of Public Health
EC	Emergency Contraceptive Pills
FP	Family Planning
HIV	Human Immunodeficiency Virus
INGOs	International Non-government Organizations
IUD	Intrauterine Devices
Jhpiego	Johns Hopkins Program for International Education in Gynecology and Obstetrics
LAM	Lactational Amenorrhea Method
LAPM	Long-acting Permanent Methods of Contraception
LARC	Long-acting Reversible Methods of Contraception
MMCWA	Myanmar Maternal and Child Welfare Association
MMR	Maternal Mortality Ratio
MSI	Marie Stopes International
NGOs	Non-government Organizations
PSI	Population Service International
RHC	Rural Health Center
STI	Sexually Transmitted Infection
TFR	Total Fertility Rate
UNFPA	United Nation Population Assistant Fund
U5MR	Under-five mortality rate
WHO	World Health Organization

CHAPTER I
INTRODUCTION

1.1 Rationale of the Study

Family planning and contraception enables women who wish to reduce the size of their family. Evidence suggests that women who have more than 4 children are at risk of maternal death. Family planning can prevent closely spaced and ill-timed pregnancies and birth, which contribute to infant death. Infants of mothers who die as a result of giving birth also have a greater risk of death and poor health.

To establish a well-being and healthy family life, he or she need to awareness on the reproductive health care with the understanding of family planning concepts and methods. Because of a comprehensive progress of reproductive health care creates to lessen maternal and infant mortality rates, cure of sexually transmitted disease (STD) and assistance to sterile couples, etc. which may lead to economic and social development with a fruitful way of health practices.

The use of contraception and family planning has many advantages. By reducing rate of unintended pregnancy, it reduces the number of unsafe abortions. Family planning and contraception prevents health risks related to pregnancy and child birth in women by spacing of pregnancies at increased risk of health problems and death room childbearing.

The number of unwanted births and induced abortions could have been substantially reduced to help families and countries reach their health goals if the most effective LAPMs were used. In addition, avoiding barriers to contraceptive use and increasing the demand for family planning could prevent unwanted pregnancies, maternal deaths and infant deaths each year.

The study area, Lewe Township is the largest township among the townships in Nay Pyi Taw according to 2014 population and housing census report. The majority of the people in Lewe Township live in rural areas with only (10.6%) living in urban areas and there are more females than males with 94 males per 100 females. For women aged 15-49, the total fertility rate is 2.6 children per woman and is slightly higher than the

total fertility rate of 2.5 at the National level. The contraceptive prevalence rate among married women age 15-49 is over 50% in Nay Pyi Taw by 2015 demographic and health survey. Despite its wider benefits and access made at community level, contraceptive methods are one of underutilized services in study area and it is believed to be influenced by misconceptions and socio-cultural values. Therefore, this study questions focused on exploring barriers to inform program managers. The structured questions were asked to married women respondents who are not using long acting and permanent method of contractions focused on their and community view on contraceptive methods, desire for more children, methods preference and reason for preference, fear of side effects and misconceptions about contraceptive utilization and possible solution/s to address challenges. All participants were encouraged to openly answer their opinions.

1.2 Objective of the Study

This study aimed to identify the family planning situation in Nay Pyi Taw and current status of modern contraceptive methods of family planning in Lewe Township and to analyze the use, need, impacts and perceptions on the modern contraceptive methods among married women in Lewe township, Nay Pyi Taw.

1.3 Method of Study

A cross-sectional study design using quantitative methods was conducted in Thit Poke Pin village tract in the Lewe Township area of Nay Pyi Taw in August and September, 2022.

1.4 Scope and Limitation of the Study

This study was conducted at selected Thit Poke Pin village tract which has the second largest population in Lewe Township. The 150 samples were taken from respondent married women aged 15-49 who are living in selected village and currently using short-term contraceptive methods. The study period is August and September, 2022.

1.5 Organization of the Study

This study is organized into five chapters. The first chapter is introduction with rationale, objectives, method, scope and limitation, and organization of the study. The

second chapter presents the importance and aim of family planning, the benefits of using family planning, methods of modern contraceptive, the impacts of modern contraceptive methods and the challenges of contraception. The third chapter, then presents overview of modern contraceptive methods of family planning among women in Nay Pyi Taw. The fourth chapter is the analysis on using modern contraceptive methods of family planning among women at the selected village tract in Lewe Township, Nay Pyi Taw. The last chapter explores in the finding of the study, conclusion and recommendations.

CHAPTER II
LITERATURE REVIEW

2.1 Importance and Aim of Family Planning

Family planning is important for the health of a mother and her children, as well as the family's economic situation. According to the United States Agency for international Development, having children more than five years or less than two years apart can cause both a mother and her children serious health consequences. The financial consequence of having children involves the medical costs of pregnancy and birth and the high costs associated with actually bringing up children. Since parents are responsible for providing education, shelter, clothing and food for their children, family planning ha an important long-term impact on the financial situation of any family.

The World Health Organization and other global and local organizations are actively seeking ways to increase the amount of information and access people have to contraception and other resources related to family planning all around the world. The organization is particularly focusing on low-income communities and developing countries where family planning is less prevalent. Planned Parenthood is an organization that has locations around the U.S that provide low-cost family planning services and sex education for low-income and uninsured patients.

Family planning philosophies can vary widely across countries. China in particular encourages couples to have only one child each for population control reasons. Other countries have negative attitudes toward family planning. The United Nations (UN) has a fund and annual conference to address global family planning. It aims to provide greater access to reproductive health potions and reduce HIV transmission and infant and maternal mortality.

2.1.1 The Importance of Family Planning (United States)

According to the Centers for Disease Control and Prevention (CDC), family planning is one of the 10 greatest public health achievements of the twentieth century (CDC, 1999). The ability to time and space children reduces fetal, infant, and maternal

mortality and morbidity by preventing unintended and high-risk pregnancies (World Band, 1993). Unintended pregnancy is associated with an increased risk of morbidity for the mother and with health-related behaviors during pregnancy, such as delayed prenatal care, tobacco use, and alcohol consumption that are linked to adverse effects for the child (IMO, 1995). In addition to preventing unintended pregnancies, the effective use of latex condoms can reduce the transmission of sexually transmitted diseases (STDs). The availability and appropriate use of contraception can also reduce abortion rates, since a large percentage of unintended pregnancies (about one-half in 1994) result in abortion (Finer and Henshaw, 2006). Moreover, couples who are able to plan their families experience less physical, emotional and financial strain have more time and energy for personal and family development and have more economic opportunities. There is also ample evidence that family planning services are cost-effective (Jaffe and Cutright, 1981; Amaral et al, 2007; Frost et al., 2008).

In 2002, nearly three-quarters of women of reproductive age in the United States (approximately 64 million women aged 15-44) received at least one family planning or related medical service (Mosher et al,. 2004). Nonetheless, the rate of unintended pregnancies in the United States remains high. In 2001, 49 percent of pregnancies were unintended, a rate unchanged since 1994 (Finer and Henshaw, 2006). While unintended pregnancies occur in all age and racial/ethnic groups, they are more likely among adolescents, women in their early 20s, and poor and minority women (Finer and Henshaw, 2006). Notably, the United States has high rates of unintended pregnancy compared with other developed countries. For example, the percentage of unintended pregnancies in France is 33 percent and in Scotland 28 percent (Trussell and Wynn, 2008). Unintended pregnancies result in societal burden, and significant economic savings are realized through investment in family planning services. The Guttmacher Institute has estimated that every $1.00 invested in helping women avoid unwanted pregnancies saved $4.02 in Medicaid expenditures (Frost et al., 2008b).

A variety of factors contribute to unintended pregnancy, including lack of access to contraception, failure of chosen contraceptive methods, less than optimal patterns of contraceptive of use, and lack of adequate motivation to avoid pregnancy (Frost et al,. 2008a)). The reasons for the high rate of unintended pregnancies in the United States, particularly in relation to rates in other industrialized countries, are poorly understood.

At the beginning of the twentieth century in the United States, the subject of birth control was not openly discussed. For example, anti-obscenity laws, including the federal Comstock law (March 3, 1873, Ch. 258. $ 2, 17 Star. 599), banned the discussion or distribution of contraceptives. These laws were not declared unconstitutional until 1972 (Eisenstadt v. Baird, 405 U.S. 438).

2.2 Benefits of Using Family Planning

The world's population is growing by 81 million people per year, and track to reach 10 billion by 2057. This growth is not sustainable. Population Media Center (PMC) writes a lot about why it's not sustainable ecologically, but it's also not sustainable economically.

Since World War II, no country has gone from developing status to developed status without first reducing its population growth rate, smaller family sizes enable couples to save a higher percentage of their income and invest some of it in education and infrastructure, leading to increased productivity of the economy, greater employment, and higher incomes.

On the other hand, couples who have large numbers of children are more likely to experience financial struggle and might have to make some difficult choices about which children to send to school and support financially. Too often, girls are the ones who go without in these cases, because their education is considered less important. The reasons are many: girls are seen as intellectually inferior, or the investment is considered unwise because there are no job opportunities for women, or girls are removed from school when they get their periods. Whatever the reason, some of these girls are married off at young ages and quickly begin having children of their own, and others are forced to drop out of school so they can help take care of their brothers and sisters.

Investing in female education is a win not only for girls, but for families, society, countries, and the world as a whole. Girls who receive a full education are more likely to have lower fertility rates and are better equipped to make informed choices for themselves, take care of their families, and contribute it society in multiple ways.

