

**YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF ECONOMICS
MASTER OF DEVELOPMENT STUDIES PROGRAMME**

**A STUDY ON KNOWLEDGE, ATTITUDE AND PRACTICE
OF CONTRACEPTIVE UTILIZATION AMONG
REPRODUCTIVE AGED MARRIED WOMEN
(CASE STUDY – HMAWBI TOWNSHIP)**

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EMDevS - 17 (17th BATCH)**

OCTOBER, 2022

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This thesis is submitted as partial fulfillment of the requirements for the
Master of Development Studies (M.DevS) Degree

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This is to certify that a thesis entitled “**A Study on Knowledge, Attitude and Practice Of Contraceptive Utilization Among Reproductive Aged Married Women In Hmawbi Township**”, submitted in partial fulfillment towards the requirements for the degree of Executive Master of Development Studies has been accepted by the Board of Examiners.

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ABSTRACT

Knowledge, attitude and practice of contraceptive utilization was done with the married women from Hmawbi Township who were interviewed with structured questionnaires. Participants were between 18 to 49 years with the mean of 38.7 (± 7.79) years. About 60 % had high school level education and above. Majority of the married women (77%) were housewife and only 23.3 % were employed. Over half of their husband were above 40 years old and majority of them were government staff. It was found that they all already heard about the contraceptive methods. The most common methods knew by the respondents was oral contraceptive pills (88 %) followed by injection depo (85.3 %). The most common sources of knowledge for contraception were health care provider. Current contraceptive use was 74% but only 25 % of the women with no children used contraceptive. It also found that the age of the respondents and their husband, total number of children and their attitude on contraceptive are the factors that directly effect on the contraceptive use. Based on the findings, it was recommended that the health information regarding contraceptive methods should be more shared to the married women in order to reduce maternal mortality and morbidity among the married women.

ACKNOWLEDGEMENTS

First of all, I would like to express my sincere gratitude to Yangon University of Economics and Master of Development Studies Programme Committee for providing me with the opportunity to undertake this study.

I would also like to acknowledge Professor Dr. Tin Tin Htwe, Rector of Yangon University of Economics, for permission to complete this study. I wish to profound my sincere thanks to Professor Dr. Khin Thida Nyein, Pro-Rector and Professor Dr. Cho Cho Thein, Pro-Rector from Yangon University of Economics. I would also like to express my appreciation and thanks to Professor Dr. Kyaw Min Htun, Pro-Rector (Retired) from Yangon University of Economies.

I am especially than thankful to my supervisor, Professor Dr. Naw Htee Mue Loe Htoo, Professor and Head of Department, Department of Economics, Yangon University of Economics and Programme Director of MDevS Programme for her patience, detailed guidance and advice to this study. My humble thanks go to all Professors, Associate Professors, Lecturers and Assistant Lecturers from various institutions who equipped us with valuable lectures and their precious experiences.

Besides, I would like to give my special thanks to Professor Dr. Khaing Lay Mon, Professor and Head, Health Behavior and communication Department University of Public Health, who also gave me valuable scholarly comments.

I am also exactly in debated to chief of general administration department of Hmawbi township, for his permission to conduct thesis study. I highly appreciate all of administrators of health Hmawbi township, who are very kind and willing to help and support during my data collection period. Moreover, I would like to extend my warm thanks to my participants of this study for their voluntarily participation of the study. Last but not least, I am sincerely grateful to my friend San Mya Thida, PMER Coordinator, Complex Emergency Operation, Myanmar Red Cross Society for her support and suggestions for this study. I am really thanking to all of my classmates of EMDDevS 17th batch for their friendship, and mental support throughout the study. Finally, I own a great debt to my parents and my family for encouraging and supporting me for their never-ending love and support.

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LIST OF ABBREVIATIONS

COCs	Combined Oral Contraceptive pills
FRHS	Fertility and Reproductive Health Survey
HIV	Human Immunodeficiency Viruses
IUDs	Intrauterine Devices
MOH	Ministry of Health
NDHS	Nigeria Demographic and Health Surveys
RH	Reproductive Health
RHC	Rural Health Center
SDGs	Sustainable Development Goals
STDs	Sexually Transmitted diseases
STI	Sexually Transmitted Infection
TFR	Total Fertility Rate
UNFPA	United Nation Fund for Population Activities
WHO	World Health Organization

CHAPTER I

Introduction

1.1 Rationale of the Study

Contraception is an integral part of reproductive health. Moreover, it widely accepted that contraception use is one of the most important determinants of fertility, mortality, material and child health. The level of contraceptive utilization is an obvious and widely accepted measure of achievement of reproductive and birth spacing programs. On the other hand, utilization of contraceptive methods can help reduce the number of material deaths. Contraception utilization is a practical method for reducing poverty but family planning and contraception are still do not fully use.

Moreover, contraceptive information and services are fundamental for the health and human rights for every human being. Prevent pregnancy, reduce maternal mortality, reduce infant mortality, prevent HIV/AIDS, empowering women and promote education, bring economic benefits, and slow population growth can be achieved through the promotion of contraceptive usage in developing countries.

Furthermore, current contraception includes a variety of highly effective and safe methods of fertility regulation. However, they need proper compliance with their strict which rely on the user's control. Improper use or noncompliance of these guidelines leads to unintended or unwanted pregnancy. Thus, acquiring knowledge of contraceptive methods and their sources are important requirement toward using suitable contraceptive method in a timely and effective manner. In addition, it is also important for the correct utilization of contraceptive method to prevent the risk of havingunwanted or unintended pregnancy.

To avoid maternal deaths, it is also vital to prevent unwanted pregnancies. Accessible to contraception, safe abortion services and quality post-abortion care should be available for all women. Correct use is an important factor in avoiding failure of a contraceptive method, and ineffective use of contraception can carry a high risk of

unintended pregnancy. Higher annual failure rates ranging from three to 12 percent have been reported in developing countries.

In Myanmar Fertility Survey (2007), forty-one percent of married women between ages of 15 to 49 years used contraception whereas thirty-seven percent in 2001 (MIP/UNFPA, 2009). Contraceptive prevalence of using any contraceptive method among the married women of the ages between 15-49 in Myanmar was reported at 52.2 % in 2016, according to the World Bank (Ministry of Immigration and Population (Myanmar), & UNFPA, 2016). There were only a few studies which reflect the rural community such as Hmawbi Township. Hence, the study of knowledge, attitude and practice regarding contraceptive utilization among the married women from rural community was needed to be done.

The study of knowledge, attitude and practice on contraceptive use among married women in Hmawbi Township Area was done. The findings from this study may provide some information to improve birth spacing services to some extent with an ultimate goal in order to reduce maternal mortality and morbidity resulting from abortion.

1.2 Objectives of the Study

The objectives of the study are:

1. To identify the knowledge and attitude of contraceptive and contraceptive utilization among married women
2. To examine the association between the sociodemographic characteristics of married women, maternal characteristics, husband characteristics and their contraceptive utilization among married women
3. To identify the association between knowledge and attitude of contraceptive and contraceptive utilization among married women

1.3 Method of Study

A cross-sectional descriptive method was applied to identify the knowledge, attitude and practice regarding contraceptive of the married women from Hmawbi Township, Yangon Region. The survey was conducted from June 2022 to September 2022. Moreover, 150 sample were selected by systematic sampling. Data collection of

primary data was done face-to-face interview method with informed using structured questionnaires.

1.4 Scope and Limitations of the Study

This study focused on the sample data of Hmawbi Township, Yangon Region. The targeted group was reproductive age married women of this township. Survey period was from August to September in 2022. Furthermore, this study only covered the contraceptive use of the married women in Hmawbi Township, Yangon Region.

1.5 Organization of the Study

This study is organized into five chapters. Chapter one consists of introduction with rationale, objectives, scope and limitations of the study, method and organization of the study. Chapter two presents literature review including contraceptive methods, global contraceptive uses and related research studies. Chapter three discusses current contraceptive utilization in Myanmar. Chapter four describes the survey data analysis and finally, chapter five involves conclusion with the findings and suggestions.

CHAPTER II

LITERATURE REVIEW

2.1 The Concepts of Reproductive Health and Contraception

World Health Organization stated that “Reproductive health is a state of complete physical, mental and social well-being and not merely the disease or infirmity, in all matters relating to the reproductive system, and to its functions and processes. Therefore, reproductive health pointed that they have the capability to reproduce and the freedom to decide and that people are able to have a satisfying and safe sex life”. (WHO, 2012). Furthermore, the right of men and women to inform and to have access to safe, effective, affordable and acceptable methods of family planning of their choice (WHO, 2012).

Moreover, the various elements of reproductive health are strongly interrelated, and improvement of one lead to the deterioration of others. Among them, contraception is central to all other aspects of reproductive health. Contraception may refer specifically to mechanisms which are intended to reduce the likelihood of the fertilization of an ovum by a spermatozoon. Birth control is commonly used as part of family planning (WHO, 2012).

2.2 Contraceptive Methods

Jain, & Muralidhar defined contraception as “the intentional prevention of conception through the use of various devices, sexual practices, chemicals, drugs, or surgical procedures” (Jain, & Muralidhar, 2011). Obtaining the highest ease and privacy with the lowest cost and side effects is also the aim of contraceptives (Jain, & Muralidhar, 2011). Some barrier methods such as condoms give the protection of transmission of sexually transmitted diseases (Jain, & Muralidhar, 2011). Mainly

Methods of contraceptive can be divided into traditional method, modern method and surgical methods (Jain, & Muralidhar, 2011).

Traditional contraceptive method are abstinence, the lactational amenorrhea method, calendar method coitus interruptus (withdrawal method), and cervical mucus method. Male condom, female condom, oral contraceptive pills, injectable contraceptive, and pills for emergency contraception are modern contraceptive methods. Moreover, intrauterine devices (IUDs), female sterilization (tubectomy) and male sterilization (vasectomy) are surgical methods (Aung Thu, 2014).

2.2.1 Modern Contraceptive Methods

(i) Male Condom

In this method, a thin rubber or latex sheath (condom) is rolled on the penis before intercourse and prevents semen (sperms) into inside the woman. It has 95 percent effective if it is used correctly. It can be safely used for all types of people. No medical examination is needed. Moreover, it is easily available and affordable with no prescription. It is the most effective contraceptive method because it provide not only protection from contraception but also prevention from STI disease (Jain & Muralidhar, 2011).

(ii) Female Condom

Female condom is a vaginal pouch made of latex sheath which has one ring at each end. The closed end ring is inserted into inside the vagina. It works as the internal anchor. Outer portion of the female condom covers the external genitalia. This is reliable with high acceptance. It is for a female and it protects from either unwanted pregnancy or STDs (Jain & Muralidhar, 2011).

(iii) Oral Contraceptive Pills

The combined oral contraceptive pill include estrogen and progesterone hormones. The women who have this OC pills method need to be taken every day orally. The pill causes the prevention of the release of the egg, the thickness of cervical mucus and alternation in tubal motility. However, it is needed to be taken with prescription after doing a medical check-up. This method is an easy and convenient and have no other problem. Moreover, the pills need to be taken daily because it do not

work if it is consumed later than 12 hours disease (Jain & Muralidhar, 2011). The pills are should not be used by the women with over 35 years or if the women has family history of the following diseases such as heart, liver diseases, hypertension, diabetes or if the women has unexplained vaginal bleeding disease (Jain & Muralidhar, 2011).

(iv) Injectable Contraceptive

This method prevents the ovulation of the women. It also increase the cervical secretions' the viscosity in order to form a barrier for sperms. It is 99 percent benefit, which can be easily administered, and it is suitable for lactation mother (Jain & Muralidhar, 2011). It has many advantages such as getting ovarian cysts or breast lumps' recession. However, it can cause irregular menstrual cycle, spotting of menstrual cycle or cease of menstrual cycle altogether during this method is used. This method may cause also the weight gain. Moreover, it may be taken time when returning to fertility (Jain, & Muralidhar, 2011).

(v) Pills for Emergency Contraception

The most commonly used method of emergency contraception is combined oral contraceptive pills (COCs) are. The main mechanism of action is the suppression or delay of ovulation if it was used before ovulation,; as a result, fertilization is prevented. They are no longer effective and pregnancy continues unaffected if emergency contraceptive pills are taken after the estimated time of implantation,. It cannot cause an abortion once pregnancy is established (Family Health International, 2012).

2.2.2 Surgical Methods

(i) Intrauterine Devices (IUDs)

Intrauterine Device is a small flexible device of plastic which is usually made with copper. It needs a medical practitioner to put it into the woman's womb. This method inhibits the fertilized egg from locating in the uterus. Copper ions are used because of its spermicidal activity. This method is effective 95-98 %. However, it may sometimes cause heavy bleeding and pelvic inflammation for the women especially who are exposed to STDs. Because it can be sometimes loosened and detached, it needed be checked regularly. One of the disadvantages of this method is It can increase

the ectopic pregnancy's risk. Other disadvantages are not appropriate for women with pelvic infection, fibroids of the uterus, women with heavy menstruation, or if the women has history of unexplainable bleeding from vagin (Jain, & Muralidhar, 2011).

(ii) Female Sterilization (Tubectomy)

Jain, and Muralidhar stated in their study that “this is a permanent surgical method in which the fallopian tubes are cut and ends tied to prevent the sperms from meeting the eggs. It is a very reliable method which require only one day of hospitalization and can be performed anytime. After this method. Though this is a permanent method, and the operation can be reversed, though the results may not be always successful. Hence, the couple should be firmed about their decision before opting for this method.” (Jain, & Muralidhar, 2011).

