

SAINT PAUL'S HOSPITAL MILLENNIUM MEDICAL COLLEGE DEPARTMENT OF OBSTETRICS AND GYNECOLOGY



DETERMINANTS OF CONTRACEPTIVE UTILIZATION AMONG WOMEN WITH DIABETES & HYPERTENSION, A FACILITY BASED CROSS SECTIONAL STUDY, ADDIS ABABA, ETHIOPIA

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ABSTRACT

BACKGROUND: Many chronic medical conditions have been affecting women in reproductive age group. Women with medical conditions like hypertension, heart disease & diabetes are at higher risk of pregnancy related morbidity & mortality than women without medical conditions. Due to the high risk associated with pregnancy, it is extremely important for women with chronic medical conditions to have a well-planned pregnancy. As to the knowledge of the investigator, there were no specific studies conducted on determinants of uptake of modern contraception among women with diabetes & hypertension in Ethiopia. Therefore, it is invariably important to assess contraceptive use & factors affecting it among women with diabetes & hypertension.

OBJECTIVES: to assess magnitude of modern contraceptive use & factors affecting it among women with diabetes & hypertension.

METHODOLOGY: A facility based cross sectional study was conducted from March 1/2021-May 30/2021. An exit interview of sampled women enrolled at the medical Out Patient Department (OPD) at diabetic & hypertensive clinics of SPHMMC was done using structured and pretested questionnaire. Descriptive, bivariable, and multivariable methods were used to analyze the level of contraceptive use & associated factors.

RESULTS: More than two-third (71.4%) of women had ever used contraceptive methods. Among the contraceptive methods, injectables (28.9%) and implants (28.3%) were the most commonly used methods. Almost all (98.4%) used modern contraceptive methods. One-third of the study participants used long-acting reversible contraceptives (LARC). One-third of women were using contraceptive methods at the time of interview. The most common reasons for use and non-use were spacing and desire of having a baby, respectively. After fitting multivariable logistic regression composed of seven predictors, five variables (age, education, relationship, giving a birth, and partner support) were identified as significant predictors of contraceptive use.

CONCLUSION & RECOMMENDATION: The overall contraceptive utilization of women with diabetes & hypertension who are having follow-up at medical OPDs is low. Hence, strengthening counselling about family planning & partner involvement would help increase the contraceptive uptake of women with chronic medical illnesses.

KEY WORDS: chronic medical illnesses, contraceptive utilization, pregnancy

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LIST OF ABBREVIATIONS

AFR- African Regions

BTL-Bilateral Tubal Ligation

CAD- Coronary Artery Disease

CHCs- Combined Hormonal Contraceptives

CPR- Contraceptive Prevalence Rate

DALY-Disability Adjusted Life Years

DM- Diabetes Mellitus

DMPA- Depo-medroxy Progesterone Acetate

EDHS- Ethiopian Demographic & Health Survey

FDA- Food & Drug Administration

FP-Family Planning

HTN- Hypertension

IDF-International Diabetic Federation

IUCD- Intrauterine Contraceptive Device

LARC- Long acting Reversible contraceptive

MEC- Medical Eligibility Criteria

OPD-Out Patient Department

POP-Progestin Only Pill

RH- Reproductive Health

SBP- Systolic Blood Pressure

SEA- South East Asia

SPHMMC – Saint Paul Hospital Millennium Medical College

WHO- World Health Organization

WP- Western Pacific

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CHAPTER ONE

INTRODUCTION

1.1 Back Ground

Many chronic medical conditions have been affecting women in reproductive age group. Women with medical conditions like hypertension, heart disease, diabetes are at higher risk of pregnancy related morbidity & mortality than women without medical conditions. (1)Chronic medical conditions account for almost 65% of women's deaths globally, & the majority of these deaths occur in low & middle income countries and are premature.(2)

According to a cross sectional study of chronic disease in Jimma the overall prevalence of chronic disease of 8.9% (diabetes 0.5%, cardiac disease 3%, hypertension 2.6%, asthma 1.5%, epilepsy 0.5%, depression 1.7%), and 80% of the subjects studied had at least one risk factor for chronic disease.(3)