Along with investing in female education, countries looking to slow population growth and improve their economies should make sure family planning services are available and citizens are empowered to use them. Simply providing family planning services is not enough because deeply ingrained cultural and religious norms often

discourage people from taking advantage of family planning methods like condoms and birth control.

In addition to making sure family planning services are widely available and accessible; countries need to invest in changing these attitudes and norms by improving the status of women, educating about the economic and health ramifications of smaller families for that family, delaying the age of first pregnancy, and demonstrating the safety of using contraception.

2.2.1 Advantages of Family Planning

Family planning reduces the number of unplanned pregnancies and abortions among women, and allows women the opportunity to choose when the time is right to have a child. Family planning gives women the option to wait until they are financially able to care for a child, and gives them time to pursue educational and employment goals without worrying about the financial burden of an unplanned pregnancy. Family planning reduces the number of abortions overall, especially unsafe abortion. It prevents sexually transmitted infections (STIs), including HIV/AIDS. Family planning empowers women – enabling them to plan and timing of their families, improves infant and child health - spacing between births, limiting births to healthier years and it improves the economic well-being of families and communities.

Family Planning provides many benefits to mother and children: enables mother to regain her health after delivery, gives enough time and opportunity to love and provide attention to her husband and children, gives more time for educational pursuits with fewer children leads to improved work opportunities, it helps to raise people's standard of living, gives more time for her family and own personal advancement, healthy mothers produce healthy children, avoids the congenital disabilities, good prenatal care and nutrition, better conducive atmosphere for children's physical growth and development and children will get the attention, security, love and care they deserve. For father, family planning lightens the burden and responsibility in supporting family, enables to give his children their basic needs (food, shelter, education, and better future), gives time for his family a down personal advancement.

2.2.2 Disadvantages of Family Planning

The side effects of hormonal birth control may stand out as a disadvantage for some women. While many women regularly use contraception without experiencing

side effects, complications can and do occur. The most common side effects associated with hormonal contraception include weight gain, headaches, dizziness and nausea. Less common but more serious side effects include stroke, blood clots and ectopic pregnancy.

Though natural family planning poses no health risks, this method is among the least effective at preventing pregnancy, according to the National Women Health Information Center, out of 100 women who use natural family planning, approximately 25 will become pregnant.

2.2.3 Health Benefits

According to a report in the November 2003 International Journal of Cancer, using oral contraceptives for five years or more reduces a woman's chances of getting ovarian cancer in the future. Birth control pills also help clear up acne, regulate or lessen menstrual flow, and reduce menstrual cramps and other premenstrual symptoms.

Perhaps most important, family planning can help save the lives of both women and children, especially in third world countries. "Family planning programs have a tremendous impact on the reduction of maternal mortally," says Yves Bergevin, M.D, coordinator of the Thematic Fund for Maternal Health. According to the United Nations Population Fund, every eight minutes a woman dies during an unsafe abortion and approximately 2.7 million newborn deaths could be prevented each year through birth control.

Family planning does not just benefit individuals. A woman's ability to choose the number of children she wants to have reduces overpopulation and reduces the economic impact of overpopulation. According to the California Department of Health Services Office of Family Planning, the average woman would experience approximately 12 to 15 pregnancies in her lifetime if birth control did not exist.

2.3 Modern Methods of Contraception

Modern methods of family planning include birth control, assisted reproductive technology and family planning programs. In regard to the use of modern methods of contraception, the United Nations Population Fund (UNFPA) says "Contraceptives prevent unintended pregnancies, reduce the number of abortions, and lower the incidence of death and disability related to complications of pregnancy and childbirth". UNFPA states, "If all women with an unmet need for contraceptives were able to use

modern methods, an additional 24 million abortions (14 million of which would be unsafe), 6 million miscarriages, 70,000 maternal deaths and 500,000 infant deaths would be prevented.

In cases where couples may not want to have children just yet, family planning programs help a lot. Federal family programs reduced childbearing among poor women by as much as 29 percent, according to a University of Michigan study.

A number of contraceptive methods are available to prevent unwanted pregnancy. There are natural methods and various chemical-based methods, each with particular advantages and disadvantages. Behavioral methods to avoid pregnancy that involve vaginal intercourse include the withdrawal and calendar-based methods, which have little upfront cost and are readily available. Long-acting reversible contraceptive methods, such as intrauterine device (IUD) and implant are highly effective and convenient, requiring little user action, but do come with risks. When cost of failure is included, IUDs and vasectomy are much less costly than other methods. In additions to providing birth control, male or female condoms protect against sexually transmitted diseases (STD). Condoms may be used alone, or in addition to other methods, as backup or to prevent STD. Surgical methods (tubal ligation, vasectomy) provide long-term contraception for those who have completed their families.

2.4 Impact of Modern Contraceptive Methods

It is important to recognize that even in 2012, contraceptive use was having impact in those years, it is estimated that modern contraceptive use across the 69 focus 69 countries averted 74 million unintended pregnancies. This means that in 2017, efforts to reach additional users and improve access to a range of methods have resulted in 10 million more unintended pregnancies averted annually than just 5 years ago.

Despite the large impact that modern contraceptive use has on reducing unintended pregnancies, unsafe abortions and maternal mortality, an estimated 43.5 million women across FP2020 countries still experienced an unintended pregnancy from July 2016 to July 2017. Most of these unintended pregnancies occurred among women who reported not using modern contraception. While some occurred among women who were using a modern method but experienced a contraceptive failure.

As a result of the more than 309 million women using modern contraception, 84 million unintended pregnancies were prevented from the midpoint of 2016 to the midpoint of 2017 compared to the number that would occur if no modern contraceptives

were used Preventing these unintended pregnancies has in turn averted 26 million unsafe abortions and 125,000 maternal deaths. These numbers represent the total annual impact of the more than 309 million women using modern contraception across FP2020 countries not just the impact from the 38.8 million additional users of modern contraception in 2017. The distribution of these impacts by region, with largest number of pregnancies, unsafe abortion, and maternal deaths averted in South Asia due to the large number of women using contraception. As contraceptive use grows across the other regions, so too will the impacts.

The Family Planning model in Spectrum was used to project the impact of modern contraception on pregnancies, abortion and births in South Africa (2015-2030). The contraceptive prevalence rate (CPR) was increased annually by 0.68 percentage points. The Lives Saved Tool was used to estimate maternal and child deaths, with coverage of essential maternal and child health interventions increasing by 5% annually. A scenario analysis was done to test impacts when: the change in CPR was 0.1% annually and intervention coverage increased linearly to 99% in 2030.

The results of this analysis show the impact of increasing the contraceptive prevalence rate (CPR) on the total fertility rate (TFR), birth, abortions and maternal and child deaths. Also presented are the total annual costs of scaling up family planning methods by 0.68% per year. The baseline CPR was 64.6%, which was projected to increase to 75.5% in 2030 (with CPR increasing by 0.68% per year).

Table (2.1) Base Case Results for Projected Demographic Events and Impact of Family Planning on Maternal, Newborn and Child Mortality

Projected Demographic Events	2014 Baseline	Change in 2030
Contraceptive prevalence rate (%)	64.4	75.5
Total fertility rate (number)	2.43	1.65
Total number of pregnancies	1,336,800	1,006,000
Unintended pregnancies (number)	535,400	383,500
Abortions (number)	103,400	74,071
Live births (number)	1,059,600	939,500

Table (2.1) Base Case Results for Projected Demographic Events and Impact of Family Planning on Maternal, Newborn and Child Mortality

Projected impact on mortality	2014 baseline	Changes in 2030
Number of maternal deaths	2,800	1,700
Number of child deaths (0-69 months)	38,100	28,300
Number of neonatal deaths	12,800	10,800
Maternal mortality ratio (deaths per 100,000 live births)	269	210
Maternal mortality rate (deaths per 10,000 women aged 15-49)	21	11
Under 5 mortality rate (deaths per 1,000 live births)	41	34
Neonatal mortality rate (deaths per 1.000 live births)	12	12
Deaths averted by family planning (2030)	**Deaths averted**	**Potential life years gained**
Maternal deaths	600	16,200
Child deaths (0-69 months)	5,900	354,000
Neonatal deaths	1,500	90,000

Source: Scaling Up Family Planning to Reduce Maternal and Child Mortality: The Potential Costs and Benefits of Modern Contraceptive Use in South Africa.

If CPR increased by 0.68% annually, the number of pregnancies would reduce from 1.3 million in 2014 to one million in 2030. Unintended pregnancies, abortions and births decrease by approximately 7,000 newborn and child and 600 maternal deaths. The total annual costs of providing modern contraception in 2030 are estimated to be US $33 million and the cost per user of modern contraception is US $7 per years. The incremental cost per life year gained is US $40 for children and US $1,000 for mothers.

Maternal and child mortality remain high in South Africa, and scaling up family planning together with optimal maternal, newborn and child care is crucial. A huge impact can be made on maternal and child mortality, with a minimal investment per user of modern contraception.

2.5 Challenges of Contraception

Birth control policies and practices are controversial in the developed and the developing worlds. In developed countries, such as the United States, contraceptive methods fail frequently. Many of the types of contraceptives used commonly by Americans have well-documented rate of failure. One measure of the number of unwanted pregnancies is the rate of abortion, the surgical termination of pregnancy. Abortion and the controversial anti-gestation drug, RU 486 (Roussel-Uclaf), are not considered in the United States. Although all individuals who receive abortions do not practice birth control, it is clear that many women do become pregnant when contraceptive methods fail.