(iii) Male Sterilization (Vasectomy)

In permanent surgical method, it blocked the vases deferential which is carrying the sperms to the penis from the testes. Therefore, at the time of ejaculation the sperms cannot be released into the semen. Moreover, vasectomy is a simple and reliable method which does not needed hospitalization. It does not affect neither on sexual vigor of the men; or the interface of intercourse (Jain, & Muralidhar, 2011).

2.3 Global Status of Contraceptive Utilization

According to the World Health Organization “In 2019, there are 1.1 billion women of reproductive age group (15-49 years) worldwide have a need for family planning”. (WHO, 2022). Ofonime stated that “there are 842 million of reproductive age women who are using any contraceptive methods, and 270 million of women have an unmet contraceptive need among the 1.9 billion. The women who had desired to use family planning has increased markedly from 900 million in 2000 to nearly 1.1 billion in 2020” (Ofonime, 2017). Accordingly, WHO showed that “the number of women using a modern contraceptive method was increased from 663 million to 851 million

and the contraceptive prevalence rate was improved from 47.7 to 49.0 per cent. An additional 70 million women are projected to be added by 2030.” (WHO, 2022).

The proportion of women who need family planning fulfilled by using modern contraceptive methods has gradually increased from 77% in 2000 to 77% in 2020. The reasons for this slow increase are inadequate choice of methods and access to services, fear or experience of side-effects, cultural or religious disagreement, poor quality of available services, and gender-based barriers to accessing services (WHO, 2022).

There are also increasing in the modern contraceptive methods’ utilization. However, the women population with unmet need for modern methods among those wanting to avoid pregnancy was decreased from (29 percent) 210 million in 2003, to (26 percent) 222 million in 2012 (Jain, & Muralidhar, 2011).

Therefore, there was 867 million (57 percent) of the 1.5 billion women in 2012, wanted to avoid pregnancy who needed contraception. The various reasons for not need contraception among the remaining 653 million women: they were unmarried and not sexually active (24 percent of all women), had recently had unintended birth, were pregnant with an intended pregnancy, or wanted to be pregnant soon 11 percent, or were sexually active but in fecund 8 percent. The women who wanted to prevent pregnancy were increased by 151 million between 2003 and 2012; most of which 108 million was because of the rising number of 15-49 years old women, and the remainder because of increasing motivation to avoid unintended pregnancies and changing patterns of marriage and sexual activity (Darroch and Singh, 2013).

On the other hand, modern contraceptive use is low in sub-Saharan Africa outside Southern Africa, in Western Asia, and in the poorest countries. Percentage of women using modern contraceptive method between 2003 and 2012 were the sharpest in sub-Saharan Africa 80 percent. The women who use modern methods increased by 25 % in Asia, including a 43 % rise in South Asia; by 29 % in Latin America and the Caribbean; by 51 % in the 69 poorest countries; and by 16 % in higher-income countries. The method which used most commonly in 2012 in developing countries was female sterilization (91%), followed by the intrauterine device, oral contraceptives, and barrier methods was (97 %) male condom, and long acting injectables and implant hormonal methods (91 % injectables). Large regional differences in type of method used; sterilization was the most commonly used modern method in Asia as a whole and in South Asia were also noted. Intrauterine devices made up almost a third of modern

use in Asia and were the most commonly used method in Eastern, Central, and Western Asia. Long-acting hormonal methods, mainly injectables, were the most commonly used methods in sub-Saharan Africa overall, particularly Eastern and Southern Africa, and in Southeast Asia. Oral contraceptives made up 45 percent of total modern contraceptive use commonly used modern method in Middle and Western Africa, which is probably an indicator of high HIV/AIDS risk and awareness in these regions (Darroch & Singh, 2013).

Between 2003 and 2012, the numbers of women using each type of method rose, while the distribution by type of method changed substantially. Between 2003 and 2012, the proportion of modern use accounted for by sterilization decreased by 9 percentage points in Asia and by 15 percentage points in Latin America and the Caribbean (Darroch and Singh, 2013). In Eastern Asia, the decline in use of sterilization was accompanied by a large increase in use of intrauterine devices, and some increase in use of sterilization was accompanied by increased use of barrier methods and a smaller increase in use of injectables and implants. A large decrease in use of intrauterine devices in Northern Africa and Western Asia was accompanied by increased use of oral contraceptives (Darroch & Singh, 2013).

In 2012, 222 million women in developing countries had the need of modern contraceptive methods. However, women with unmet need increased more slowly because the proportion using modern methods rose. If this proportion had not decreased from the 2003 level, 254 million women would have had unmet need for modern methods in 2012. In 2012, 73 % of women who had a contraceptive unmet need for modern methods lived in the world's poorest countries. The proportion of women with unmet need for modern contraceptive methods remained high in many regions, with the highest proportions in Eastern, Middle, and Western Africa, and in South and Western Asia. It fell most steeply in Eastern and Southern Africa, Southern Asia, Central America, and America (Darroch & Singh 2013).

Most women who had an contraceptive unmet need for modern methods used no contraceptive was 69 percent in 2012. On the other hand, the number of non-users with unmet need rose slightly from 149 million in 2003, to 153 million in 2012, this group decreased from 21 percent of all women who did not want pregnancy in 2003 to 18 percent in 2008 and 2012, accounting for most of the decrease in the overall proportion with unmet need for modern methods among those did not want pregnancy. The number of women relying on traditional methods was much smaller (68 million in

2012) than the number with unmet need using no method, and has accounted for only 8-9 percent of all women wanting to avoid pregnancy in 2003-12. General decreases between 2003 and 2012 in the proportion of women wanting to avoid pregnancy who are using traditional methods, with minor variations in this pattern were also noted. In 2012, most women relying on traditional methods used some form of periodic abstinence 47 percent or withdrawal 42 percent, with 11 percent using other methods (Darroch & Singh, 2013).

2.4 Review on Previous Studies

Bhandari, Shrestha, Pushpa and Thakuri in Nepal studied the factors which are affecting contraceptive utilization of reproductive Age married women. This study was done among (369) reproductive age married couples in Dhulikhel Municipality. Among 369 (81.3%) of the respondents used a modern contraceptive method. Depo-Provera was the choice 150(54.5%) of contraceptive method (Bhandari, Shrestha, &Thakuri, 2014).

Frost, Singh and Finer studied United State women's one-year contraceptive pattern in 2004. In this study, a nationally representative sample 1978 adult women at the risk of unintended pregnancy was surveyed by telephone and respondents provided information about contraception use and periods of stopping or switching methods. There are 23 % of women at the risk of unintended pregnancy were exposed to risk of getting pregnancy because of the gaps in contraceptive use in the year prior to survey (Frost, Singh & Finer, 2007). More than half of women used a contraceptive method last year and among them, the same method used all year was 38 % and 24% switched the methods (Frost, Singh & Finer, 2007).

Factors affecting contraceptive use of reproductive aged women from the Worawora township of the Volta Region of Ghana was studied. A total of 390 women were asked. Bivariate and multivariate logistic regression analyses were deployed to understand the data. Most of the respondents were between the 15-24 age group and also Christians. The findings identified significant association between the use of contraceptives and age, number of children, number of members per household, occupation, marital status, educational level of partner and having a prior discussing with the sexual partner. It was shown that partners' involvement and educational background has high impact on women's use of contraceptive. Policy decision should

be driven to target those outside these age groups and demographic characteristics as measure to encourage usage (Manortey, Tetteh & Lotsu, 2017).

Family planning is a key strategy in the control of fertility among women. This study was done in Nigeria to determine the factors that influence modern family planning use using data from Nigeria Demographic and Health Survey (NDHS) 2013. There are a total of 119,386 women aged 15-49 years participated in the study. The mean age was 35.9 ± 8.1 years and prevalence of modern contraceptive methods was 10.3%. The contraceptive use was (26.7%) in the South West, while the lowest in (2.7%) the North West. Factors of modern family planning use were higher education, richest wealth quintile, being from South West, age 25-49 years and urban residence ($p < 0.001$). The education and wealth index were the highest factors of modern contraceptive use (Ofonime, 2017).

A quantitative cross-sectional comparative study on knowledge, attitudes and practice of birth spacing among pre and post family planning clinic attendees was carried out in Central Women Hospital by Kyu Kyu Than in 1997. Two hundred subjects were included using systematic random sampling method. The subjects were interviewed by using pretested questionnaires. It was shown that odds of the having high score on contraceptive knowledge among OFPCA was significantly high than the comparison groups. Positive attitudes toward contraception were much higher in OFPCA compared to the comparison groups. The ever user of contraception was 95.5 percent and there was no significant difference among the study and the comparison groups. Of the 32% of current users, the most commonly used was injectable contraception 61 % which was followed by IUCD 24 %. The commonest type of failure was oral pills 50.9 %t. Reasons for not birth spacing methods were lack of knowledge, fears of side effects and pregnancy before knowing anything about contraception. All of the family planning clinic attendees have intention of using contraception in the future (Kyu Kyu Than, 1997).

A cross sectional descriptive study conducted to define the pattern of contraceptive utilization and fertility behavior among married women residing in Inndine by Tin Myo Han in 2001. Nine hundreds and forty-one married women were interviewed by face to face with a pretested structured questionnaire. The findings revealed that current contraceptive prevalence among married women was 53.29 percent and most commonly used methods were oral contraceptive pill 40.88 percent and 3 monthly depo injections 92.95 percent. Main sources of the contraceptive drug

supply were the drug shops 82.8 percent in current users and 59 percent in ever users. About 80 percent of women used contraceptives properly and the most preferred method among the current users was oral contraceptive pills 44.2 percent and that of ever user was sterilization and 57 percent of never users did not have specific preference methods. The common reasons for choosing the preferred method of contraception include advantages of those particular drugs or methods 41 percent, as traditionally 11.1 percent. There was a strong association between the abortion and improper use of contraceptive study (Tin Myo Han, 2001).

A prospective comparative study was done to explore the compliance and use behavior injectable contraceptive users and oral contraceptive pill users in family planning clinic of Central Women's Hospital was done by Aye Aye Thin in 2002. A total of 180 contraceptive users comprising of 90 injectable contraceptive users and 90 oral contraceptive pill users were by interviewed by using semi-structured interview questionnaires at first time of visit. The age ranges were 18-43 years in injectable users and 18-42 years in OC pill users. Most of the women (75 % of injectable users and 82 percent of OC pill users) had reached middle school level in education. The difference between age distribution, parity, education level and family income of two groups are not statistically significant. However, there is statistically significant difference in preceding obstetric history of injectable contraceptive users had highly significant compliance than oral contraceptive pill users (100 percent vs 84.4 %) (Aye Aye Tin, 2002).

A cross-sectional analytical community-based study was carried out to define the pattern of contraceptive utilization and fertility behavior among married women residing in Inndine community. After having informed consent for the study, 795 contraceptive users (current and ever) and 159 never users were selected from sampling frame by systematic random sampling. Current contraceptive prevalence among women was 53.29 percent. The most common used methods were OC pills 44.2 percent and 3 monthly Depo injections 28.9 percent. There were statistical associations between contraceptive utilization and total family income, education levels of couple , and age of women (Thein Myint Thu, et al, 2002).

A study on the knowledge, attitude and practice on contraceptive utilization among the married women in Hlaing Tharyar Township of Yangon Division was done in 2009. About 200 married women were face-to-face interviewed using pre-tested semi-structured questionnaires. Age of women ranged from 18 to 47 years and mean

age was 32.42 ± 7.672 (Mean+SD). Most of the women were literate, 23.5 percent had passed high school and 17.5 percent were graduate level. About half of the participants were housewives. Seventy-six percent of women had at least one child and mean duration of marriage was 10.41 ± 7.647 (Mean+SD). Among 200 women, 164 (82 percent) were aware of contraception. Seventy-six (38 percent) or one third of women had heard level of knowledge on contraceptive methods. Almost all women have heard of oral pills and injections. Major source of advices concerning contraception was health care providers and major source of drug supply was clinics. Two third of women had positive attitude towards contraception. Mean age of starting contraception was 22.72 ± 4.392 (Mean+SD) years. Three quarters were current users of contraception and 25 percent were not using any method at present time. Half of the participants 53 percent were using injection. Majority preferred injection method. Among the 41 women were not currently using contraception, 27 (52 %) women were planning for pregnancy. Significant association was found between education of women and knowledge on contraception. More widespread and accurate information about the safe, effective and appropriate use of contraception should be given in the community (Wai Phyo, 2009).

A descriptive study was done to assess the knowledge, attitude and practice on contraception of abortion patients who had been admitted to Central Women's Hospital (CWH), Yangon. A hundred and one patients admitted to CWH from 19th September, 2012 to 10th October, 2012 were included for quantitative data and then eight patients were purposively selected for conducting in-depth interview to explore reasons for and procedures of abortion among induced abortion patients. Mean age at first marriage was 24.3 ± 5.2 years with the range varying from 15 years to 38 years. Mean age at first pregnancy was 25.3 ± 5.3 years with the range varying from 15 years to 40 years respectively. Concerning age at first use of contraception, 76 patients mentioned their mean age being 25.2 ± 5.1 , minimum and maximum age at first use of contraception was 16 and 38 years respectively. It was revealed that 95 % of patients had heard about contraception. Among them, 84.4 percent mentioned daily pills and 92.7 % mentioned three monthly injections. Regarding source of information, 55.2 % of patients had noticed about contraception from relatives and friends. Nearly 80 % of patients expressed that condom could protect against pregnancy and sexually transmitted infections (STIs). Only 23.8 % of patients could mention emergency contraception and only one patient could express appropriate time for taking drugs. Regarding total

knowledge score of respondents about contraception, 58.4 percent had good knowledge score. Moreover, 81.2 percent of patients had high attitude score. About 76.2 percent of respondents were current users. Among current user, half of the women used 3 monthly injections. Among never users, they got pregnant mainly because they stopped contraception due to desire to get next child (Nway Nway Win, 2012).