Chronic diseases can influence the course of pregnancy and may have lasting effects that manifest at and after birth.(4) Pregnant women with hypertension and heart disease have a higher risk of developing congestive heart failure, arrhythmia, preterm delivery, intrauterine growth retardation and reduced birth weight. Women with diabetes and hypertension are at increased risk of pregnancy-related complications, which includes spontaneous abortion, preterm labor, hypertensive disorders & delivery by cesarean section. Existing population based studies demonstrated increased congenital anomalies and perinatal mortality in diabetic mothers as compared to the nondiabetic population.(5)

Due to the high risk associated with pregnancy, it is extremely important for women with chronic medical conditions to have a well-planned pregnancy. It is also equally important to avoid unplanned pregnancy among the women who do not intend to get pregnant, by using effective contraceptive methods. As recommended by the Preconception Care Workgroup and the Select Panel on Preconception Care, Centers for Disease Control and Prevention (CDC), optimal pre-conception care which include adequate spacing of childbirth and effective contraception are among the important elements to ensure successful maternal and fetal outcome among women with chronic medical conditions.(1)

Despite the large range of contraceptive choices available, many women with medical issues that put them at risk for pregnancy do not use effective birth control. This is partly owing to the medical community's common misconception of these women's eligibility for effective contraceptive techniques as well as missed opportunities for collaboration between medical specialists and the family planning community. This scenario places large numbers of women unnecessarily at risk for unplanned pregnancies and worsening of medical conditions.(6)

According to EDHS (2016), the 12-month contraceptive discontinuation rate for all methods was 37 percent. Among the modern methods, the highest discontinuation rate was for the pill (70 percent), followed by the male condom (62 percent). In contrast, implants have a discontinuation rate of just 5 percent. The contraceptive failure rate among participants using pills, patch, or ring was 4.55 per 100 participant-year, as compared with 0.27 among participants using LARCs.(7)

The most effective modern family planning method consists of LARCs which are IUCD and Implants. These methods have multiple advantages over other reversible methods. Most importantly, once in place, they do not require maintenance and their duration of action is long, ranging from 3 to 10 years. (8)

Nationally, Ethiopia strives to improve the utilization rate of modern contraceptives. As to the knowledge of the investigator, there were no specific studies conducted on determinants of uptake of contraceptive methods among women with chronic medical illnesses in Ethiopia. Hence, conducting this study was found helpful to assess the utilization rate and identify determinants factors for contraceptive use among women with diabetes & hypertension.

1.2. Statement of the problem

Pregnancy & child birth carries a significant health risk for women with chronic medical conditions. (1)

Women with chronic medical problems are at higher risk for unintended pregnancy as their healthy counterparts, but pregnancy in these women carries greater health risks.

Although primary care has placed a strong emphasis on the management of chronic diseases, reproductive planning in high-risk populations has been largely ignored. Chronic illness management,

such as diabetes, is standardized and protocol-driven & clinicians do an excellent job with these patients. Comprehensive reproductive planning, on the other hand, is frequently undervalued and even disregarded. We must systematize reproductive planning to guarantee that we satisfy our patients' needs, given the rising demand on primary care clinicians' time.(39)

To reduce perinatal morbidity and mortality caused by chronic conditions, key concerns such as optimizing health before pregnancy, the effects of drugs on a prospective pregnancy, and counseling regarding appropriate birth control techniques must be addressed. The importance of discussing and managing these issues with patients is critical in reducing the burden of prenatal morbidity and mortality. (39)

Therefore planned pregnancy and birth spacing is a key element to prevent complications of cardiovascular illness & diabetes during pregnancy. The reason for having planned pregnancy is to optimize the cardiovascular condition, to change teratogenicity drugs such as ACEIs, and to be proactive for complication readiness. Consistent use of contraceptive is crucial to obtain this goal. (9)

The government of Ethiopia had targeted 55% CPR by the year 2020, of which 35% is expected to come from LARCs, which in turn implies that much needs to be done to catalyze the uptake of these methods. Despite these expectations and advantages of contraceptives, their use remains small and sometimes missing component of many national reproductive health and family planning programs.