Abortion rates typically are highest in countries where contraceptives are difficult to obtain. For example, in the Soviet Union in the early 1980s, when contraceptives were scarce, 181 abortions were performed annually for every 1,000 women aged 15 to 44; in 1990, 109 for every 1,000 women; and 1992, 98 per 1,000. In comparison, in the 1980s in selected western European countries, the rate did not exceed 20 per 1,000.

The abortion rate in the United States is typically higher than in many other developed countries. A 1995 survey showed the annual abortion rate was 20 per 1,000 women aged 15 to 44 (a total of 1,210,883 legal abortions), a decrease of 4.5% from 1994's rate of 28 per 1,000. The annual numbers have been decreasing since 1987, and have been decreasing since 1987, and 1995 was the lowest recorded since 1975. However, the rate in Great Britain in 1990 was less than half that of the U.S at 13 per 1,000 and in the Netherlands, 5.6 per 1,000. A study of 20 western democracies found that countries with lower abortion rates tended to have contraceptive care accessible through primary care physicians.

Some experts believe that more access to contraceptive services would result in lower rates of accidental pregnancy and abortion. However, vigorous debate concerning programs to deliver contraceptives through school-based clinics and in other public settings has polarized the United States. Groups such as the Roman Catholic Church have opposed funding for greater accessibility of contraceptive services because they believe the use of any contraceptive is wrong.

Internationally, use of contraceptives has increased dramatically from the years 1960-1965, when 9% of married couples used contraceptives in the developing

countries of Latin America, Asia, and Africa. By 1990, over 50% of couples in these countries used contraceptives.

China has taken an aggressive policy to limit population growth, which some experts have deemed coercive. Couples who agree to have one child and no more receive benefits ranging from increased income and better housing to better future employment and educational opportunities for the child. In addition, the Chinese must pay a fine to the government for each “extra” child.

Numerous problems exist which prevent the great demand for contraceptive services in developing countries from being met, due in part to the general difficult of providing medical care to poor people. In addition, some services, such as sterilization, remain too expensive to offer to all those who could use them. Experts call for more money and creativity to be applied to the problem in order to avoid a massive population increase.

CHAPTER III

OVERVIEW OF MODERN CONTRACEPTIVE METHODS OF FAMILY PLANNING AMONG WOMEN IN LEWE TOWNSHIP IN NAY PYI TAW

3.1 Present Overview of Modern Contraceptive Methods of Family Planning among women in Myanmar

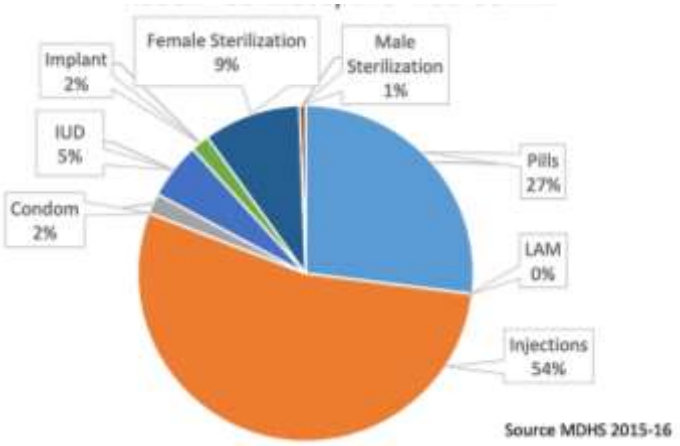
Myanmar is a developing country in Southeast Asia. In Myanmar, both the public and private sectors provided birth spacing services since 1970s. Although services were available, birth spacing officially launched as a public sector program in 1991. The population policy drafted in 1992 ensured that birth spacing services were available to all married couples. Myanmar Reproductive Health Policy was introduced in 2002 and facilitated the alignment of reproductive health care services to the population policy. The Ministry of Health implemented the successive Strategic Plans on Reproductive Health (2004– 2008, 2009–2013 and 2014–2018) to conform to the national policy guidance and international agenda. All of the plans included birth spacing services as one of their core elements. Myanmar is also one of the Family Planning 2020 focus countries and receiving support for family planning and contraceptive services.

Due to these policies, plans and activities, the contraceptive prevalence rate (CPR) of modern methods among married women increased from 13.6% in 1991 to 38.4% in 2007 and reached 46% in 2010. The earlier surveys included oral contraceptive pills, injectables, intra uterine devices, male and female sterilization and barrier methods as modern methods. Implants were included since the 2010 survey. The 2015–2016 Myanmar Demographic and Health Survey (DHS) reported that the CPR (modern method) for currently married women was 51.3%, while only 1% reported using traditional methods. Despite the attempt by Myanmar DHS to cover the whole country, including the areas not enumerated in the 2014 Myanmar census, they had to replace four clusters and drop one cluster during the fieldwork for security reasons.

The 2015–2016 Myanmar DHS indicated that almost all married women (98.5%) knew some form of modern contraceptives. The CPR of married women increased with increasing educational level. About 56% of married women in the highest wealth quantile and 46.3% in the lowest quantile used modern contraceptives.

The Government of Myanmar views family planning as critical to save lives, by protecting mothers and children from death, ill health, disability and under development. It views access to family planning information, commodities, and services as a fundamental right for every woman and community if they are to develop to their full potential. In order to improve the life of women and girls through access to quality birth spacing services without any social and regional disparities, Myanmar has committed to Family Planning 2020 with the aim to (1) Increase Contraceptive Prevalence Rate (CPR) from 41 percent to above 60 percent by 2020, (2) Reduce unmet need to less than 10 percent, (3) Increase demand satisfaction from 67 percent to 80 percent, and (4) Improve method mix with increased use of long acting methods and decentralization to districts24,25. Myanmar's commitment includes policy, financial and service delivery perspectives that are critical to increasing access for more women and girls. Overall, 52 percent of currently married women use a method of family planning, with 51 percent using a modern method and 1 percent using a traditional method. Contraceptive use is highest among women in urban areas, those with secondary or higher education, and among the richest women. Ever-married women with two children have the highest usage rate of contraceptives26. Injectable contraceptives account for 54 percent in modern contraceptive method mix followed by 27 percent of oral contraceptive pills, with less than 8 percent using long-acting reversible contraceptives (LARC) as shown in Figure (3.1).

Figure (3.1) Modern Contraceptive Method Mix



3.2 Modern Contraceptive Knowledge, Use and Need among Women in Myanmar

Modern contraceptive methods include male and female sterilization, injectables, intrauterine devices (IUDs), contraceptive pills, implants, male condoms, and the lactational amenorrhea method (LAM). According to Myanmar Demographic and Health Survey (2015-16), among married women, injectables are the most commonly used method (28%), followed by the pill (14%), female sterilization (5%), and the IUD (3%). Modern contraceptive use peaks at 62% among currently married women age 35-39. More than half of currently married adolescents (women age 15-19) (53%) use modern contraceptive methods.

Myanmar Demographic and Health Survey (2015-16) said that modern contraceptive use is highest among married women with 1-2 living children (58%) and generally declines as the number of living children goes up. Women in urban areas are somewhat more likely to use modern contraceptives than those in rural areas (57% versus 49%). Contraceptive use increases substantially with education. Married women with secondary education or higher are more likely to use modern methods of contraception than those with no education (57-58% versus 38%). There are big differences in contraceptive use among currently married women across states and regions. The use of modern contraception ranges from a low of 25% in Chin State to a high of 60% in Bago Region and Yangon Region.

Knowledge of contraceptive methods is almost universal in Myanmar, with 97% of all women and 95% of all men knowing at least one method of contraception. On average, women have heard of seven methods and men have heard of six methods, with most having heard about modern methods as shown in Table (3.1). The most commonly known method among women is injectables (95%), followed by the pill (93%), and female sterilization (84%), while among men, it is the male condom (86%), followed by injectables (85%), and the pill (84%). Knowledge about emergency contraception is relatively poor, with only one in four women and men having heard about it.

The contraceptive prevalence rate among currently married women age 15-49 is 52%, with almost all women using modern methods (51%) as shown in Table (3.2). This indicates that Myanmar is on track for meeting its commitment to Family Planning 2020, a global partnership for women on reproductive rights. In 2013 Myanmar

announced it would increase modern contraceptive use from 41 percent to 50 percent by 2015 and to more than 60 percent by 2020 (Family Planning 2020, 2013).

Among married women, injectables are the most commonly used method (28%), followed by the pill (14%), female sterilization (5%), and the IUD (3%) as shown in Figure (3.2). Modern contraceptive use peaks at 62% among currently married women age 35-39 as shown in Table (3.2). More than half of currently married adolescents (women age 15-19) (53%) use modern contraceptive methods.