CHAPTER III

CONTRACEPTIVE USE IN MYANMAR

3.1 Current contraceptive utilization in Myanmar

According to Report on Situation Analysis of Population and Development, Reproductive Health and Gender in Myanmar (2010), approximately one million women give birth each year in Myanmar, and the maternal mortality ratio (MMR) remains high; for every 100,000 live births were an estimated 316 maternal deaths in 2004-2005. Myanmar maternal mortality rate of 2014 was 247.00, a 1.59% decline from 2013. Myanmar maternal mortality rate in 2016 was 245.00, a 0.41% decline from 2015 (Microtrend, 2022). Myanmar maternal mortality rate in 2017 was 250, which was 2.04% increase from 2016. The fact that MMR estimates were higher in 2017 than 2014 and 2015 is suggestive that the impacts of the poor economy, the intense vulnerability of women's health and psycho-social factors have compounded negative effects on women's health and survival. The rise in MMR could also be due to better reporting maternal deaths due to increased awareness and improved data collection methods.

In 2010, prevalence rate of contraceptive was 46 % and it was aimed to increase up to 50 percent in 2015. According to the Myanmar Fertility Survey (2016), the contraceptive prevalence rate is 52.2 % of all methods. Comparing with neighboring countries in Asia, the prevalence of modern contraceptive used rate (PCR) for Myanmar is relatively lower than the other countries.

In Myanmar, the population of women is 53.2% of total population according to 2019 Myanmar's Inter-census survey. Adolescent fertility rate is 20.3 births per 1,000 women aged 15-19 while total fertility rate (TFR) is 2 children per women aged 15 to 49. Women are exposed to the risk of unintended pregnancy over much of their adult lives. This expectation of increased risk is supported by higher failure rates experienced by women in the first months of using a method compared with rates among long-term users (Frost, Singh & Finer, 2007). In order to promote the

knowledge, attitude and practice of the better utilization of contraceptive among the married women, needed to be explored first.

In Myanmar, the unmet contraception need in 2021 for the married women was 15.5%. Nationally, the unmet contraception need in 2006 was estimated at 17.7 percent of all currently married women of reproductive age (4.9 percent for spacing and 12.8 percent for limiting), a slight reduction from 19.1 percent in 1997 (5.8 percent for spacing and 13.3 percent for limiting). In 2016, 16 % of currently married women have an unmet contraception need according to Demographic and Health Survey (2015-16). The unmet contraception need may be underestimated and would probably appear to be much higher if unmarried women were also included in the data. The choice of one modern contraceptive method is usually influenced by the availability of options locally and the influence of the method promoted by national family planning programmes. Family Planning services in Myanmar are provided through both the public and private sectors. Oral contraceptives, injectable contraceptives, condoms and IUDs have been made available through the public sector since 1991, and are currently provided at the subsidized rates in 132 of the country's 325 townships (FRHS, 2016).

In Myanmar, the mean age at marriage was 22.5 years for women and 24 years for men. There is a direct correlation with of education; the higher level of education, the older age at marriage for the mean age at marriage and they also effected on contraceptive use of these women. The changes in demographics of high proportion of never married as well as the high level of abortion in 15-19 age group, implies that RH care and support need to specifically target 15-19 adolescents, and the population of never married women and men in age group 15 to 49 year's old who are likely to be sexually active. While there are strong cultural values against premarital sex, there is a high demand for reproductive health information and services from married and unmarried adolescents. Young women in particular face barriers based on social and cultural values, in accessing reproductive health services, including those for birth spacing. Adolescent fertility in Myanmar is mostly related to early marriage. The mean age at first for Myanmar women is 23 years. A very low proportion of women 1.9 percent had their first before age 15. Slightly over one quarter had their first birth age 20 years (FRHS, 2007). Forty-five percent of women had given birth before age 22 and another 41 percent had their first birth between age 20 and 24 years. There are suggestive of a good standard of reproductive management.

The total fertility rate (TFR), indicating the mean number of children born to a woman, indicates a post-transitional stage in fertility in Myanmar, with a below replacement level of 2.092 in 2022 (2.112 in 2021, a gradual decline from 3.4 in 1990 and 2.4 in 2000-2001). The decline in fertility levels could be attributed to delays in age of marriage and first birth, an increase in proportion of never-married women 51 and increased use of modern methods of contraception among women. Again, remote areas such as Rakhine, Chin and Sagaing States have minorities who vulnerable populations with high fertility rates. Language barriers of ethnic minorities who are not literate in the Burmese language hinder effective use of RH services.

3.2. Trends of Contraceptive Use in Myanmar

The study of trends in use of contraception is important in assessing the achievement of material and child health programs over a period of time. Trends in the use of specific contraceptive methods among currently married women and the annual percentage point change implied by differences of the measures during one decade was done by Population Council Fertility Survey (PCFS) and 2001 Fertility and Reproductive Health Survey (FRHS) in Myanmar.

Within a ten-year period, contraceptive prevalence rate has more than doubled, from 17 percent in 1991 to 37 percent in 2001. During 1991 and 2000, prevalence of any contraceptive method increased by 20 percentage points mainly due to increase of 12 percentage points of injection prevalence from three to 15 percent.

For traditional methods, the prevalence rate among currently married women has increased from three percent in 1991 to four percent in 1997 and remained at four percent in 2001. There is a slight increase for use of withdrawal method but use of other traditional methods has decreased during 1997-2001 period.

Among current users of modern methods, private sector sources are more popular 50 percent than government sources 41 percent. More than 56 percent of married women and 52 percent of husbands approve contraceptive use. Surprisingly, among current non-users, 26 percent have intention to use in the future while 70 percent do not intent to use contraception and remaining four percent are unsure of their intention (Ministry of immigration and population, Department of Population and UNFPA, 2003).

Myanmar demonstrated a gradual increase in its contraceptive prevalence rate (CPR) reaching 37 percent in 2001 (32.8 percent using modern methods and 4.2 percent using traditional methods) and 41 percent in 2007 (38.4 percent using modern methods). The Reproductive Health Strategic Plan (2009-2013) sets the target for CPR of 45 percent (modern methods) by the year 2013. With the increase in the contraceptive prevalence rate, the unmet need for contraception of currently married women has moderately decreased from 20.6 in 1991 to 17.7 in 2007.

Emergency contraceptive pills are included in the public supply chain and are available in private pharmacies. Anecdotal evidence suggests that women often obtain low quality or counterfeit drugs from the private market. Data on quality, use and effects of contraceptives available from private pharmacies is not depicted in health statistics and remains a subject for further research. More evidence is required to learn about the magnitude and consequences of the use of monthly contraceptive pills available over the counter in private pharmacies.

Knowledge of different methods is a crucial determinant of contraceptive use. According to the 2007 FRHS, over 95 percent of the population have the knowledge of at least 3 methods of contraception. Fifty-two percent of respondents mentioned private sources and 43 percent mentioned government outlets as sources for contraceptive supplies. Government facilities are known as the main female sterilization 84.2 percent and the IUD insertion 51.2 percent while private drugs stores and shops are known as the major source for contraceptive pills over 70 percent and condoms 61.1 percent. Respondents cited health clinics as a major source for injectable contraceptives, followed by government nurses or midwives and private drug stores.

There are considerable differentials in the use of contraceptives, both among urban-rural and rich-poor population groups. Nearly 49 percent of currently married urban women are using a modern contraceptive method compared with only 34 percent of rural married women. Among the regions, contraceptives use is the highest in Yangon Division 57 percent followed by Bago 45 percent and Mandalay 42 percent. The lowest CPR rates are in Chin and Sagaing 28 percent. The use of traditional methods among married women in 2007 accounted to 2.5 percent, a decline from 4.3 percent in 1997 and 4.2 percent in 2001.

Nationally, the unmet need for contraception in 2006 was estimated at 17.7 percent of all currently married women of reproductive age (4.9 percent for spacing and 12.8 percent for limiting), a slight reduction from 19.1 percent in 1997 (5.8 percent for

spacing and 13.3 percent for limiting). The unmet need for contraception may be underestimated and would probably appear to be much higher if unmarried women were also included in the data.

The choice of contraceptive method is usually influenced by the availability of options locally and the influence of the method promoted by national family planning programmes. Birth spacing services in Myanmar are provided through both the public and private sectors. Oral contraceptives, injectable contraceptives, condoms and IUDs have been made available through the public sector since 1991, and are currently provided at the subsidized rates in 132 of the country's 325 townships. Myanmar has limited resources for RH commodities and UNFPA supplies contraceptives to 122 townships across the country. Another 10 townships are supported through German bilateral assistance. The MOH logistics supply chain transports oral pills, injectables and condoms for distribution at the RHC level, while IUDs are made available at the township level. There are 193 townships without public health support for contraceptive commodities. In these locations, it is common for private vendors to fill the gap for demand for contraception by supplying mainly condoms and oral contraceptives. The most widely used methods of contraception are three-monthly injectables 14.9 percent, followed by daily combined oral pills 8.6 percent. There is a minimal use of IUDs and condoms. While promotion programmes are in place, the use of condoms for dual protection is not a common practice.

In theory, female sterilization is available through the public sector in all township hospitals. However, permission for sterilization procedures must be granted from a state/division-level board. Female sterilization is more likely to be performed under certain conditions, for example if the patient has health complications or is HIV positive. Due to the tedious amount of paper work for patients to obtain a formal clearance for sterilization (approval can take between 3 to 5 months), the choice of this permanent method has not been widely used. Male sterilization is restricted by law to men whose wives have been approved for female sterilization, but are unable to undergo sterilization for medical reasons (UNFPA, 2010).

CHAPTER IV

ANALYSIS OF SURVEY DATA

4.1 Study Area

Hmawbi Township is part of the Yangon Region. It is located at the Northern District in Yangon Region. The location of Hmawbi Township is between North Latitude 73 degree 36 minutes and East Longitude from 176 Degree to 136 Degree. The area is 183.78 square miles.

Hmawbi Township is organized with four wards, 39 village tracts and 195 villages. According to 2014 population census, in urban area 25928 people live and 218679 people live in rural area. The total population of Hmawbi Township is 244607 with 120931 Male and 123676 females Most of the people in Hmawbi Township are cultivating and farming.

Religious status of the people in Hmawbi Township are Buddhist, Christian, Islam and Hindu. The number of Buddhist is the largest, followed by Christian. The majority of the households in Hmawbi Township are living in bamboo house and wooden houses. Agriculture is the main economic activity and most of the crop grow in Hmawbi Township are rice, sunflower, cow-pea and bean. There are fifty-bedded hospitals, two sixteen-bedded hospitals and thirty rural health centers.

4.2 Study design

Cross-sectional descriptive study design was used use to explore the knowledge, attitude and practice of contraceptive use among the married women from Hmawbi Township. Sample surveys are the most commonly use method for the primary data collection. The household survey is conducted to obtained the required information. The objective of the study is to assess of knowledge, attitude and practice on contraceptive use among married women from Hmawbi Township.

4.2.1 Questionnaire design

The questionnaire was used to collect the required information. Data was collected by interviewing method in which interviewers administered questionnaire in Myanmar language, visited house to house and conducted face to face interview with the helps of three assistant interviewers. The questionnaire basically consists of three parts: (Part 1) socio-demographic characteristics of respondents and their husbands, (Part 2) knowledge and attitude on contraceptive and (Part 3) Contraceptive use among the respondents. Contraceptive method uses included the question asking about current using contraceptive method.

The questionnaire was prepared for asking the required information from a reproductive age married women. Married women have a right to agree or refuse to participate in the study. The purpose of the study was explained to the respondents and the consent was obtained before the interview. All the participants were explained the study was solely for a research purpose and that information was kept confidential. Informed consent was taken explained about the questions how to answer multiple response questions. After that each interview was done which last about 10 to 20 minutes. The data was checked for completeness error and in consistence after data collection. Informed consent was taken from all respondents. The finding and results were used for research purposes and ensure their privacy.

4.2.2 Sample Design

Married women residing in the selected one ward of Hmawbi Township Area was included as a survey population. Hmawbi area in Yangon Region was selected as study area. The study period was from July 2022 to October 2022.

Inclusion criteria was married women between aged 18 to 49 years who gave the inform consent to participate in this survey. Women who were critically ill during data collection was excluded from the study. There were (4) wards in Hmawbi township and (1) ward was selected purposively due to the limitation cost, transportation and communication. Ward 4 was selected and it has a total of 751 house hold and among them, (150) Households were selected by systematic sampling. The first household was chosen between one and five by lottery. Based on first number, five number was added

to the first number chosen and these houses are selected systematically until it reached the targeted household. One married woman was selected from one selected household (If there are more than one married woman, wife of household head was chosen.)