CHAPTER TWO

LITERATURE REVIEW

BURDEN OF CHRONIC MEDICAL ILLNESSES AMONG REPRODUCTIVE AGE WOMEN

Chronic medical conditions are diseases & conditions which are usually of chronic in nature, with slow onset, lengthy progression for which there are no known causative agents, and generally are non-transmittable from one person to another.(5)

Chronic medical illnesses account for almost 65% of women's deaths globally, & the majority of these deaths occur in low & middle income countries. In recent years, chronic medical illnesses among women of reproductive age has doubled in many African countries. (2)

Diabetes mellitus (DM) and hypertension (HTN), both essential risk factors for coronary artery disease (CAD), heart failure, & cerebrovascular illness, have arisen as serious medical & public health challenges around the world. Globally, the prevalence of diabetes mellitus is rising. According to the WHO, the prevalence of diabetes in adults was estimated to be 4.0 percent in 1995 and is expected to rise to 5.4 percent by 2025, resulting in a global increase in the number of adults with diabetes from 135 million in 1995 to 300 million by 2025. (10)

Furthermore, HTN affects around one billion people worldwide, (11) and it is anticipated that up to 1.56 billion adults will be hypertensive by 2025. (12) Raised blood pressure (BP) is thought to be responsible for 7.5 million deaths and 57 million disability-adjusted life years (DALYs). According to the Burden of Metabolic Risk Factors in Chronic Diseases Study, men's age-standardized mean SBP was 128.1 mm Hg (95 percent uncertainty interval 126.7–129.4) in 2008, while women's age-standardized mean SBP was 124.4 mm Hg (123.0–125.9). SBP fell by 0.8 mmHg per decade in men and 1.0 mmHg per decade in women globally between 1980 and 2008. (13)

Because of its enormous incidence, HTN is a substantial risk factor for heart disease. When compared to normotensive adults, people with HTN have a twofold increased risk of coronary artery disease, a fourfold increased risk of congestive heart failure, and a sevenfold increased risk of cerebrovascular disease and stroke. Non optimal blood pressure is blamed for 62 percent of strokes, 49 percent of coronary artery disease (CAD), and 14 percent of other nonfatal cardiovascular disease (CVD) events, according to global estimates.

The WHO Western Pacific (WP) and Southeast Asia (SEA) regions had the largest number of fatalities and DALYs attributed to high blood pressure, (13) Extensive epidemiological research in the AFR region demonstrate that HTN is one of the most common cardiovascular diseases, and that BP becomes more important with increasing blood pressure. (10) DM is quickly growing in people of South Asian, African, and African Caribbean backgrounds, according to epidemiological studies. (14) The WHO and IDF used approaches that combined available nation data at regular intervals with extrapolated estimates for countries where data was not available. According to WHO, the prevalence of diabetes mellitus (DM) was expected to be 7.02 million individuals in the WHO AFR region in

2000, and 4.69 million in the SEA region. (13)(15). There are considerable disparities between countries as well as within them.

The burden of chronic medical illnesses in Ethiopia is similar to other developing nations, which is estimated to account for 39% of all deaths with the leading causes being cardiovascular diseases & cancer. (16)

CHRONIC MEDICAL ILLNESSES IN WOMEN OF REPRODUCTIVE AGE

In comparison to men, women have specific health challenges. Some are self-evident, such as chronic illnesses resulting from pregnancy and tumors of the female reproductive tract, which are only found in women. The impact of chronic disease on women can be more complicated at times. Women, for example, smoke at a lower rate than men, but the repercussions of smoking-related diseases have a higher detrimental influence on women's health. Other diseases, such as migraine headaches, are just more common in women (18%) than in men (6 percent). In the United States, chronic disease is the most expensive group of illnesses. It's also the most avoidable, as most preventative initiatives target behaviors like good nutrition, tobacco use and excessive alcohol consumption. (17)

Despite the fact that rates of optimal blood pressure control are similar in men and women in the United States (18), individuals with hypertension aged 18–39 are less likely to be well controlled than those aged 40 and up (19). Women who are obese, non-Hispanic black, or have diabetes or chronic renal disease are at an even higher risk of hypertension. In addition, as women get older, the prevalence of hypertension rises. When women of reproductive age are treated for hypertension, they are most typically given diuretics, beta-blockers, and angiotensin-converting enzyme (ACE) inhibitors (20), all of which have been designated as potentially contraindicated in pregnancy by the US Food and Drug Administration (FDA) (21). Hypertension in younger women is commonly undertreated for a variety of reasons, including the fact that only half of women of reproductive age with hypertension are prescribed antihypertensive medicine (20). As a result, many women of reproductive age may be ignorant of their hypertension or have it uncontrolled, putting them at risk for heart disease & pregnancy complications. (21)