Table (3.1) Knowledge of Contraceptive Methods

Percentage of all respondents and currently married respondents age 15-49 who know any contraceptive method, by specific method, Myanmar DHS 2015-16

Method	Women		Men	
	All women	Currently married women	All men	Currently married men
Any method	96.7	98.5	94.9	96.9
Any modern method	96.6	98.4	94.7	96.6
Female sterilization	84.4	88.8	72.9	80.0
Male sterilization	50.7	60.2	41.5	51.1
Pill	93.0	96.1	83.6	88.7
IUD	70.5	80.1	46.3	56.0
Injectables	94.6	97.7	85.4	91.6
Implants	61.1	70.3	31.0	36.6
Male condom	73.0	76.8	85.5	86.8
Female condom	28.4	31.0	30.4	33.1
Lactational amenorrhea method (LAM)	36.5	43.9	20.1	22.9
Emergency contraception	25.4	28.7	25.7	27.0
Other modern method	1.3	1.8	2.1	2.5
Any traditional method	46.7	58.8	66.3	75.0
Rhythm	39.7	50.3	49.5	60.0
Withdrawal	33.9	45.0	57.6	64.7
Other	0.0	0.0	0.1	0.1
Mean number of methods known by respondents 15-49	6.9	7.7	6.3	7.0
Number of respondents	12,885	7,759	4,737	2,957

Source: Myanmar Demographic and Health Survey 2015-16

Table (3.2) Current Use of Contraception by Age

Percent distribution of all women and currently married women age 15-49 by contraceptive method currently used, according to age, Myanmar DHS 2015-16

			Modern method									Traditional method					
Age	Any method	Any modern method	Female sterili-zation	Male sterili-zation	Pill	IUD	Inject-ables	Implants	Male condom	Other[1]	Any traditional method	Rhythm	With-drawal	Other	Not currently using	Total	Number of women
ALL WOMEN																	
15-19	6.8	6.7	0.0	0.0	1.8	0.1	4.8	0.0	0.0	0.0	0.1	0.0	0.1	0.0	93.2	100.0	1,810
20-24	26.7	26.7	0.2	0.0	9.9	0.5	15.6	0.3	0.1	0.0	0.1	0.0	0.0	0.0	73.3	100.0	1,867
25-29	39.9	39.3	0.8	0.0	11.8	2.0	23.1	0.8	0.7	0.0	0.6	0.2	0.3	0.1	60.1	100.0	1,867
30-34	42.8	42.3	2.2	0.0	11.1	2.6	24.2	1.1	1.1	0.0	0.5	0.2	0.3	0.0	57.2	100.0	2,037
35-39	48.2	47.2	4.9	0.1	11.6	3.2	25.1	1.1	1.0	0.2	1.0	0.3	0.7	0.0	51.8	100.0	1,954
40-44	35.6	34.7	7.3	0.4	7.7	2.2	16.1	0.4	0.7	0.0	1.0	0.4	0.6	0.0	64.4	100.0	1,733
45-49	17.3	16.3	5.8	0.7	3.1	1.3	4.6	0.0	0.7	0.0	1.0	0.3	0.4	0.2	82.7	100.0	1,617
Total	31.6	31.1	2.9	0.2	8.3	1.7	16.7	0.6	0.6	0.0	0.6	0.2	0.3	0.0	68.4	100.0	12,885
CURRENTLY MARRIED WOMEN																	
15-19	54.0	533.2	0.0	0.0	14.2	0.5	38.5	0.0	0.0	0.0	0.8	0.0	0.8	0.0	46.0	100.0	227
20-24	59.5	59.3	0.4	0.0	22.0	1.0	34.7	0.8	0.3	0.1	0.1	0.0	0.1	0.0	40.5	100.0	834
25-29	58.7	57.9	1.2	0.0	17.4	3.0	34.1	1.1	0.9	0.0	0.8	0.3	0.4	0.1	41.3	100.0	1,258
30-34	57.8	57.1	2.9	0.0	15.0	3.5	32.8	1.5	1.4	0.0	0.7	0.2	0.4	0.0	42.2	100.0	1,505
35-39	63.1	61.8	6.2	0.1	15.3	4.2	33.0	1.3	1.4	0.2	1.3	0.4	0.9	0.0	36.9	100.0	1,482
40-44	47.9	46.6	9.7	0.5	10.5	2.8	21.8	0.5	0.9	0.0	1.3	0.5	0.8	0.0	52.1	100.0	1,283
45-49	23.7	22.3	7.9	1.0	4.3	1.8	6.4	0.0	1.0	0.0	1.3	0.4	0.6	0.3	76.3	100.0	1,169
Total	52.2	51.3	4.8	0.3	13.8	2.8	27.6	0.9	1.0	0.0	1.0	0.3	0.6	0.1	47.8	100.0	7,759

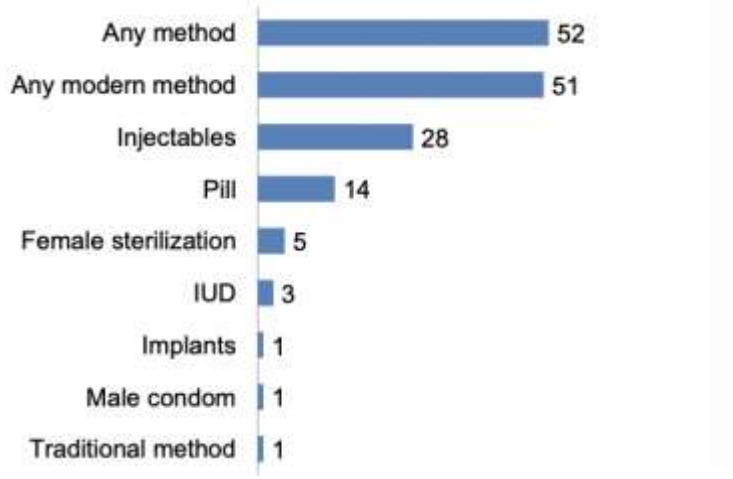
Note: If more than one method is used, only the most effective method is considered in this tabulation.

1Includes lactational amenorrhea method (LAM)

Source: Myanmar Demographic and Health Survey 2015-16

Figure (3.2) Contraceptive Use

Percentage of currently married women age 15-49 currently using a contraceptive method



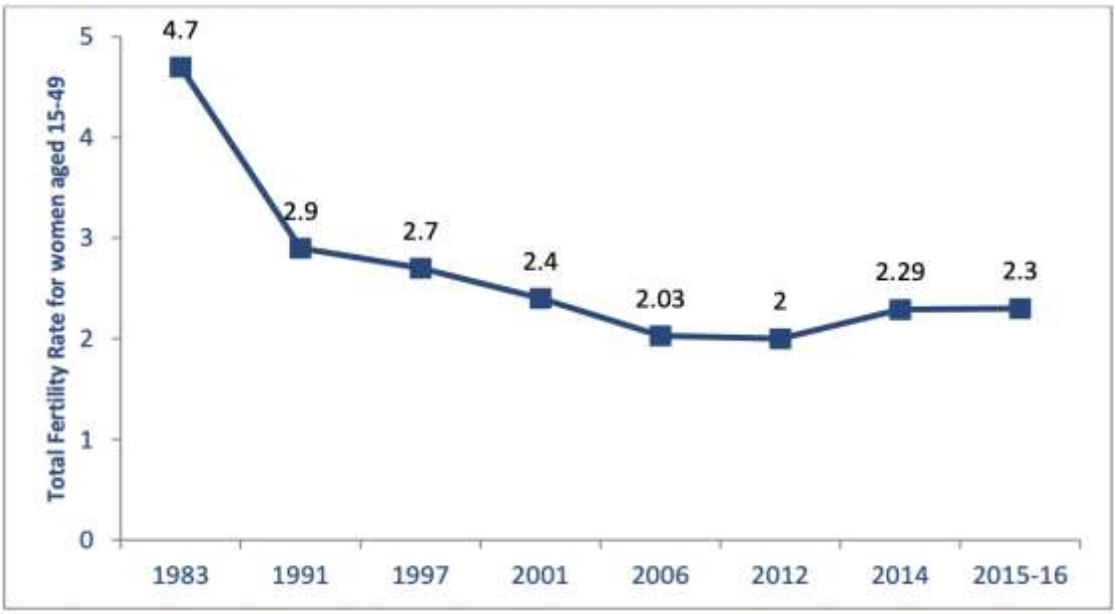
Source: Myanmar Demographic and Health Survey 2015-16

3.3 Total Fertility Rate (TFR) in Myanmar

Figure (3.3) shows that the total fertility rate (TFR) in Myanmar has decreased from 4.7 to 2.3 in the last 33 years. The TFR was 2.3 for all women in 201517 and 4.03 for ever-married women in 201418. The TFR for all women ages 15 to 49 in Myanmar was slightly lower than the average TFR of other countries in the South East Asia region, at 2.5 children per woman19. The TFR differs according to population location; fertility is higher among rural women than among urban women at 2.4 and 1.9,

respectively. The age specific fertility rate is higher in rural women ages 20 to 24 than the 25 to 29 age group 20.

Figure (3.3) Trends in TFR for Women (Aged 15-49), 1983-2016



Source: Jhpiego FP2020 Landscape Analysis Report

3.4 Source of Modern Contraceptive Methods

United Nation Population Assistant Fund (UNFPA) provides family planning commodities (oral contraceptive (COCs) pills, injectables, condoms, and implants) to the Maternal and Reproductive Health Division, Department of Public Health (DoPH) and family planning implementing partners (INGOs, NGOs). Marie Stopes International (MSI)/Myanmar's clinics, mobile outreach activities, and Sun Quality Health Network, franchise network of Population Services International (PSI)/Myanmar, provide a broad range of family planning services (COC pills, injectables, condoms, implants, IUD). MSI and PSI distribute family planning commodities in a social marketing approach to pharmacies and clinics. Local non-governmental organization such as maternity clinics of the MMCWA, provide family planning services as well.

3.5 Unintended Pregnancies Averted due to Modern Contraceptive Use in Myanmar

A new study conducted by the World Health Organization (WHO) in 36 countries found that two-thirds of sexually active women who wished to delay or limit childbearing stopped using contraception for fear of side effects, health concerns and underestimation of the likelihood of conception. This led to one in four pregnancies being unintended.