Data was reviewed for completeness coded, and data entry was done manually into Excel Spreadsheet. Data cleaning was done by checking frequency distribution tables, graphs, outlines, and errors. Data summarization was done by using table and graphs and analyzed by using appropriate statistical tests such as Chi square. The socio-demographic characteristics of age was described by mean age standard deviation, education, occupation, age of first pregnancy; numbers of children are described by frequency table, charts and graph.

In this study, knowledge, attitude and practice on contraceptive use among the married women are assessed and it also asked about sociodemographic characteristics of married women, husband characteristic and marital characteristic such as respondent's age, race religion, education, working status of the respondent, their family monthly income, age of their husband, their husband's race, religion, education and occupation, age of the first marriage, number of living children and age of first pregnancy of the married women.

Both age of the respondents and their husband were categorized into three groups: ≤ 30 years age group, 31 to 40 years age group, >40 years age group. Both religion of the respondents were categorized into two groups: Buddhist and Christian. Race of the respondents were categorized into two groups: Myanmar and Other. Education level of the respondents were categorized into four groups: Up to Primary school level education, Middle school level education, High school level education, and University/graduate level education. Occupation of the respondents were categorized into four groups: Housewife, Manual worker/ seller, Skilled/ professional and Others. Monthly family income were categorized into three groups: $\leq 200,000$ MMK per month, 200,001 to 300,000 MMK per month, $>300,000$ MMK per month.

Age at first marriage were categorized into three groups: ≤ 20 years group, 21 to 30 years group, and 31 to 40 years group. Age at first pregnancy (n= 142) were categorized into three groups: ≤ 20 years group, 21 to 30 years group, and 31 to 40 years group. Total number of children were categorized into three groups: No children group, 1 to 2 children group, and ≥ 3 children group. Age of youngest child (n= 142) were categorized into three groups: ≤ 1 year group, 2 to 5 years group, 6 to 10 years and >10 years group.

Husband characteristics, Education level of their husband were categorized into six groups: Read and write level group, Primary school level group, Middle school level group, High school level group, University and Graduate level group. Occupation of their husband were categorized into four groups: Manual worker/ Seller group, Skilled/ Professional group, Government staff group and Others.

Regarding scoring, correct knowledge is set as one and incorrect and don't know response are given zero. In practice questions regarding contraceptive use, there was no scoring. However, it was shown by frequency. Knowledge level of the respondents regarding contraceptives was divided into two groups, low and high based on mean score. Below mean was set as low knowledge but medium and equal mean were set as high knowledge groups. Regarding attitude toward contraceptive use of the respondents was divided into positive attitude and negative attitude group based on mean attitude score. Below 38 score was negative attitude group and 38 score and above 38 was positive attitude group.

4.3. Survey Result

4.3.1. Sociodemographic characteristics of study population

This study was assessing the socio demographic characteristics of the married women and their husband such as their age, religion, race, education, occupation, and monthly family income.

Table (4.1) Sociodemographic characteristics of study population

Sociodemographic characteristics	Frequency	Percentage
Age		
≤30 years	27	18.0
31 to 40 years	58	38.7
>40 years	65	43.3
Total	150	100
Religion		
Buddhist	143	95.3
Christian	7	4.7
Total	150	100

Table (4.1) Continued

Race		
Myanmar	140	93.3
Other	10	6.7
Total	150	100
Education		
Illiterate	1	0.7
Read and write	6	4.0
Primary school	20	13.3
Middle school	34	22.7
High school	53	35.3
University	7	4.7
Graduate	29	19.3
Total	150	100
Occupation		
Housewife	115	76.7
Manual worker/ seller	13	8.7
Skilled/ professional	5	3.3
Others	17	11.3
Total	150	100
Monthly family income		
≤200,000	44	29.3
200,001 to 300,000	79	52.7
>300,000	27	18.0
Total	150	100

(Source: Survey Data)

In this study, (150) married women were asked about their age, race, religion, education, occupation and family monthly income.

Age distribution of the study population was ranged from 18 to 49 years with the mean (SD) age of 38.7 (7.79) years and median age of 39 years. About 44 % were over 40 years, 38.7 % were 31 to 40 year's age group and the remaining were 30 years and below. Majority of the participants were Myanmar, and Buddhist.

Regarding the education status, one respondent was illiterate and 6 respondent (4 %) were only read and write. However, about 60 % were high school level and above.

In terms of occupation, majority of the married women (115, 77%) were housewife and only 23.3 % of the respondents were employed.

Monthly family income of the participants was ranged from 150,000 MMK to 500,000 MMK with the median (IQR) income of 240,000 (100,000) MMK. Among them, 44 respondents 29% had monthly income of 200,000 MMK and below 200,000 MMK. On the other hand, over half of the respondents 79 (53%) had 20,0001 to 300,000 MMK monthly income.

4.3.2. Maternal characteristics of study population

In this study, marital characteristic of the (!%) married women were also assessed such as their age at first marriage, age at first pregnancy, total number of children and age of the youngest child.

Table (4.2) Maternal characteristics of study population

Maternal characteristics	Frequency	Percentage
Age at first marriage (n= 150)		
≤20 years	53	35.3
21 to 30 years	90	60.0
31 to 40 years	7	4.7
Total	150	100
Age at first pregnancy (n= 142)		
≤20 years	22	15.5
21 to 30 years	104	73.2
31 to 40 years	16	11.3
Total	142	100
Total number of children (n= 150)		
No children	8	5.3
1 to 2 children	95	63.4
≥ 3 children	47	31.3
Total	150	100

(Source: Survey Data)

Table (4.2) Continued

Age of youngest child (n= 142)		
≤ 1 year	18	12.7
2 to 5 years	40	28.2
6 to 10 years	33	23.2
>10 years	51	35.9
Total	142	100

(Source: Survey Data)

In this study, marital characteristic of the (!%) married women were also assessed such as their age at first marriage, age at first pregnancy, total number of children and age of the youngest child.

About one third of the respondents married ≤20 years of age and 60 % of the respondents married at the age of between 21 to 30 years. There was only 4.7 % who were married over 30 years of age. Mean (SD) age at first marriage was 22.97 (4.16) years with the minimum age of 16 years and maximum age of 38 years.

Among the respondents, 8 women had never given birth to a child. Minimum age at first pregnancy was 18 years and maximum age was 40 years with the mean (SD) age of 24.87(4.63) years. Among a total of (142 participants who had children, majority of the participant became pregnant between their age of 21 to 30 years. Among a total of (142 participants who had children, two third of the participants had one or two children and 31.1 % had three children and more.

4.3.4. Husband characteristics of study population

In this study, husband characteristic of the (150) married women were also assessed such as their husband's age, race, religion, education level, and occupation.

Table (4.3) Husband characteristics of study population

Husband characteristics	Frequency	Percentage
Age		
≤30 years	19	12.7
31 to 40 years	50	33.3
>40 years	81	54.0
Total	150	100
Religion		
Buddhist	145	96.7
Christian	5	3.3
Total	150	100
Race		
Myanmar	139	92.7
Other	11	7.3
Total	150	100
Education		
Read and write	2	1.3
Primary school	13	8.7
Middle school	33	22.0
High school	52	34.7
University	10	6.7
Graduate	40	26.7
Total	150	100
Occupation		
Manual worker/ seller	17	11.3
Skilled/ professional	20	13.3
Government staff	110	73.3
Others	3	2.0
Total	150	100

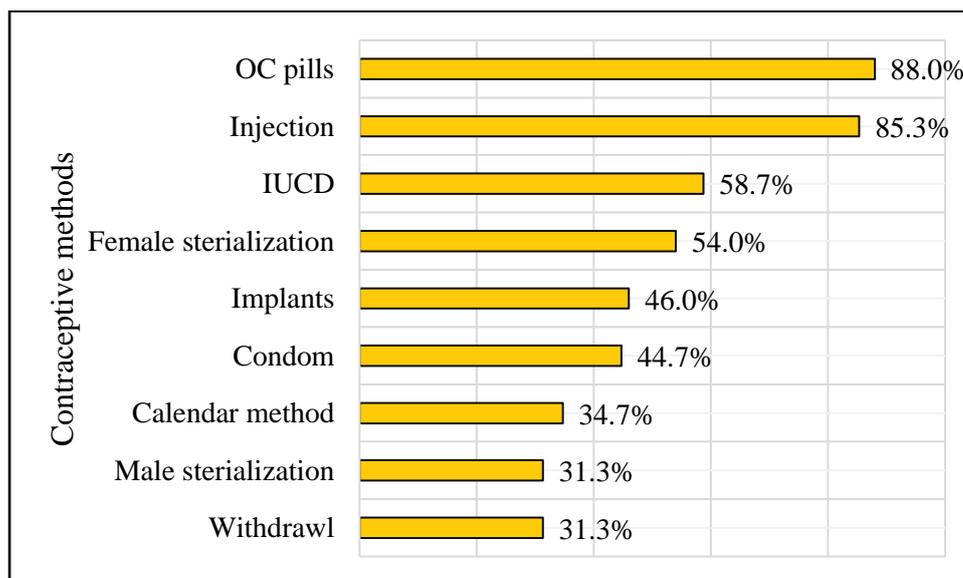
(Source: Survey Data)

Husband characteristic of the participants were also assessed such as their husband's age, race, religion, education level, and occupation. Age distribution of the husband ranged from 25 to 59 years with the mean (SD) age of 42.29 (8.69) years and median age of 42 years. Nearly 55 % of husband were over 40 years of age. Similar to the participants, majority of the husband were Myanmar, Buddhist. Regarding the

education status, more than 60 % were high school level and above. In terms of occupation, majority were government staff.

4.3.5 Knowledge of the respondents regarding contraceptive

(i) Knowledge on different methods of contraceptive

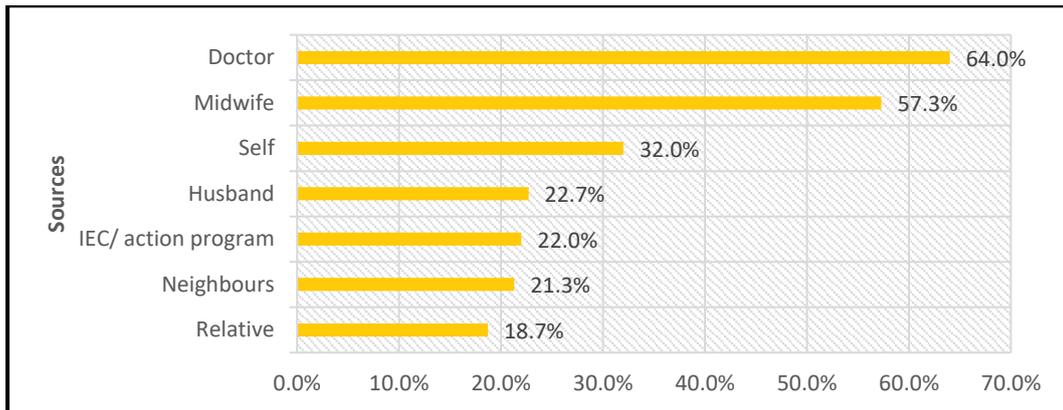


(Source: Survey Data)

Figure (4.1) Knowledge on different methods of contraceptive

All the participants already heard about the methods to prevent pregnancy. Among the methods oral contraceptive pills were the most common methods (88 %) and which was followed by injection depo (85.3 %). Only 46% know about implants and 45% heard about condom. Both male sterilization and withdrawal were the least common method of participants' answer (31%).

(ii) Sources of knowledge for contraception among the participants

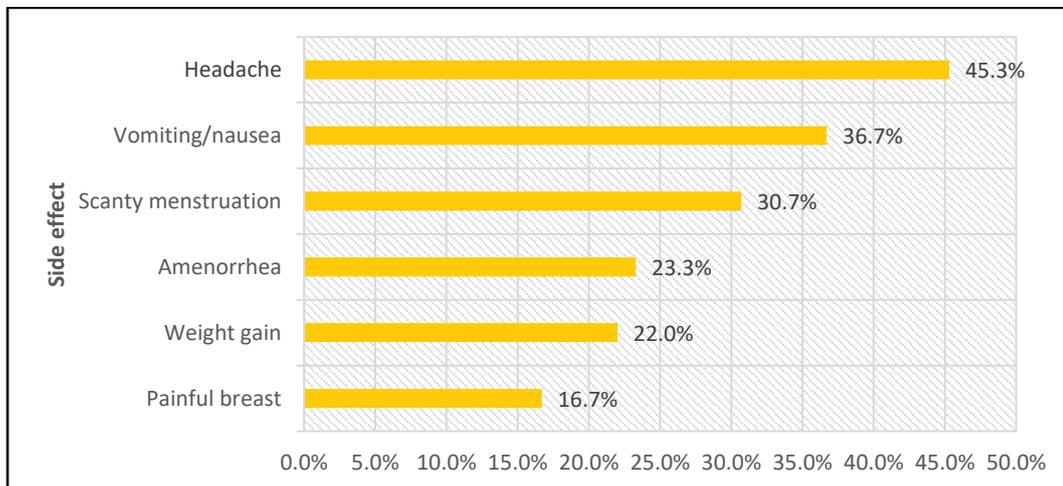


(Source: Survey Data)

Figure (4.2) Sources of knowledge for contraception among the participants

The most common sources of knowledge for contraception among the participants were health care provider (doctors and midwife) which was followed by self (32 %), husband (22.7 %), IEC/action program (22 %), neighbors (21.3%) and relatives (18.7 %).

iii. Knowledge on Side -effect of contraceptive drug among the respondents

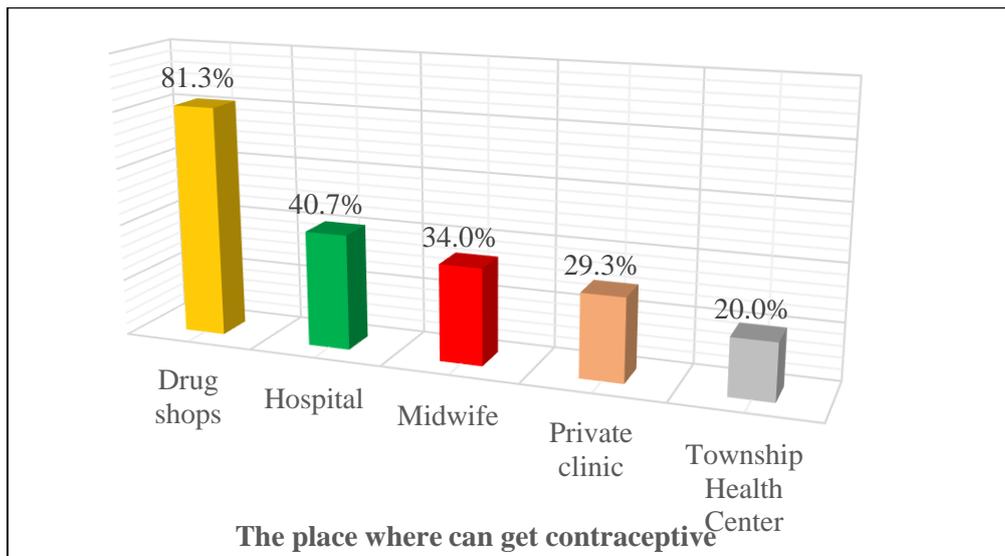


(Source: Survey Data)

Figure (4.3) Side effect of contraceptive drug

Among the respondents, 123 (82 %) heard the side effects of the contraceptives. The side effect that they mentioned were headache (45.3%), vomiting/nausea (36.7 %), scanty menstruation (30.7 %), amenorrhea (23.3 %), weight gain (22 %) and painful breast (16.7 %).

iv. Knowledge on the place where can get contraceptive



(Source: Survey Data)

Figure (4.4) Knowledge on the place where can get contraceptive

As shown in figure (4), drug shops were the most common place where respondent can get contraceptive and Township Health center was the least common place that the respondents mentioned.

4.3.6. Knowledge on advantages and disadvantages of contraception

Knowledge on advantages and disadvantages of contraceptive methods was assessed in this survey. Firstly, they are asked if they knew about advantage and disadvantage of them and if they answer yes, they were continuing to ask what are advantage or disadvantage of each method. The advantage or disadvantage of each method were multiples choice questions and the respondents were allowed to answer more than one answer.

(i) **Knowledge on advantages and disadvantages of oral contraception pills**

Table (4.4) Knowledge on advantages and disadvantages of oral contraception pills

Knowledge on advantages and disadvantages	Frequency	Percentage
Knowledge on advantages of OC pills (n=150)		
Yes	132	88.0
No	18	12.0
Total	150	100
Advantages of OC pills (n=132) **		
Low pregnancy rate	119	79.3
Simple	48	32.0
Cheap	49	32.7
Reduce some gynecological disease	18	12.0
Regular menstruation	59	39.3
Knowledge on disadvantages of OC pills (n=150)		
Yes	119	79.3
No	31	20.7
Total	150	100
Disadvantages of OC pills (n=119) **		
Headache	90	60.0
Nausea	79	52.7
Discomfort in the breast	24	16.0
Increase hypertension/ CVD	19	12.7
Development of Ca breast	9	6.0

(Source: Survey Data) ** **Multiple choice questions (More than one answer)**

Although 88 % of the respondent had knowledge on advantages of OC pill, only 79.3 % had knowledge on disadvantage.

Among the respondents who knew about advantage of OC pills, the most common advantage of OC pills knew by the respondents was low pregnancy rate (79.3 %).

On the other hand, the most common disadvantage of OC pills was headache (60 %) among the 119 respondents who had knowledge on disadvantage of OC pills.

(ii) **Knowledge on advantages and disadvantages of injectable contraceptives**

Table (4.5) Knowledge on advantages and disadvantages of injectable contraceptives

Knowledge on advantages and disadvantages	Frequency	Percentage
Knowledge on advantages of injectable contraceptives (n=150)		
Yes	126	84.0
No	24	16.0
Total	150	100
Advantages of injectable contraceptives(n=126)		
**	119	79.3
Good pregnancy control	56	37.3
Simple	53	35.3
Cheep	15	10.0
Reduce some gynecological disease		
Knowledge on disadvantages of injectable contraceptives (n=150)		
Yes	124	82.7
No	26	17.3
Total	150	100
Disadvantages of injectable contraceptives(n=124) **		
Irregular menstruation	72	48.0
Amenorrhea	47	31.3
Delayed return to fertility		

(Source: Survey Data) ** **Multiple choice questions (More than one answer)**

For the injectable contraceptives, 84 % had knowledge on advantages and 82.7 % had knowledge on disadvantages. Good pregnancy control was the mostly mentioned advantage and irregular menstruation was the most mentioned disadvantage.

(iii) Knowledge on advantages and disadvantages of IUCD

Table (4.6) Knowledge on advantages and disadvantages of IUCD

Knowledge on advantages and disadvantages	Frequency	Percentage
Knowledge on advantages of IUCD (n=150)		
Yes	77	51.3
No	73	48.7
Advantages of IUCD (n=77) **		
Long term contraceptives	70	46.7
No systemic side effect	37	24.7
Use in breast feeding mother	42	28.0
Likely to conceive after removal	33	22.0
Can remove if there are adverse reactions	41	27.3
Knowledge on disadvantages on IUCD (n=150)		
Yes	73	48.7
No	77	51.3
Disadvantages of IUCD (n=73) **		
Renewal every 3 to 5 years	43	28.7
Risk of PID	16	10.7
Menorrhagia	42	28.0
Dysmenorrheal	23	15.3
Ectopic pregnancy	32	21.3

(Source: Survey Data) ** Multiple choice questions (More than one answer)

In contract to OC pill and injectable contraceptives, knowledge on advantages and disadvantages of IUCD was reduced to 51.3 % and 48.7 % respectively. The most common advantage and disadvantage of IUCD were long term contraceptive (46.7 %) and Renewal every 3 to 5years (28.7 %) respectively.

(iv) **Knowledge on advantages and disadvantages of condom**

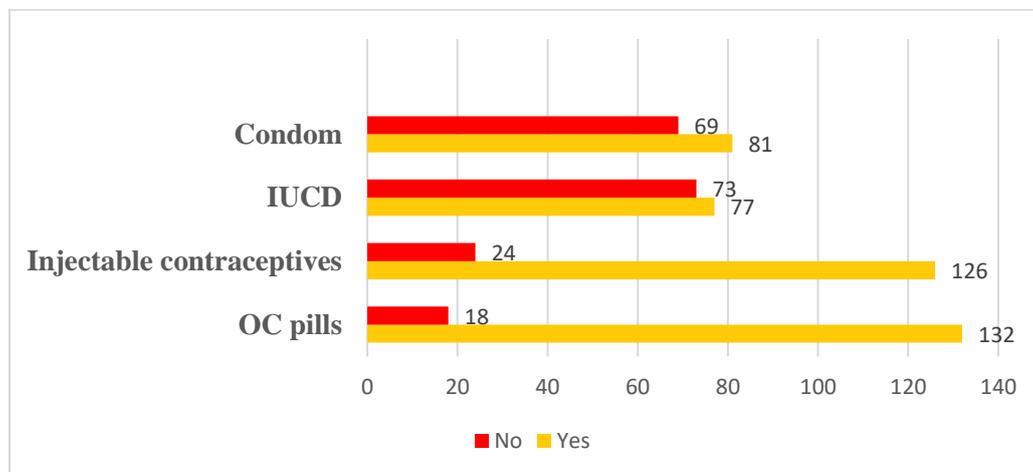
Table (4.7) Knowledge on advantages and disadvantages of condom

Knowledge on advantages and disadvantages	Frequency	Percentage
Knowledge on advantages of condom(n=150)		
Yes	81	54.0
No	69	46.0
Total	150	100
Advantages of condom(n=81) **		
Cheaper	42	28.0
Simple to use	39	26.0
Protection against STD	74	49.3
Protection against CIN	35	23.3
Knowledge on disadvantages of condom(n=150)		
Yes	49	32.7
No	101	67.3
Total	150	100
Disadvantages of condom (n=49) **		
Slipper	45	30.0
Torn	36	24.0
Inadequate sexual pleasure	22	14.7

(Source: Survey Data) ** **Multiple choice questions (More than one answer)**

Regarding the condom, 54 % had knowledge on advantages and 32.7 % had knowledge on disadvantages. About 50 % mentioned that condom can protect the STD as advantage and 30 % mentioned that one of the disadvantages of condom was slipper.

(v) Knowledge on advantages of the contraceptive methods among the married women

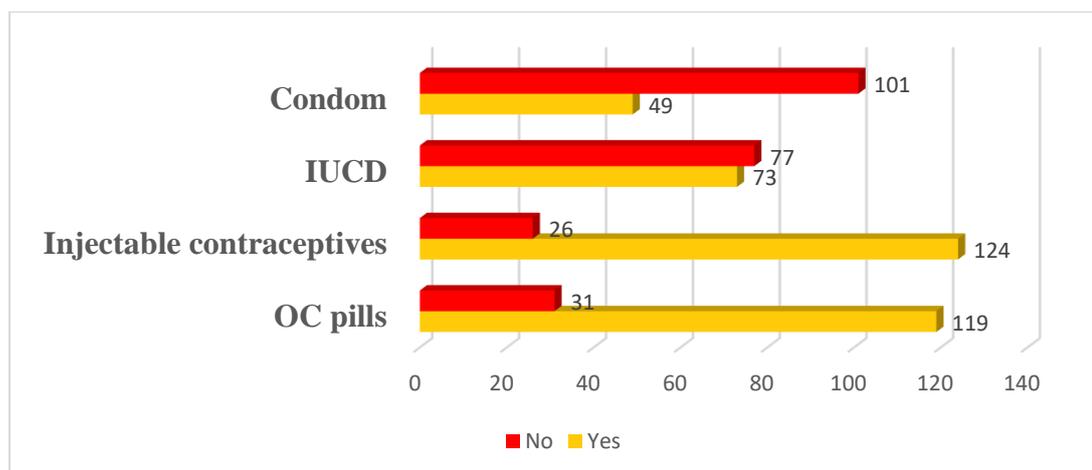


(Source: Survey Data)

Figure (4.5) Knowledge on advantages of the contraceptive methods among the married women (n=150)

Among the women who knew about advantages of contraceptive methods, majority of them knew about OC pills 132 (88%) followed by injectable contraceptives 126 (84%).

(vi) Knowledge on disadvantages of the contraceptive methods among the married women



(Source: Survey Data)

Figure (4.6) Knowledge on disadvantages of the contraceptive methods among the married women (n=150)

Among the married women who knew about disadvantages of contraceptive methods, majority of them knew about OC pills 119(79%) followed by injectable contraceptives 124 (83%).

(vii) Knowledge on complication of female sterilization

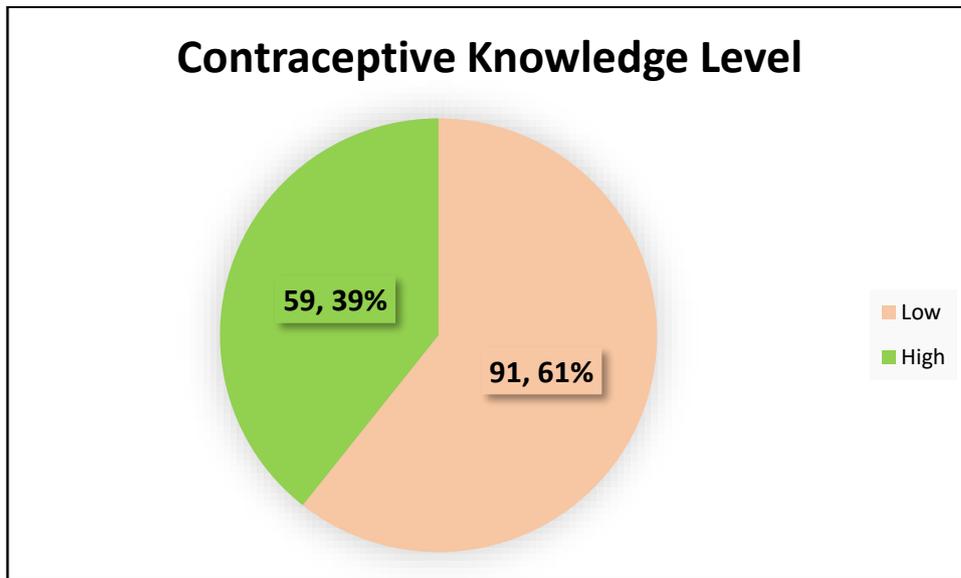
Table (4.8) Knowledge on complication of female sterilization

Knowledge on complication of female sterilization	Frequency	Percentage
Knowledge on complication of female sterilization (n=150)		
Yes	65	43.3
No	85	56.7
Total	150	100
Complication on female sterilization (n=65)		
**	43	28.7
Risk of anesthesia	28	18.7
Ectopic pregnancy	18	12.0
Bleeding risk of injury to near structure	19	12.7
Pregnancy	37	24.7
Regret		

(Source: Survey Data) ** Multiple choice questions (More than one answer)

About half of the responded knew the complications of female sterilization. Risk of anesthesia was the most commonly mentioned complication and risk of bleeding was the least common mentioned complication.