Whilst unintended pregnancies do not necessarily equate to pregnancies that are unwanted, they may lead to a wide range of health risks for the mother and child, such as malnutrition, illness, abuse and neglect, and even death. Unintended pregnancies can further lead to cycles of high fertility, as well as lower educational and employment potential and poverty – challenges which can span generations.

Modern methods of contraception have a vital role in preventing unintended pregnancies. Studies show that 85% of women who stopped using contraception became pregnant during the first year. Among women who experienced an unintended pregnancy leading to an abortion, half had discontinued their contraceptive methods due to issues related to use of the method such as health concerns, side effects or inconvenience of use. In 2021, 1,870,000 unintended pregnancies will be prevented due to modern contraceptive use in Myanmar as per the 2014-16 DHS Report.

3.6 Unsafe Abortions Averted due to Modern Contraceptive Use in Myanmar

Around the world, unintended and unwanted pregnancies are common challenges that women and couples face. About 44% of all pregnancies worldwide are unintended, and some 56% of unintended pregnancies end in an induced abortion (8). An estimated 56 million induced abortions took place annually in 2010-14, which translates to an annual abortion rate of 35 abortions for every 1000 women aged 15-44 years (9). Contraception can prevent unsafe abortions by reducing the number of unintended pregnancies. As per the 2014-16 DHS Report, in Myanmar, as a result of the contraceptive use, 487,000 unsafe abortions will be averted in 2021.

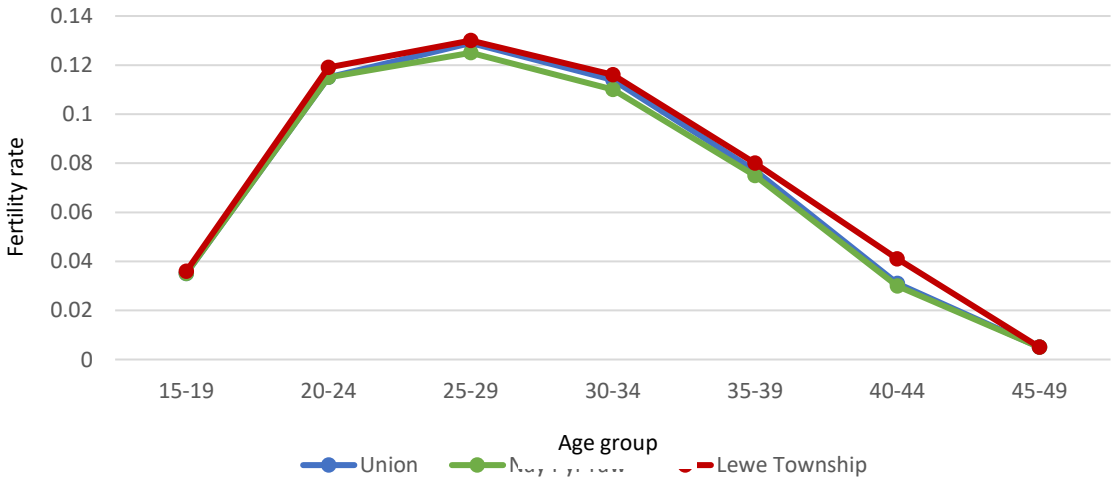
3.7 Maternal Deaths Averted due to Modern Contraceptive Use in Myanmar

The maternal mortality ratio (MMR) in Myanmar is the second highest among ASEAN countries at 282 deaths per 100,000 live births, compared to 161 in Cambodia and 20 in Thailand. Every year, approximately 2,800 women die during pregnancy or child birth. The under-five mortality rate (U5MR) is 72 deaths per 1,000 live births, compared to 29 in Cambodia and 12 in Thailand. The infant mortality rate is 62 per 1,000 live births compared to 25 in Cambodia and 11 in Thailand. The adolescent fertility rate is 36 births per thousand women aged 15-19 years. In 2021, the contraceptive use averted 2,000 maternal deaths as per the 2014-16 DHS Report.

3.8 Modern Contraceptive Methods of Family Planning among Women in Lewe Township

In Lewe Township, there are more females than males with 94 males per 100 females. Aged specific fertility rate is the highest at age group 25-29. For women aged 15-49, the total fertility rate is 2.6 children per woman and is slightly higher than the total fertility rate of 2.5 at the National level as shown in Figure (3.6).

Figure (3.4) Age Specific Fertility Rate, Union, Nay Pyi Taw and Lewe Township



Source: The 2014 Myanmar Population and Housing Census Nay Pyi Taw, Dekkhina District, Lewe Township Report

CHAPTER IV
SURVEY ANALYSIS

4.1 Survey Profile

This study was conducted in selected Thit Poke Pin Village Tract in Lewe Township from August to September, 2022. Lewe is one of the administrative townships in Naypyidaw Union territory, Myanmar. It is located about ten miles southwest of Pyinmana Township. As its focal point in the trade network, the bulk of local goods such as agricultural products flow are fast. It lies on the way to Pyinmana via Kyaukpandaung Railway Road and the Yangon-Mandalay Highway Road. Although Lewe Township was formerly part of Mandalay Division, on 26 November 2008, it was designated as one of the original townships constituting the new capital region of Naypyidaw by the Ministry of Home Affairs. According to the 2014 census, Lewe township has a population of 284,393. Among the total population, male proportion is 48.6% and female proportion is 51.4%. In addition, 89.4% are living in rural area and 10.6% are living in urban area.

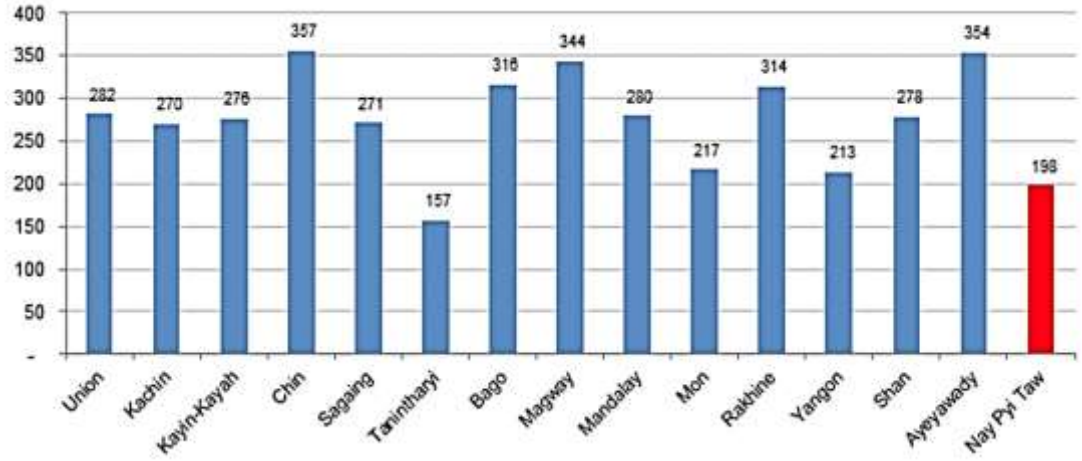
According to Township Profile from General Administrative Department (2017), Lewe Township consists of 6 Wards and composed by 59 village tracts and 261 sub-village groups according to 2014 census data.

Lewe is served by a public hospital: 100-beded Lewe General Hospital, 3 circuit hospitals, 10 Rural Healthcare Sub-divisions, and 9 private clinics.

Age specific fertility rate is the highest at age group 25-29. For women aged 15-49, the total fertility rate is 2.6 children per woman and is slightly higher than the total fertility rate of 2.5 at the National level.

In Nay Pyi Taw, there are 198 women dying while during pregnancy/delivery or within 42 days of termination of pregnancy for every 100,000 live births. The maternal mortality ratio is lower than that of the Union level as shown in Figure (4.1). Compared to the average maternal mortality ratio of 140 for Southeast Asian countries, the maternal mortality ratio of 282 for Myanmar is high.

Figure (4.1) Maternal Mortality Ratios (Union and State/Region) (2014 Myanmar Population and Housing Census)



Source: The 2014 Myanmar Population and Housing Census, Nay Pyi Taw, Dekkhina District, Lewe Township Report

The major private service providers for family planning services are non-government organization (NGO) such as Population Service International (PSI) and Marie Stopes International (MSI).

4.2 Survey Design

This study was the cross-sectional study design using quantitative methods. The data were collected by using structured interviewer administered questionnaires. The structured questionnaire was developed in Myanmar language by reviewing different literatures considering the local situation. Married women respondents who were using short-term contraceptive methods were randomly selected as study population (n = 150). Total population of Lewe Township is 284,393 and the study population was calculated based on 93,458 total women in reproductive age 15-64 in Lewe Township. Two data collectors and one supervisor were trained for proper interview, data collection and quality assurance. Firstly, ten samples were collected for pretest to identify reliability of the questionnaires. All the data collectors went to the selected villages from August to September, 2022. They randomly selected respondent women of reproductive age who had been using short-term contraceptive methods. After that they collected the required data from those respondents by using structured questionnaire provided. All the data were entered into Microsoft Excel and exported to IBM SPSS Statistics version 25 for analysis.

The questionnaire was divided into three parts: (1) Socio-demographic conditions of respondents, (2) Contraceptive knowledge and usage history and (3) Questions relating to long-term reversible contraceptive methods. The questionnaire had multiple-choice questions in which choice of answer and respondents were asked to select one or more of the alternatives and dichotomous questions that had only two response alternatives, Yes or No and demographic questions. Collected data were tabulated, analyzed and interpreted in the light of objective of the study by applying descriptive statistics.