(viii) Knowledge level on contraception among the married women



(Source: Survey Data)

Figure (4.7) Knowledge level on contraception

Maximum given score of knowledge was 70 and minimum score was 0. Knowledge score of study population ranged from 2 to 70 with the mean score of 27.3 (± 14.9) and median score was 24.

Knowledge score of the respondents' regarding contraceptive was divided in to two groups: high and low group, based on the mean knowledge score. Knowledge score of 28 and above was defined as high knowledge and <28 was defined as low knowledge group. According to this cut off point, 59 (39%) had high knowledge level on contraception.

4.3.7. Attitude of the married women on contraception

The eleven attitude questions regarding contraceptive were used to assess the respondents' attitude on the contraceptive. The score was given using the Likert scale. For the positive question, the strongly agree was given one, disagree was two, neutral was three, agree was four and strongly agree was five. And the score was reversed for the negative question.

(i) **Attitude on contraception**

Table (4.9) Attitude on contraception (n=150)

Attitude	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean
	n (%)	n (%)	n (%)	n (%)	n (%)	
Contraception is needed to get the healthy family life	71 (47.3)	74 (49.3)	3 (2.0)	2 (1.3)	0 (0)	4.43
Contraceptive can improve the mother health	25 (16.7)	83 (55.3)	27 (18.0)	15 (10.0)	0 (0)	3.79
The use of contraceptive is against the human nature*	18 (12.0)	31 (20.7)	40 (26.7)	59 (39.3)	2 (1.3)	2.97
Condom is comfortable to use	7 (4.7)	33 (22.0)	104 (69.3)	5 (3.3)	1 (0.7)	3.27
Condom has fewer side effects than other methods	7 (4.7)	43 (28.7)	98 (65.3)	2 (1.3)	0 (0)	3.37
Use of one month O.C pills is the reliable methods of contraception	24 (16.0)	84 (56.0)	34 (22.7)	8 (5.3)	0 (0)	3.83
O.C pills increase the risk of cancer	2 (1.3)	19 (12.7)	119 (79.3)	10 (6.7)	0 (0)	3.09
Use of three-month Depo-injection is the reliable methods of contraception	18 (12.0)	91 (60.7)	36 (24.0)	5 (3.3)	0 (0)	3.81
The use of emergency contraceptive methods is the reliable methods of contraception	5 (3.3)	50 (33.3)	85 (56.7)	8 (5.3)	2 (1.3)	3.32
The use of IUCD is the reliable methods of contraception	9 (6.0)	62 (41.3)	76 (50.7)	2 (1.3)	1 (0.7)	3.51
The use of contraception is the best consequence for health	11 (7.3)	32 (21.3)	57 (38.0)	48 (32.0)	2 (1.3)	3.01
Total Attitude Mean Score with SD	38.39 (\pm 3.27)					

(Source: Survey Data)

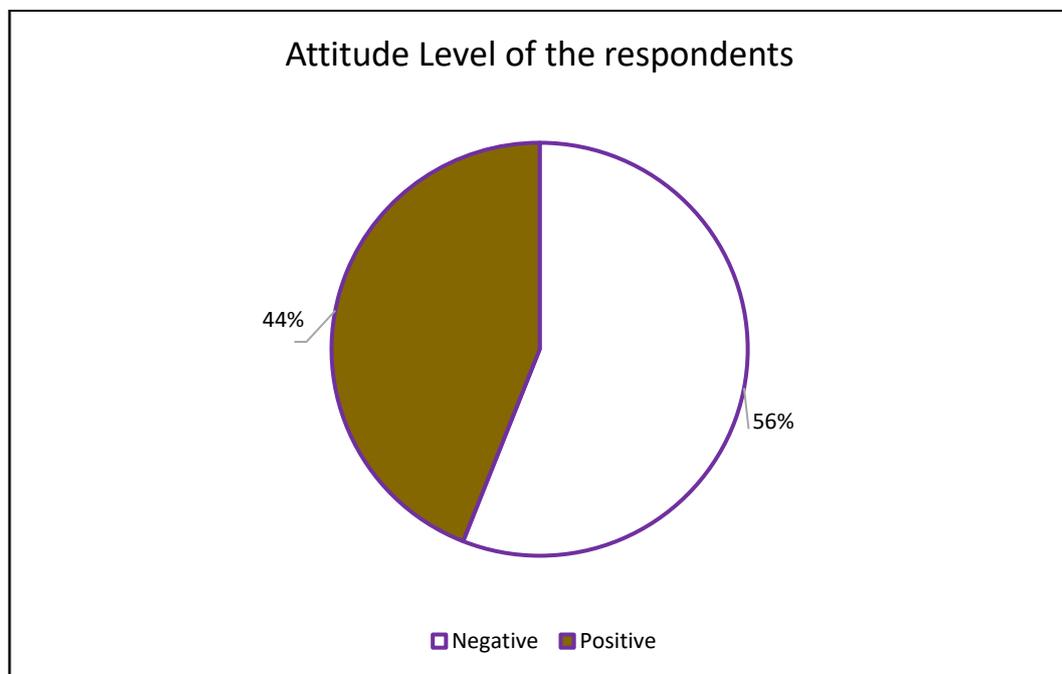
*Negative statement

Apart from the “use of contraceptive is against the human nature” statement, other statements were positive statement. For the positive statements, majority of the

respondents answered agree or strongly agree. However, for one positive statement “use of contraception is the best consequence for health”, most of the respondents answered neutral or disagree. For one negative statement: the “use of contraceptive is against the human nature” statement, majority of the respondent answered neutral (40, 27%) or disagree (59, 39%).

Maximum given score of attitudes was 55 and minimum score was 11. Attitude score of study population ranged from 31 to 52 with the mean score of 38.39 (SD \pm 3.27) and median score was 38.

ii. Attitude level on contraception



(Source: Survey Data)

Figure (4.8) Attitude level on contraception

Attitude score of the respondents regarding contraceptive was divided in to two groups: positive attitude and negative attitude group based on mean attitude score.

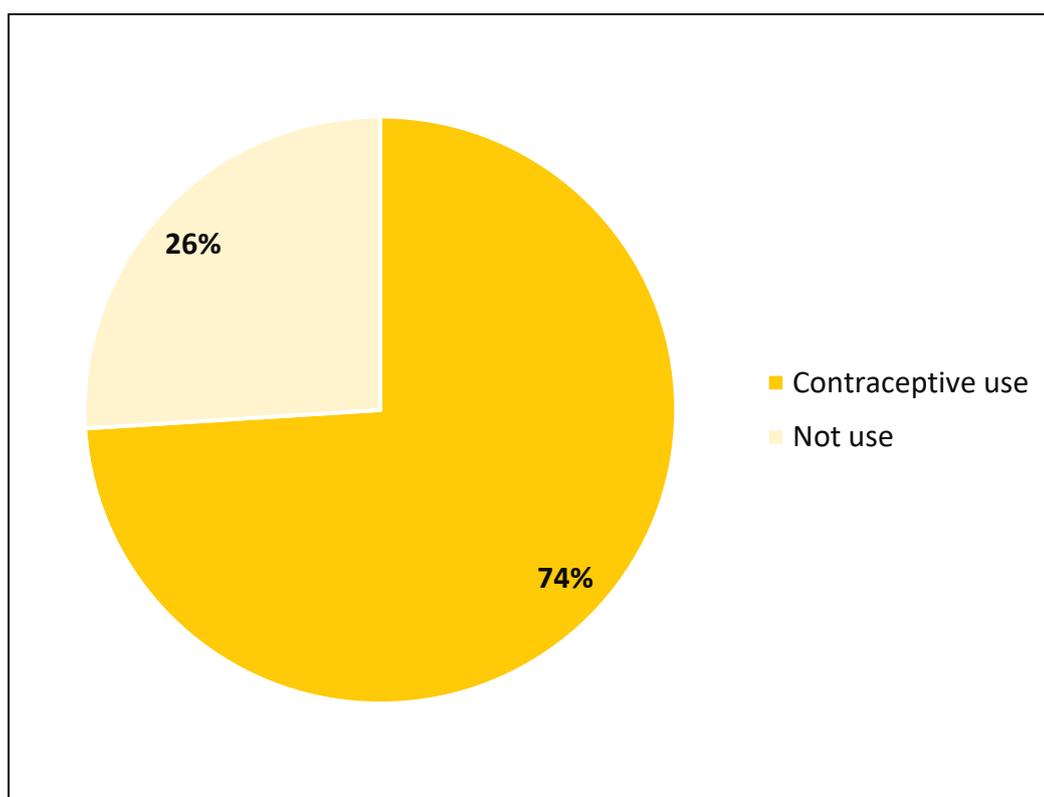
Attitude score of 38 and above was defined as positive attitude and <38 was defined as negative attitude. According to this cut off point, 66 (44%) had positive attitude on contraception.

4.3.8. Practice of currently contraception use among the respondents

The current contraceptive use among the married women was determined by the question if the use the contraceptive currently or not.

If yes, they were currently using contraceptive and then they were also ask about what method they used.

(i) Current Contraception utilization status among the respondents

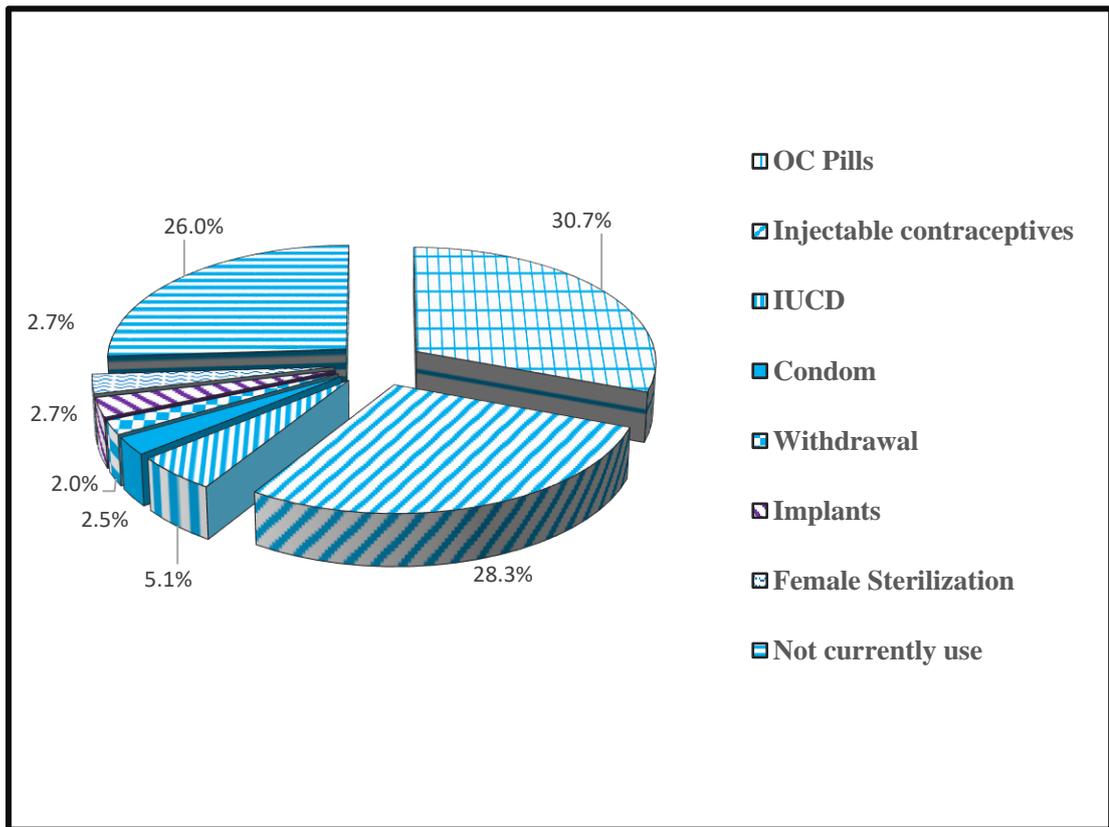


(Source: Survey Data)

Figure (4.9) Proportion of contraception utilization practice among the respondents

Out of 150 respondents, 111 (74 %) currently used contraception of any type currently and 39 (26%) were not using currently.

(ii) Contraceptive Methods currently used by the respondents



(Source: Survey Data)

Figure (4.10) Methods of Contraception use among the respondents

In this survey, 39 (26%) respondents out of 150 respondents were not currently using any contraceptive methods. The methods of contraception used among the married women were OC pill (30.7 %), injection (28.3%), IUCD (5.1 %), condom (2.5%), withdrawal (2 %), implants (2.7 %), female sterilization (2.7 %).

4.3.9 Relationship of sociodemographic characteristics and contraceptive use of study population

The statistical association between sociodemographic characteristics such as age, race, religion, education, occupation and income and contraceptive use of the respondents were studied using Chi square test and/or Fisher's exact test.

Table (4.10) Association between sociodemographic characteristics and contraceptive use

Sociodemographic characteristics	Contraceptive use		Chi square test	P value
	Yes n (%)	No n (%)		
Age				
≤30 years	23 (85.2)	4 (14.8)	7.278	0.026
31 to 40 years	47 (81.0)	11 (19.0)		
>40 years	41 (63.1)	24 (36.9)		
Religion				
Buddhist	107 (74.8)	36 (25.2)		0.377*
Christian	4 (57.1)	3 (42.9)		
Race				
Myanmar	106 (75.7)	34 (24.3)		0.127*
Other	5 (50.0)	5 (50.0)		
Education				
Up to Primary school	16(59.3)	11 (40.7)	4.021	0.259
Middle school	26 (76.5)	8 (23.5)		
High school	40 (75.5)	13 (24.5)		
University/graduate	29 (80.6)	7 (19.4)		
Occupation				
Housewife	84 (73.0)	31(27.0)		0.429*
Manual worker/ seller	9(69.2)	4 (30.8)		
Skilled/ professional	3 (60.0)	2 (40.0)		
Others	15 (88.2)	2 (11.8)		
Monthly family income				
≤200,000	31 (70.5)	13 (29.5)	1.087	0.581
200,001 to 300,000	58 (73.4)	21 (26.6)		
>300,000	22 (81.5)	5(18.5)		

(Source: Survey Data)

*Fisher's exact test

Regarding the demographic characteristic, age of the respondent was significantly associated with the contraceptive use with the p value of 0.026. The younger the age, the more the contraceptive used. Among the women with ≤30 years age group, 82.5 % used contraceptive and it was reduced to 81 % among the women with 31 to 40 years age group and reduced to 63.1 % among over 40 years age group. Even though women with higher education level were more contraceptive used, it was not statistically significant. Other demographic variables such as race, religion, occupation and income were not significantly associated with the contraceptive use.

4.3.10. Relationship of maternal characteristics and contraceptive use of the respondents

The statistical association between maternal characteristics such as age at first marriage, age at first pregnancy, total number of children, age of the youngest child and contraceptive use of the respondents were studied using Chi square test.

Table (4.11) Association between maternal characteristics and contraceptive use

Maternal characteristics	Contraceptive use		Chi square test	P value
	Yes n (%)	No n (%)		
Age at first marriage				
≤20 years	43 (81.1)	10 (18.9)	2.825	0.243
21 to 30 years	64 (71.1)	26 (28.9)		
31 to 40 years	4 (57.1)	3 (42.9)		
Age at first pregnancy (n= 142)				
≤20 years	19 (86.4)	3 (13.6)	1.750	0.417
21 to 30 years	77 (74.0)	27 (26.0)		
31 to 40 years	13 (81.2)	3 (18.8)		
Total number of children				
No children	2 (25.0)	6 (75.0)	16.6	0.001
1 to 2 children	79 (83.2)	16 (16.8)	51	
≥ 3 children	30 (63.8)	17 (36.2)		
Age of youngest child (n= 142)				
≤ 1 year	15 (83.3)	3 (16.7)	3.348	0.341
2 to 5 years	34 (85.0)	6 (15.0)		
6 to 10 years	24 (72.7)	9 (27.3)		
>10 years	36 (70.6)	15 (29.4)		

(Source: Survey Data)

Among the women with no children, only 25 % used contraceptive. Otherwise, women with children used contraceptive from 64 to 83 %. There was significantly association between total number of children and contraceptive use with the p value of less than 0.001. The younger the age of youngest child, the more the contraceptive used. However, it was not statistically significant. Other maternal characteristics such as age at first marriage and age at first pregnancy were not significantly associated with contraceptive used.

4.3.11. Relationship of husband characteristics and contraceptive use (n=150)

The statistical association between husband characteristics such as their husbands' age, race, religion, education, occupation and contraceptive use of the respondents were calculated with Chi square test and/or Fisher's exact test.

Table (4.12) Association between husband characteristics and contraceptive use (n=150)

Husband characteristics	Contraceptive use		Chi square test	P value
	Yes n (%)	No n (%)		
Age				
≤30 years	14(73.7)	5 (26.3)	13.549	0.001
31 to 40 years	46 (92.0)	4 (8.0)		
>40 years	51 (63.0)	30 (37.0)		
Religion				
Buddhist	108 (74.5)	37 (25.5)		0.605*
Christian	3 (60.0)	2 (40.0)		
Race				
Myanmar	103 (74.1)	36 (25.9)		1 .000*
Other	8 (72.7)	3 (27.3)		
Education				
Up to Primary school	9 (60)	6 (40.0)	5.246	0.153
Middle school	21 (63.6)	12 (36.4)		
High school	40 (76.9)	12 (23.1)		
University/Graduate	41 (82.0)	9 (18.0)		
Occupation				
Manual worker/ seller	11 (64.7)	6 (35.3)		0.269*
Skilled/ professional	15 (75.0)	5 (25.0)		
Government staff	84 (76.4)	26 (23.6)		
Others	1 (33.3)	2 (66.7)		

(Source: Survey Data)

*Fisher's exact test

Similar to age of respondents, age of husband was significantly associated with contraceptive use. Women with husband of younger age groups were more contraceptive used.

Similar to the education level of respondents, women with husband of higher education level were more contraceptive used. However, it was not statistically significant.

Other husband characteristics such as race, religion and occupation status were not significantly associated with contraceptive used.

4.3.12. Relationship between knowledge, attitude and contraceptive use (n=150)

Table (4.13) Association between knowledge, attitude and contraceptive use (n=150)

Knowledge and attitude	Contraceptive use		Chi square test	P value
	Yes n (%)	No n (%)		
Knowledge level				
High	31 (77.5)	9 (22.5)	0.347	0.556
Low	80 (72.7)	30 (27.3)		
Attitude level				
Positive	55 (83.3)	11 (16.7)	5.336	0.012
Negative	56 (66.7)	28 (33.3)		

(Source: Survey Data)

Although women with high knowledge level were more used the contraceptive, it was not statistically significant.

In this study, it was found that there was the statistical association between the attitude level of the married women and their contraceptive use. Therefore, married women with positive attitude level more used the contraceptive than women with low attitude level regarding contraceptive.

CHAPTER V

CONCLUSION

5.1 Findings

The objective of the study is to assess the knowledge, attitude and practice of the contraceptive use among the married women from Hmawbi Township. In this study, 150 married women from Hmawbi Township, Yangon region were interviewed with structured questionnaire to assess their sociodemographic characteristic, their knowledge and attitude on contraceptive and their contraceptive use.

Age distribution of the study population was ranged from 18 to 49 years with the mean (SD) age of 38.7 (7.79) years and median age of 39 years. About 44 % were over 40 years, 38.7 % were 31 to 40 years age group and the remaining were 30 years and below. Majority of the participants were Myanmar, and Buddhist.

Regarding the education status, one respondent was illiterate and 6 respondent (4 %) were only read and write. However, about 60 % were high school level and above. In terms of occupation, majority of the married women (115, 77%) were housewife and only 23.3 % of the respondents were employed. Monthly family income of the participants was ranged from 150,000 MMK to 500,000 MMK with the median (IQR) income of 240,000 (100,000) MMK. Among them, 44 respondents 29% had monthly income of 200,000 MMK and below 200,000 MMK. On the other hand, over half of the respondents 79 (53%) had 20,0001 to 300,000 MMK monthly income.

In this study, the participants were the married women between the age of 18 to 49 years. Their mean (SD) age was 38.7 (7.79) years and median was 39 years. About 44 % of the respondents were over 40 years, 39% were 31 to 40 years age group and the remaining were 30 years and below. Moreover, majority of the participants were Myanmar, and Buddhist in this survey.

In Myanmar, the mean age at marriage was 22.5 years for women. In this study, it also found that the mean age of marriage was 22.97 years \pm 4.161. Maximum age of

marriage among the study population was 38 years and the minimum was 16 years. Mode was 20 years.

Regarding the education status, one respondent was illiterate and 6 respondent (4 %) were only read and write. However, about 60 % were high school level and above. In terms of occupation, majority of the married women (115, 77%) were housewife and only 23.3 % of the respondents were employed. Monthly family income of the participants was ranged from 150,000 MMK to 500,000 MMK with the median (IQR) income of 240,000 (100,000) MMK. Among them, 44 respondents 29% had monthly income of 200,000 MMK and below 200,000 MMK. On the other hand, over half of the respondents 79 (53%) had 20,0001 to 300,000 MMK monthly income.

Age distribution of the husband ranged from 25 to 59 years with the mean (SD) age of 42.29 (8.69) years and median age of 42 years. Nearly 55 % of husband were over 40 years of age.

Similar to the participants, majority of the husband were Myanmar, Buddhist. Regarding the education status, more than 60 % were high school level and above. In terms of occupation, majority were government staff.

In this survey, it was found that all the participants already heard about the methods to prevent pregnancy. Among them, the most common methods knew by the respondents was oral contraceptive pills (88 %) and which was followed by injection depo (85.3 %). Only nearly half of the respondents knew about implants and 45% heard about condom. Both male sterilization and withdrawal were the least common method knew by the participants because only one third of the participants knew about them (31%). It showed that the health information regarding contraceptive methods should be more shared to the married women because they all should know about every method and choose the most suitable method for them.

Regarding the places that they obtained contraceptive drug, shops were the most common place where respondent can get contraceptive and township health center was the least common place that the respondents mentioned. The most common sources of knowledge for contraception among the participants were health care provider (doctors and midwife) which was followed by self (32 %), husband (22.7 %), IEC/ action program (22 %), neighbors (21.3%) and relatives (18.7 %).

Overall proportion of contraceptive use of the married women in the study was 74%. Among the women with no children, only 25 % used contraceptive. Otherwise, women with children used contraceptive from 76%. According to the reproductive

health survey in Myanmar, in 2007, nearly 49 percent of currently married urban women are using a modern contraceptive method compared with only 34 percent of rural married women. Among the regions, contraceptives use is the highest in Yangon Division 57 percent followed by Bago 45 percent and Mandalay 42 percent. According to the Myanmar Fertility Survey (2016), the contraceptive prevalence rate (proportion of currently married women aged 15-49 who are currently using a contraceptive method) is 52.2 percent of all methods. In this study, 74% of the respondents were currently using a contraceptive method. Therefore, contraceptive prevalence in this survey was higher than the Myanmar contraceptive prevalence rate. However, it was lower than the study in Nepal where (81.3%) of the respondents of reproductive age were using a modern contraceptive method.

There was significantly association between total number of children and contraceptive use with the p value of less than 0.001. The younger the age of youngest child, the more the contraceptive used. However, it was not statistically significant. Other maternal characteristics such as age at first marriage and age at first pregnancy were not significantly associated with contraceptive used.

Relationship between socioeconomic characteristic of their husband and their contraceptive use, age of husband was significantly associated with contraceptive use. Women with husband of younger age groups were more contraceptive used than women with older husband group. On the other hand, other husband characteristics such as education level, race, religion and occupation status were not significantly associated with contraceptive used.

Relationship between knowledge, attitude and contraceptive use, it was not statistically significant between the knowledge of the respondents regarding contraceptive and their currently contraceptive use. Therefore, it can be concluded that knowledge of the contraceptive method did not effect on their contraceptive uses. On the other hand, there was a relationship between attitude of the respondents and their contraceptive uses in this survey. Married women with positive attitude on contraceptive more use of the contraceptive methods.

Therefore, regarding knowledge, attitude and practice of contraceptive utilization among the respondents, this study found that knowledge and was not affecting their contraceptive use statistically. Among the socio demographic characteristic of the respondent's attitude of the women on contraceptive, age of the

respondents and age of their husband, and total number of children effect on the contraceptive use of the married women.

5.2 Suggestions

Contraceptive use helps couples and individuals realize their basic right to decide freely and responsibly if, when and how many children to have. The growing use of contraceptive methods has resulted in not only improvements in health-related outcomes such as reduced maternal mortality and infant mortality, but also improvements in schooling and economic outcomes, especially for girls and women. Therefore, all the married women should know about all types of contraceptives and their advantages and disadvantages. The easy ways to explain the contraceptive methods to the married couple should be done so that different education level of the community could understand these methods clearly.

In this study, nearly half of the respondents didn't know about IUCD, condom and female sterilization methods. Moreover, only 10% to 28% of the respondents knew the advantages and disadvantages of IUCD and female sterilization. Therefore, information sharing about these methods should be done more for the community.

INFORMED CONSENT FORM

**RESEARCH TITLE A STUDY ON KNOWLEDGE, ATTITUDE AND
PRACTICE OF CONTRACEPTIVE UTILIZATION
AMONG REPRODUCTIVE AGED MARRIED
WOMEN IN YANGON, MYANMAR**

**RESEARCHER MAY MYO MYINT KHAING
(Master of Development Study) Student
Yangon University of Economics, Yangon**

1. I clearly understand the nature and purposes of the research project.
2. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction.
3. I clearly understand that questions not more than twenty-five minutes are being asked and it is not included invasive procedure.
4. I also understand that participating in this study may not effect on my life in the present or future.
5. I agree that while the information gained during the study may be published, my personal information will be kept confidential.
6. I understand that I can withdraw from the study at any time or refuse to answer any questions, Which I do not wait to answer.
7. Therefore, I consent voluntarily to participate as a participant in this study.