Survey finding are categorized into (3) parts. The first part, Part (A) is Socio-demographic conditions of respondents. The second part, Part (B) is showing reproductive and contraceptive history of the respondent. The final part, Part (C) is finding about knowledge, attitude of respondents and service requirement for long-term and reversible contraceptives.

4.3 Demographic Characteristics of the Respondents

This study was conducted at selected Thit Poke Pin village tract which has the second largest population in Lewe township. There are four villages in Thit Poke Pin village tract. Among 2,336 conventional households, the 150 samples were taken from respondent married women aged 15-49 who are living in selected village tract and currently using short-term contraceptive methods. Below tables describe the socio-demographic conditions of respondents.

Table (4.1) Age of Respondents and Number of Children

	Minimum	**Maximum**	**Mean**	**Std. Deviation**
Age	19	49	34.54	6.759
Women's age of marriage	16	35	22.11	4.086
Number of children	0	5	2.55	1.912
Number of Children			**Total**	**Percentage**
0			9	6
1			55	37
2			51	34
3			23	15
4 and above			12	8

Source: Survey Data, 2022

According to the Table (4.1), the youngest women among respondents is 19 year and the oldest women is 49 years. The mean age is 34.54. The earliest age of marriage among respondents is at 16 year and the latest age is at 35 years. The mean age of marriage is 22.11. Among the respondents, the number of children is range from 0 to 5 (mean number of children is 2.55). Among the all respondents, 8% have four and above children.

Table (4.2) Education Status of Husband and Wife

Women's Education		**Frequency**	**Percent**	**Cumulative Percent**
Read and Write		31	20.7	20.7
Primary School		30	20.0	40.7
Middle School		43	28.7	69.3
High School		36	24.0	93.3
University Graduate		10	6.7	100.0
Number of Children	**Low Education**	**Under Graduate Education**	**Post Graduate Education**	**Percentage**
0	2	5	2	6.0
1	10	25	3	25.3
2	19	17	3	26.0
3	8	13	1	14.7
4 and above	10	29	3	28.0
Women's Occupation		**Frequency**	**Percent**	**Cumulative Percent**
Unemployment		23	15.3	15.3
Skilled Agricultural, Forestry and Fishery Worker		41	27.3	42.7
Services and Sales worker		23	15.3	58.0
Technician		5	3.3	61.3
Trader		21	14.0	75.3
Clerical Support Worker		4	2.7	78.0
Student		3	2.0	80.0
Elementary Occupations		30	20.0	100.0

Table (4.2) Education Status of Husband and Wife (Continued)

Women's Income per month (MMK)		Frequency	Percent	Cumulative Percent
0 - 100,000		26	17.3	17.3
100,001 - 300,000		109	72.7	90.0
300,001 - 500,000		13	8.7	98.7
Above 500,000		2	1.3	100.0
Husband's Education		**Frequency**	**Percent**	**Cumulative Percent**
Read and Write		25	16.7	16.7
Primary School		39	26.0	42.7
Middle School		45	30.0	72.7
High School		33	22.0	94.7
University Graduate		8	5.3	100.0
Number of Children	**Low Education**	**Under Graduate Education**	**Post Graduate Education**	**Percentage**
0	2	7	2	7.3
1	9	26	2	24.7
2	17	19	3	26.0
3	7	15	1	15.3
4 and above	9	30	1	26.7
Husband's Occupation		**Frequency**	**Percent**	**Cumulative Percent**
Unemployment		3	2.0	2.0
Skilled Agricultural, Forestry and Fishery Worker		48	32.0	34.0
Services and Sales worker		19	12.7	46.7
Technician		9	6.0	52.7
Trader		24	16.0	68.7
Clerical Support Worker		4	2.7	71.3
Manager		1	0.7	72.0
Student		2	1.3	73.3

Husband's Occupation	Frequency	Percent	Cumulative Percent
Elementary Occupations	39	26.0	99.3
Other	1	0.7	100.0
Husband's Income per month (MMK)	**Frequency**	**Percent**	**Cumulative Percent**
0 - 100,000	5	3.3	3.3
100,000 - 300,000	107	71.3	74.7
300,000 - 500,000	21	14.0	88.7
Above 500,000	17	11.3	100.0

Source: Survey Data, 2022

According to the Table (4.2), 69.3% have up to middle school education level and the other 30.7% have high school and university graduate level among respondent women. Among husbands of the respondent women, 72.7% have up to middle school education level and the left 27.3% have high school and university graduate level.

After categorizing the education level of respondent women as (1) respondents who can do read and write only as low education level (2) respondents who have at least primary education and up to high school level education as under graduate education level and (3) respondents who are attending for university degree or who already had university degree as post graduate education level, the respondents who are under the education level of under graduate level have 4 and above children as shown in Table 4.2.

Moreover, after doing the same categorization to the education level of respondents' husbands, the result was similar to the education level of respondent women that families with husbands who are under the education level of under graduate level have 4 and above children according to the Table (4.2).

For the occupation of respondent women, most of women are skilled agricultural workers (27.3%) and (20%) work the elementary occupations. Most of women get incomes between 100,000 MMK and 300,000 MMK per month. Most of the respondents' husbands are skilled agricultural workers (32%), some work the elementary occupations (26%) and (16%) are the traders. Most of them get incomes between 100,000 MMK and 300,000 MMK per month as shown in Table (4.2).

4.4 Contraceptive Knowledge and Usage History of the Respondents

Table (4.3) Knowledge on Contraceptive Methods

Knowledge on contraceptive methods	Frequency	Percent
Pill	121	80.7
Injectables	139	92.7
EC Pill	78	52.0
Condom	97	64.7
IUD	67	44.7
Implants	61	40.7
Source of knowledge	**Frequency**	**Percent**
BHS	15	10.0
CBHW	25	16.7
NGO Staffs	87	58.0
Husband	5	3.3
Parents	1	0.7
Friends/Relatives	105	70.0
Magazine/Books/Newspaper	34	22.7
Internet	51	34.0

Source: Survey Data, 2022

According to the Table (4.3), almost all the women know about injectables (92.7%), combined oral contraceptive pills (80.7%). Over half of women (64.7%) answered that they know about condom and emergency contraceptive pill (52%). Women who have knowledge about intra-uterine device (44.7%) and implants (40.7%) were small potions and under half of women know about that.

Almost all the women said they got contraceptive knowledge from their friends and relatives (70%). More than half of the respondents (58%) said that they know contraceptive methods from awareness raising session by NGO staffs. Some of the respondents said they also got contraceptive knowledge from internet (34%) and some found about contraception from magazine, books and newspapers (22.7%) and community-based health workers (CBHW) (16.7%) and. Very few respondents said that basic health staffs also gave knowledge about contraceptive methods (10%). Almost all of the women said they got contraceptive knowledge at least from parents and from their husbands as shown in Table (4.3).

Table (4.4) History of First-time Contraception

	Minimum	Maximum	Mean	Std. Deviation
Age of first-time contraception	18	40	26.929	4.8619
First-time contraceptive method		**Frequency**	**Percent**	**Cumulative Percent**
Pill		45	30.0	30.0
Injectables		49	32.7	62.7
EC Pill		9	6.0	68.7
Condom		21	14.0	82.7
IUD		15	10.0	98.7
Implants		9	6.0	98.7
Calendar Method		2	1.3	100.0
Who give decision for first-time contraception		**Frequency**	**Percent**	**Cumulative Percent**
BHS		24	16.0	16.0
CBHW		23	15.3	31.3
NGO Staffs		34	22.7	54.0
Husband		2	1.3	55.3
Friends, Relatives		49	32.7	88.0
Own decided		18	12.0	100.0
Provider of first-time contraception		**Frequency**	**Percent**	**Cumulative Percent**
BHS		15	10	10
CBHW		34	22.7	32.7
NGO Clinic		46	30.7	63.3
Private Clinic		2	1.3	64.7
Public Hospital		7	4.7	69.3
Pharmacy		46	30.7	100.0

Source: Survey Data, 2022

As shown in Table (4.4), most of the first-time contraceptive methods of the respondents were injectables (32.7%) and pill (30%). Some of the respondents used condom for their first-time contraceptive method (14%). The respondent's decision for first-time contraception was mostly because of friends and relatives (32.7%) and because of NGO staffs counseling (22.7%). Basic health staffs (BHS) (16%) and community-based health workers (CBHW) (15.3%) also encouraged to use first-time contraception. Some of the respondents (12%) decided by their own to use contraception for first-time.

The biggest providers of contraception are NGO clinic and pharmacy and both of them provide 30.7%. Community based health workers also provided contraceptive methods to some respondents (22.7%) according to the Table (4.4).

4.5 Knowledge, Attitude and Service Requirement for LARC

Table (4.5) Knowledge about Long-term Contraceptive Methods

Knowledge on LARCs	Frequency	Percent
Female sterilization	139	92.7
Male sterilization	127	84.7
IUD	97	64.7
Implants	89	59.3

Source: Survey Data, 2022

According to the Table (4.5), most of the respondents answered that they know long-term reversible contraceptive methods very well.

Table (4.6) Accessibility of Long-term Contraceptive Methods

Accessibility of long-term contraceptive methods	Frequency	Percent
Yes	71	47.3
No	59	39.3
Not know	20	13.3

Source: Survey Data, 2022

As shown in Table (4.6), among the respondents, 47.3% said that they have easy accessibility to long- term contraceptive methods, however, 39.3% said they are not and 13.3% said they do not know where to get service.

Table (4.7) Service Providers for Long-term Contraceptive Methods

Service providers for long-term contraceptive methods	Frequency	Percent
BHS	21	14.0
CBHW	5	3.3
NGO Clinic	78	52.0
Private Clinic	60	40.0
Public Hospital	69	46.0
Not know	20	13.3

Source: Survey Data, 2022

Table (4.7) shows that most of the respondents said that women could get long-term contraceptive services from NGO clinics (52%), public hospital (46%) and private clinics (40%). Only 14% of respondents said women could get long-term contraceptive services from basic health staffs from government hospital and public health facilities. Some of the respondents (13.3%) do not know the service providers who could give services for long-term contraceptive methods because some of the respondents said in there are only NGO clinic visited to their village and gave service for long-term contraceptive methods.

Table (4.8) Knowledge on Advantages of Using Long-term Contraceptive Methods

Know advantages of using LARCs	Frequency	Percent
Yes	119	79.3
No	31	20.7
Advantages of using LARCs	**Frequency**	**Percent**
No need to go frequently to service provider	102	68.0
One-time expenditure is enough	13	8.7
Has long-term effect for contraception	141	94.0
Easy to get baby after removal	15	10.0

Know advantages of using LARCs	Frequency	Percent
Effectively prevent unwanted pregnancy	113	75.3

Source: Survey Data, 2022

Most of the respondents said they have knowledge on using of long-term contraceptive methods and what they mostly said is that using long-term contraceptive methods makes (1) No need to go frequently to service provider (2) has long-term effect for contraception and (3) effectively prevent unwanted pregnancy as shown in Table (4.8).

Table (4.9) Knowledge on Disadvantages of Using Long-term Contraceptive Methods

Know disadvantages of using LARCs	Frequency	Percent
Yes	98	65.3
No	52	34.7
Disadvantages of using LARCs	**Frequency**	**Percent**
Irregular menstrual cycle	98	65.3
Headache	38	25.3
Lower abdominal pain	71	47.3
Acne	3	2
Weight changes	98	65.3
Vertigo	32	21.3
Breast tenderness	2	1.3
Mode changes	1	0.7

Source: Survey Data, 2022

Most of the respondents said they have knowledge on disadvantages of using long-term contraceptive methods and what they mostly said is that using long-term contraceptive methods makes (1) irregular menstrual cycle (2) weight changes and (3) lower abdominal pain. Some of the respondents said long-term contraceptive methods makes headache and vertigo as shown in Table (4.9).

Table (4.10) Negative Feeling on Long-term Contraceptive Methods

Negative feeling on using LARCs	Frequency	Percent
Cause hypertension	8	5.3
Can move other part of the body	91	60.7
Can lost in the body	38	25.3
Can cause health problems	139	92.7
Can cause anemia	12	8.0
Can cause unavailability to have baby	108	72.0

Source: Survey Data, 2022

Most of the respondents said they have negative feeling on using long-term contraceptive methods such as long-term contraceptive methods can cause health problems, can cause unavailability to have baby and can move other part of the body. Moreover, some of the respondents said long-term contraceptive methods could lost in the body as well as they could cause anemia as shown in Table (4.10).

Table (4.11) Reason for Still do not Use Long-term Contraceptive Methods

Still do not use LARCs because	Frequency	Percent
Fear of side effects	54	36.0
Fear of moving other part of the body	3	2.0
Plan to do sterilization	20	13.3
Want to have baby	78	52.0
Fear to insert in the body	101	67.3
No service provider	35	23.3

Source: Survey Data, 2022

Most of the respondents said they still do not use long-term contraceptive methods because they fear to insert in their body, they have plan to have more babies in their future and also, they fear to side effects. Some of the respondents said there is no service provider nearby their villages as shown in Table (4.11).

Table (4.12) Requirements for Women to Use LARCs

Requirement for women to use LARCs	Frequency	Percent
Service facility should not too far away	91	60.7
Easy to go to the service facility	94	62.7
Need to get the service with cheap price	103	68.7
Need to have good reputation of the service provider	78	52.0
Need to have good relationship with service provider	1	0.7

Source: Survey Data, 2022

Most of the respondents said (1) service facility should not too far away from their villages, (2) easy to go to the service facility from their villages, (3) need to get the service with cheap price, and (4) need to have good reputation of the service provider are requirement for women to use long-term contraceptive methods easily. Only very few respondents said good relationship with service provider is required for women to use long-term contraceptive methods as shown in Table (4.12).

CHAPTER V
CONCLUSION

5.1 Findings

Knowledge of contraceptive methods is almost universal in Myanmar, with 97% of all women and 95% of all men knowing at least one method of contraception. The most commonly known method among women is injectables (95%), followed by the pill (93%), and female sterilization (84%), while among men, it is the male condom (86%), followed by injectables (85%), and the pill (84%). Knowledge about emergency contraception is relatively poor, with only one in four women and men having heard about it.

Among married women, injectables are the most commonly used method (28%), followed by the pill (14%), female sterilization (5%), and the IUD (3%). Modern contraceptive use peaks at 62% among currently married women age 35-39. More than half of currently married adolescents (women age 15-19) (53%) use modern contraceptive methods.

As per the survey results, married women of reproductive age (15-49) are aware of the various modern contraceptive methods that are being provided at various service facilities thus; male condoms (64.7%), injectable (92.7%), pills (80.7%), implants (40.7%), intrauterine device (44.7%) and (52%) knew of emergency contraceptive pills. Only 47.3% of the respondents knew where to obtain family planning methods from. Moreover, only 31% of the respondents got proper counseling for family planning. The most important source of information in regards to family planning was reported to be from NGO clinic, private hospital and private clinic so that family planning education from public sector is very little.

Among several factors that would affect use of long-acting reversible contraceptive methods, age of women, race, education and occupation of the respondents and husband-wife discussion were found determinants of long-acting reversible contraceptive method use. Significant association between women's age, race, education and occupation of the respondents and use of long-acting reversible

contraception methods was observed. Those women having discussion with their husbands on contraceptive methods were found more likely to use LARCs than who did not have.

Health concerns was the most commonly cited reasons for not using. Second, opposition to use either is because of taboos that says those devices can cause unavailability to have baby in the future. Thirdly, women cited fear to insert in the body or think that the device can move other part of the body. Lack of contraceptive supplies and logistic problems in getting the contraceptives to the public provider continue to be a challenge in the health facilities, a few women stated that lack of access (distance or costs) was the reason for not using.

5.2 Recommendations

Based on the findings of the survey, this section will propose in supply, enabling environment. For supply, need to strengthen support to all levels of health facilities with job aids and visual aids for service providers; family planning information education and communication materials for clients such as posters, flip charts, brochures, information sheet, counseling cards, and family planning regulatory submission posters and to provide competency based IUD trainings and to expand the competency based implant trainings to all states/regions which will not only enable health facilities to provide the LARC methods as a method of choice for the client during her visit but also facilitate the performance of providers.

And this study recommends proper counseling of women regarding available family planning services, proper recording and reporting for women who need family planning advice would help to improve the provision of these services.

Focus on reducing the top barriers to family planning uptake through improving counseling services to reduce health concerns and fear of side effects, educating women about their bodies and when they are most at risk of getting pregnant, and breaking down cultural and social barriers to contraceptive use.

Ensure that women have access to a full range of contraceptive methods (short-term, long term, and permanent) to satisfy their reproductive needs at different life stages. Health workers who are working in the study area should offer all options of contraceptive methods with their advantage and disadvantage, risk and benefits as to enable the clients utilize safe and convenient methods using proper counseling technique by considering the occupation and age of the women.

With so many women experiencing unplanned pregnancies, providers need to integrate family planning counseling, services, and follow-up into postpartum programs as well as other services that offer an opportunity to reach women- post abortion care, community health programs like children immunization.

Reach out to women and their partners at multiple stages in their reproductive lives to better satisfy changing needs from adolescents and young women and men, to middle-aged and older couples.

Further study (qualitative) needs to be conducted to address some crosscutting issues like health provider and health facility associated with utilization of long-acting reversible contraceptive methods.

This study points out the service providers and program implementers should not only be satisfied with an increasing contraceptive prevalence but also realize that an increase in demand calls for more service expansion. An expansion of contraceptive services will reduce unplanned or unintended pregnancies, and the risk of unsafe abortions, which lead to poor maternal and child health outcomes. Furthermore, there is a need for exploration of contraceptive use among the unmarried women and barriers/hindering factors for contraception with an in-depth discussion, especially among non-users.

REFERENCES

Adrienne Stith Butler and Ellen Wright Clayton, Editors (2009). *A Review of the HHS Family Planning Program: Mission, Management, and Measurement of Results*

Alemayehu, M.B.T. (2012). *Factors associated with utilization of long acting and permanent contraceptive methods among married women of reproductive age,* Mekelle town, Tigray region north Ethiopia.

Department of Medical Research (2016). *Health facility assessment for reproductive health commodities and services,* Pyin Oo Lwin, Ministry of Health and Sports, Myanmar.

Department of Population (2017). The 2014 Myanmar Population and Housing Census, Nay Pyi Taw, Dekkhina District, *Lewe Township Report,* Ministry of Labour, Immigration and Population, Myanmar.

Department of Population (2016). The 2014 Myanmar Population and Housing Census, *Thematic Report on Fertility and Nuptiality,* Nay Pyi Taw, Ministry of Labour, Immigration and Population, Myanmar.

Dorothy, S. (2010). *The ABC's of family planning, Partnership for Maternal Newborn Health,* Canada.