Signature _____

Name of Participant (Wife) _____

Date _____

Signature _____

Name of researcher _____

Date _____

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APPENDIX - I

The study of factors influencing contraceptive utilization among married women

Interview Questionnaires

A. Socio-demographic data

No	Questions	Results Answer	Code
A1.	Age of women	-----	<input type="checkbox"/>
A2.	Religion of women	1. Buddhist 2. Christian 3. Other	<input type="checkbox"/>
A3.	Race of women	1. Myanmar 2. Other -----	<input type="checkbox"/>
A4.	Education of women	1. illiterate 2. Read & write 3. Primary education 4. Middle education 5. High school education 6. University 7. Graduate	<input type="checkbox"/>
A5.	Occupation of women	1. Housewife 2. Manual worker/Seller 3. Skilled/Professional	<input type="checkbox"/>
A6.	Economics status (monthly total family incomes)	-----kyat	<input type="checkbox"/>

B. Maternal Characteristics

B1.	Age at first marriage	-----years	<input type="checkbox"/>
B2.	Age at first pregnancy	-----years	<input type="checkbox"/>
B3.	Total number of living children	1. 0 2. 1 -2	<input type="checkbox"/>

		3. ≥ 3	
B4.	Ages of the youngest children	-----year	<input type="checkbox"/>

C. Husband Factors Questions

No	Questions	Results/Answer	Code
C1.	Age of Husband	-----	<input type="checkbox"/>
C2.	Religion of husband	4. Buddhist 5. Christian 6. Other	<input type="checkbox"/>
C3.	Race of husband	1. Myanmar 2. Other -----	<input type="checkbox"/>
C4.	Education of Husband	1. illiterate 2. Read & write 3. Primary education 4. Middle education 5. High school education 6. University 7. Graduate	<input type="checkbox"/>
C5.	Occupation of husband	1. Manual Worker/Seller 2. Skilled/ Professional 3. Government Staff 4. Others	<input type="checkbox"/>

D. Knowledge about contraceptive methods

D1.	Have you ever heard of any method to prevent pregnancy?	<ol style="list-style-type: none"> 1. Yes 2. No 	<input type="checkbox"/>
D2.	If yes, what methods have you heard? (Choose all correct answer)	<ol style="list-style-type: none"> 1. O.C Pills 2. Injection 3. IUCD 4. Condom 5. Calendar method 6. Withdrawal 7. Implants 8. Male Sterilization 9. Female Sterilization 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
D3.	If yes, Sources of knowledge for contraception are (Choose all correct answer)	<ol style="list-style-type: none"> 1. Doctor 2. M.W 3. Neighbors 4. Husband 5. Relative 6. Self 7. IEC/Action program 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
D4.	Have you ever heard the side effects of the contraceptives	<ol style="list-style-type: none"> 1. Yes 2. No(Go to question 26) 	<input type="checkbox"/>
D5.	What are they? (Choose all correct answer)	<ol style="list-style-type: none"> 1. Vomiting/nausea 2. Headache 3. Painful breast 4. Weight gain 5. Scanty menstruation 6. Amenorrhea 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
D6.	Do you know the place where you can get contraceptive? (Choose all correct answer)	<ol style="list-style-type: none"> 1. Drug shops 2. Hospital 3. Township Health Center 4. Private clinic 7. Midwife 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

D7.	Do you know about the advantages due to use of O.C pills?	1. Yes 5. No	<input type="checkbox"/>
D8.	If yes, advantages of O.C pills are (choose all correct answer)	1. Low pregnancy rate 2. Simple 3. Cheap 4. Reduce the incidence of some Gynecological diseases 2. Regular menstruation	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
D9.	Do you know about the disadvantages due to use of O.C pills?	1. Yes 2. No	<input type="checkbox"/>
D10.	If Yes, disadvantages of O.C pills are (choose all correct answer)	1. Headache 2. Nausea 3. Discomfort in the breast 4. Increase incidence of hypertension and other Cardio-vascular disease 5. Development of carcinoma breast	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
D11.	Do you know about the advantages due to use of Injectable Contraceptives?	1. Yes 2. No	<input type="checkbox"/>
D12.	If Yes, advantages of Injectable Contraceptives are (choose all correct answer)	1. Good pregnancy control 2. Simple 3. Cheap Reduce the incidence of some gynecological diseases	<input type="checkbox"/>
D13	Do you know about the disadvantages due to use of Injectable Contraceptives?	1. Yes 2. No 4.	<input type="checkbox"/>
D14	If Yes, disadvantages of Injectable Contraceptives are (Choose all correct answer)	1. Irregular menstruation 2. Amenorrhea Delayed return to fertility	<input type="checkbox"/>
D15	Do you know about the advantages due to use of IUCD?	1. Yes 2. No	<input type="checkbox"/>

D16	If Yes, advantages of IUCD are (Choose all correct answer)	<ol style="list-style-type: none"> 1. Long term contraceptives 2. No systemic side effect 3. Use in breast feeding mother 4. Likely to conceive after removal 5. Can remove if there are adverse reactions 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
D17	Do you know about the disadvantages due to use of IUCD?	<ol style="list-style-type: none"> 1. Yes 2. No 	<input type="checkbox"/>
D18	If Yes, disadvantages of IUCD are (Choose all correct answer)	<ol style="list-style-type: none"> 1. Renewal every 3 to 5 years 2. Risk of PID 3. Menorrhagia 4. Dysmenorrheal 5. Ectopic pregnancy 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
D19	Do you know about the advantages due to use of condom?	<ol style="list-style-type: none"> 1. Yes 2. No 	<input type="checkbox"/>
D20	If Yes, disadvantages of condom are (Choose all correct answer)	<ol style="list-style-type: none"> 1. Cheaper 2. Simple to use 3. Protection against STD 4. Protection against CIN 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
D21	Do you know about the disadvantages due to use of condom?	<ol style="list-style-type: none"> 1. Yes 2. No 	<input type="checkbox"/>
D22	If Yes, disadvantages of condom are (Choose all correct answer)	<ol style="list-style-type: none"> 1. Slipper 2. Torn 3. Inadequate sexual pleasure 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
D23.	Do you know about the complication of female Sterilization?	<ol style="list-style-type: none"> 1. Yes 2. No 	<input type="checkbox"/>
D24.	If Yes, the complications of female sterilization are (Choose all correct answer)	<ol style="list-style-type: none"> 1. Risk of anesthesia 2. Ectopic pregnancy 3. Bleeding risk of injury to near structure 4. Pregnancy 5. Regret 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

E. Attitude Questions

E1.	Contraception is needed to get the healthy family life	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
E2.	Contraceptive can improve the mother health	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	<input type="checkbox"/>
E3.	The use of contraceptive is against the human nature.	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	<input type="checkbox"/>
E4.	Condom is comfortable to use	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	<input type="checkbox"/>
E5.	Condom has fewer side effects than other methods?	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	<input type="checkbox"/>
E6.	Use of one month O.C pills is the reliable methods of contraception?	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	<input type="checkbox"/>
E7.	O.C pills increase the risk of cancer.	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	<input type="checkbox"/>
E8.	Use of three month Depo-injection is the reliable methods of contraception.	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	<input type="checkbox"/>

E9.	The use of emergency contraceptive methods is the reliable methods of contraception	<ol style="list-style-type: none"> 1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree 	<input type="checkbox"/>
E10.	The use of IUCD is the reliable methods of contraception.	<ol style="list-style-type: none"> 1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree 	<input type="checkbox"/>
E11.	You think that the use of contraception is the best consequence for health.	<ol style="list-style-type: none"> 1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree 	<input type="checkbox"/>

F. Currently practice contraceptive method

F1.	Are you using any type of contraception now?	<ol style="list-style-type: none"> 1. Yes 2. No 	<input type="checkbox"/>
F2.	If yes, which method was that?	<ol style="list-style-type: none"> 1. O.C Pills 2. Injection 3. IUCD 4. Condom 5. Calendar method 6. Withdrawal 7. Implants 8. Male Sterilization 9. Female Sterilization 10. Others 	<input type="checkbox"/>

Scoring for Questions

Section 1 Knowledge Questions

(Only knowledge score counted questionnaires were shown)

D1.	Have you ever heard of any method to prevent pregnancy?	1. Yes 2. No	1 0
D2.	If yes, what methods have you heard?	1. O.C Pills 2. Injection 3. IUCD 4. Condom 5. Calendar method 6. Withdrawal 7. Implants 8. Male Sterilization 9. Female Sterilization	1 1 1 1 1 1 1 1 1
D3.	If yes, Sources of knowledge for contraception are (Choose all correct answer)	1. Doctor 2. M.W 3. Neighbors 4. Husband 5. Relative 6. Self 7. IEC/Action program	1 1 1 1 1 1 1
D4.	Have you ever heard the side effects of the contraceptives	1. Yes 2. No (Go to question 26)	1 0
D5.	What are they?	1. Vomiting/nausea 2. Headache 3. Painful breast 4. Weight gain 5. Scanty menstruation 6. Amenorrhea	1 1 1 1 1 1

D6.	Do you know the place where you can get contraceptive?	<ol style="list-style-type: none"> 1. Drug shops 2. Hospital 3. Unit clinic 4. Private clinic 5. Midwife 	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>
D7.	Do you know about the advantages due to use of O.C pills?	<ol style="list-style-type: none"> 1. Yes 2. No 	<p>1</p> <p>0</p>
D8.	If yes, advantages of O.C pills are (choose all correct answer)	<ol style="list-style-type: none"> 1. Low pregnancy rate 2. Simple 3. Cheap 4. Reduce the incidence of some Gynecological diseases 5. Regular menstruation 	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>
D9.	Do you know about the disadvantages due to use of O.C pills?	<ol style="list-style-type: none"> 1. Yes 2. No 	<p>1</p> <p>0</p>
D10.	If Yes, disadvantages of O.C pills are (choose all correct answer)	<ol style="list-style-type: none"> 1. Headache 2. Nausea 3. Discomfort in the breast 4. Increase incidence of hypertension and other Cardio-vascular disease 5. Development of carcinoma breast 	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>
D11.	Do you know about the advantages due to use of Injectable Contraceptives?	<ol style="list-style-type: none"> 1. Yes 2. No 	<p>1</p> <p>0</p>
D12.	If Yes, advantages of Injectable Contraceptives are- (choose all correct answer)	<ol style="list-style-type: none"> 1. Good pregnancy control 2. Simple 3. Cheap 4. Reduce the incidence of some gynecological diseases 	<p>1</p> <p>1</p> <p>1</p> <p>1</p>

D13.	Do you know about the disadvantages due to use of Injectable Contraceptives?	1. Yes 2. No	1 0
D14.	If Yes, disadvantages of Injectable Contraceptives are- (Choose all correct answer)	1. Irregular menstruation 2. Amenorrhea 3. Delayed return to fertility	1 1 1
D15.	Do you know about the advantages due to use of IUCD?	1. Yes 2. No	1 0
D16.	If Yes, advantages of IUCD are (Choose all correct answer)	1. Long term contraceptives 2. No systemic side effect 3. Use in breast feeding mother 4. Likely to conceive after removal 5. Can remove if there are adverse reactions	1 1 1 1 1
D17.	Do you know about the disadvantages due to use of IUCD?	1. Yes 2. No	1 0
D18.	If Yes, disadvantages of IUCD are (Choose all correct answer)	1. Renewal every 3 to 5 years 2. Risk of PID 3. Menorrhagia 4. Dysmenorrheal 5. Ectopic pregnancy	1 1 1 1 1
D19.	Do you know about the advantages due to use of condom?	1. Yes 2. No	1 0
D20.	If Yes, disadvantages of condom are (Choose all correct answer)	1. Cheaper 2. Simple to use 3. Protection against STD 4. Protection against CIN	1 1 1 1

D21.	Do you know about the disadvantages due to use of condom?	1. Yes 2. No	1 0
D22.	If Yes, disadvantages of condom are (Choose all correct answer)	1. Slipper 2. Torn 3. Inadequate sexual pleasure	1 1 1
D23.	Do you know about the complication of female Sterilization?	1.Yes 2.No	1 0
D24.	If Yes, the complications of female sterilization are (Choose all correct answer)	1. Risk of anesthesia 2. Ectopic pregnancy 3. Bleeding risk of injury to near structure 4. Pregnancy 5. Regret	1 1 1 1 1

There are 24 knowledge questions.

Yes – 1 and No – 0.

Knowledge score range from 0 to 65.

Low score 0-32 and high score 33-65.

Scoring for Questions

Section II Attitude Questions

E1.	Contraception is needed to get the healthy family life	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	5 4 3 2 1
E2.	Contraceptive can improve the mother health	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	5 4 3 2 1
E3.	The use of contraceptive is against the human nature.	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	1 2 3 4 5
E4.	Condom is comfortable to use	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	5 4 3 2 1
E5.	Condom has fewer side effects than other methods?	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	5 4 3 2 1
E6.	Use of one month O.C pills is the reliable methods of contraception?	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	5 4 3 2 1

E7.	O.C pills increase the risk of cancer.	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	5 4 3 2 1
E8.	Use of three month Depo-injection is the reliable methods of contraception.	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	5 4 3 2 1
E9.	The use of emergency contraceptive methods is the reliable methods of contraception	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	5 4 3 2 1
E10.	The use of IUCD is the reliable methods of contraception.	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	5 4 3 2 1
E11.	You think that the use of contraception is the best consequence for health.	1. Strongly agree 2. Agree 3. Natural 4. Disagree 5. Strongly disagree	5 4 3 2 1

There are 11 attitude questions.

Five Likert score range from strong agree 5 to strong disagree 1 for positive questions and for negative questions, scoring are strong agree 1 to strong disagree 5.

Attitude score range from 11 to 55.

Low score 11-33.

High score 34-55.