FPwatch Group (2016). *FPwatch Study Reference Document: Myanmar,* Washington DC, Population Service International.

Hobago, D. (2009). *Opportunity to use contraceptive implants instead of short-acting methods in young women,* Nairobi, Kenya.

Jhpiego (2017). *Myanmar Family Planning Landscape Analysis,* Nay Pyi Taw, Ministry of Health and Sports, Myanmar.

Kavanaugh, M.J.J. and Hubacher, D. (2011). *Characteristics of women and long-acting reversible contraceptive methods use,* United States of America.

Chola L, McGee S, Tugendhaft A, Buchmann E, Hofman K (2015), *Scaling Up Family Planning to Reduce Maternal and Child Mortality: The Potential Costs and Benefits of Modern Contraceptive Use in South Africa*.

McPake, Normand, Smith and Nolan (2013). *Health Economic, An international perspective*, 3rd Edition, Routledge, USA.

Mekonnen, W. (2011). *Determinants of low family planning use and high unmet need,* Butajira District, South Central Ethiopia.

Ministry of Health and Sports (MoHS) and ICF. (2017). *Myanmar Demographic and Health Survey 2015-16.* Nay Pyi Taw, Myanmar, and Rockville, Maryland USA: Ministry of Health and Sports and ICF.

Missie Thurston (2021). *The Economic Benefits of Family Planning: A Cost-Benefit Analysis*

Omar, E. (2009). Factors influencing family planning choices among women, Hohoe district, Ghana, *International conference on family planning research.*

Phlipens, J.F.G. (2009). *Prerequisite to meet family planning unmet needs in Sub-Saharan Africa, Burkina Faso,* Institute de Recherche poulle Development.

Stephenson, R.B.A. and Teshibangu, D. (2008). *Community and health facility influence on contraceptive method choice,* eastern Cape Town, South Africa.

World Health Organization and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs (2018). *Family Planning, Global Handbook for Providers,* 3rd Edition, The Knowledge for Health Project at Johns Hopkins Center, Baltimore and Geneva.

Wudie, S. (2013). *Assessment of factors affecting the use of long-Acting reversible contraceptive methods among married women of reproductive age group in Debre Markos district,* Published MPH Thesis, Debre Markos University and Gamby Collage of Medical Sciences, North West, Ethiopia.

APPENDIX

Questionnaire to study on Modern Contraceptive Methods of Family Planning used by Married women in Thit Poke Pin Village Tract, Lewe Township, Nay Pyi Taw Council, Myanmar

No. ……..

Name of Data Collector : …….

Date : …….

Section (A) Socio-demographic Conditions of Respondents

Sr.	Question	Answer	Code No.
A1	Age		
A2	Education of Respondent	1. Read and write 2. Primary School 3. Middle School 4. High School 5. University Graduate	
A3	Education of Respondent's Husband	1. Read and write 2. Primary School 3. Middle School 4. High School 5. University Graduate	
A4	Occupation of Respondent	1. Unemployment 2. Skilled Agricultural, Forestry and Fishery Worker 3. Services and Sales worker 4. Technician 5. Trader 6. Clerical Support Worker 7. Professional (Admin/Technology) 8. Student 9. Elementary Occupations 99. Other	

Sr.	Question	Answer	Code No.
A5	Occupation of Respondent's Husband	1. Unemployment 2. Skilled Agricultural, Forestry and Fishery Worker 3. Services and Sales worker 4. Technician 5. Trader 6. Clerical Support Worker 7. Professional (Admin/Technology) 8. Student 9. Elementary Occupations 10. Manager 99. Other	
A6	Income per month of Respondent	1. 0 – 100,000 MMK 2. 100,001 - 300,000 MMK 3. 300,001 - 500,000 MMK 4. Above 500,000 MMK	
A6	Income per month of Respondent's Husband	1. 0 – 100,000 MMK 2. 100,001 - 300,000 MMK 3. 300,001 - 500,000 MMK 4. Above 500,000 MMK	
A7	Age of marriage of Respondent		
A8	Number of children (if nil, fill "0")		

Section (B) Questions Related the Contraceptive Methods

Knowledge and history of first-time contraception			
B1	Contraceptive methods you know (may be more than one)	1. Pill 2. Injectables 3. EC Pill 4. Condom 5. IUD 6. Implants 99. Other (please express)	
B2	Source of knowledge about contraceptive methods (may be more than one)	1. BHS 2. CBHW 3. NGO Staff 4. Husband 5. Parents 6. Friends/Relatives 7. Magazine/Books/Newspaper 8. Internet 9. Radio 99. Other (please express)	
B3	Age of first-time contraception		
B4	First-time contraceptive methods	1. Pill 2. Injectables 3. EC Pill 4. Condom 5. IUD 6. Implants 7. Calendar Method	
B5	Who give decision for first-time contraception	1. BHS 2. CBHW 3. NGO Staff 4. Husband 5. Friends/Relatives 6. Own decided 7. Other (please express)	

Knowledge and history of first-time contraception			
B6	Provider of first-time contraception	1. BHS (e.g. Midwife) 2. CBHW 3. NGO Clinic 4. Private Clinic 5. Public Hospital 6. Pharmacy (if so, skip to B10) 99. Other (please express)	
B7	Does the provider counsel about the contraception?	1. Yes 2. No 99. Not know	
B8	Did the provider explain clearly what to do if any side effects/problems occur?	1. Yes 2. No 99. Not know	
B9	Is it okay to ask what you want to know to provider?	1. Yes 2. No 99. Not know	
B10	Have you experienced any side effects/problems cause of contraception? (e.g. Irregular menstrual cycle)	1. Yes 2. No 99. Not know	
B11	Have you changed it to other methods use?	1. Yes 2. No (if so, skip to C1)	
B12	How many times changed the methods?		
B13	What is the method you changed? (may be more than one)	1. Pill 2. Injectables 3. Condoms 4. IUD 5. Implants 99. Other (please express)	

Contraceptive method you currently use			
B14	Contraceptive method you currently use	1. Pill 2. Injectables 3. Condoms 4. IUD 5. Implants 99. Other (please express)	
B15	Who give decision for current contraception method?	1. BHS (e.g. Midwife) 2. CBHW 3. NGO Staff 4. Husband 5. Parents 6. Friends/Relatives 7. Own decided 99. Other (please express)	
B16	Who provide the current contraception method?	1. BHS (e.g. Midwife) 2. CBHW 3. NGO Clinic 4. Private Clinic 5. Public Hospital 6. Pharmacy (if so, skip to B19) 99. Other (please express)	
B17	Does the provider counsel about the contraception method you currently use?	1. Yes 2. No 99. Not know	
B18	Did the provider explain clearly what to do if any side effects/problems of the current contraception method occur?	1. Yes 2. No 99. Not know	
B19	Have you experienced any side effects/problems cause of the contraception method you use?	1. Yes 2. No 99. Not know	

Knowledge and history of first-time contraception			
B20	Why did you change the current contraception method? (may be more than one)	1. Suffer from side effects 2. Because the family/husband doesn't like 3. Think it's more convenient 4. No service provider 5. Can't afford it anymore to use 99. Other (please express)	

Section (C) Questions Related about Long-term Contraceptive Methods

C1	Do you know the LARCs?	1. Yes (Continue to C2) 2. No (Continue to C4)	
C2	LARCs you know (may be more than one)	1. Female sterilization 2. Male sterilization 3. IUD 4. Implants 99. Other (please express)	
C3	Source of knowledge about LARCs (may be more than one)	1. BHS (e.g. Midwife) 2. CBHW 3. NGO Staff 4. Husband 5. Parents 6. Friends/Relatives 7. Magazine/Books/Newspaper 8. Internet 9. Radio 99. Other (please express)	
C4	Can access the LARCs in the area you live?	1. Yes 2. No 99. Not know	
C5	Who provide the LARCs in the area you live?	1. BHS (e.g. Midwife) 2. CBHW 3. NGO Clinic 4. Private Clinic 5. Public Hospital 6. Pharmacy (if so, skip to B19) 99. Other (please express)	
C6	Do you know the advantages of using LARCs?	1. Yes (Continue to C7) 2. No (Continue to C8)	

C7	Advantages of using LARCs you know (may be more than one)	1. No need to go frequently to service provider 2. One-time expenditure is enough 3. Has long-term effect for contraception 4. Easy to get baby after removal 5. Effectively prevent unwanted pregnancy 99. Other (please express)	
C8	Do you know the disadvantages of using LARCs?	1. Yes (Continue to C9) 2. No (Continue to C10)	
C9	Disadvantages of using LARCs (may be more than one)	1. Irregular menstrual cycle 2. Headache 3. Lower abdominal pain 4. Acne 5. Weight changes 6. Vertigo 7. Breast tenderness 8. Mode changes 99. Other (please express)	
C10	Negative feeling on using LARCs	1. Cause hypertension 2. Can move other part of the body 3. Can lost in the body 4. Can cause health problems 5. Can cause anemia 6. Can cause unavailability to have baby 99. Other (please express)	

C11	The reason why you still do not use LARCs	1. Fear of side effects 2. Fear of moving other part of the body 3. Plan to do sterilization 4. Want to have baby 5. Fear to insert in the body 6. No service provider 99. Other (please express)	
C12	Requirement for women to use LARCs	1. Service facility should not too far away 2. Easy to go to the service facility 3. Need to get the service with cheap price 4. Need to have good reputation of the service provider 5. Need to have good relationship with service provider 99. Other (please express)	

Thank you so much for your answers.