CONTRACEPTIVE USE & OPTIONS FOR WOMEN WITH DIABETES & HYPERTENSION

According to the Ethiopian demographic & health survey 2019, 41% of married Ethiopian women practiced modern contraceptive methods. In the same survey, contraceptive prevalence rate was reported to be 52% which combined the prevalence of both modern & traditional contraceptive practices. According to a cross-sectional study on contraceptive use in women with hypertension and diabetes the contraceptive prevalence rate was found to be 53.8%. (16)

The low prevalence of contraceptive use among Ethiopian women showed that there is a significantly high unmet needs for contraception, which may expose the woman to the risk of unplanned pregnancy.(22)

Contraceptive methods includes Abstinence, Rhythm method of contraception (periodic abstinence) Calendar, Ovulation method, Symptothermal, Post ovulation, Oral contraceptives (combined), Transdermal contraceptive patch (Ortho Evra) ,Vaginal contraceptive ring (NuvaRing), Mini-pills (progestin-only pills; POPs),Emergency contraceptives, Barrier contraceptives, Diaphragm, Vaginal contraceptive sponge, Cervical cap, Female condom, Vaginal spermicides, Male condoms, Injectable contraceptives, DMPA, Lunelle, Intrauterine devices, ParaGard (copper T380A IUD), Mirena (IUD with ,levonorgestrel) (Mirena IUD/IUS), Implants, Implanon (Nexplanon), Sterilization Woman, Man (vasectomy), Coitus interruptus.(23)

In Ethiopia there are modern hormonal and non-hormonal contraceptives being provided in HC, governmental hospital, private setting and NGO clinics. This includes IUD, implants, COC, POP, DEPO Provera, Male condom, Emergency contraceptives, BTL and male sterilization. (24)

For adolescents with chronic medical problems, avoiding unintended pregnancy is imperative. Regardless of the medical problem, guidance is available for helping adolescents with chronic medical problems to obtain the best contraceptive methods possible. The United States and WHO Medical Eligibility Criteria for contraceptive use, combined with the framework of contraceptive effectiveness and the risk analysis algorithm should guide the choice of contraceptives in adolescents with chronic medical problems. (9)

The risks of CHCs outweigh the benefit in women with a history of hypertension where blood pressure cannot be evaluated, adequately controlled hypertension, and elevated blood pressure (systolic 140–159 or diastolic 90–99 mmHg) (WHO MEC category 3). In women with severely elevated blood pressures (systolic ≥ 160 or diastolic ≥ 100 mmHg) or evidence of vascular disease, CHCs represent an unacceptable health risk and should not be recommended (WHO MEC category 4). Although it is

preferred to have a blood pressure measurement before starting a woman on CHCs, if blood pressure cannot be evaluated in a woman with no history of hypertension (such as in a setting without medical personnel who know how to take a blood pressure measurement or without a working blood pressure cuff), the woman should not be denied estrogen containing methods. In such settings, pregnancy related morbidity and mortality are high and estrogen-containing pills may be one of the few contraceptive methods available. In women with DM without vascular disease, the advantages of using CHCs outweigh the risks (WHO MEC category 2). On the other hand, limited data exist on the risk of CHC use in women with vascular complications of DM. Therefore, women with vascular complications (nephropathy, retinopathy, and neuropathy) and women with diabetes of greater than 20 years' duration should avoid CHC use unless no other methods are available (WHO MEC category 3 or 4 depending on severity of the condition).(25)

In women with a history of hypertension, adequately controlled hypertension, and mildly elevated blood pressures, the benefits of DMPA outweigh the risks (WHO MEC category 2). However, the risks outweigh the benefits in women with severely elevated blood pressures and vascular disease (WHO MEC category 3). In diabetic women without vascular complications, the benefit of DMPA use outweighs the risks (WHO MEC category 2); however, in women with vascular complications or who have had the disease for over 20 years, the risks of use outweigh the benefits (WHO MEC category 3) based on theoretical increased cardiovascular risks in these women if using DMPA. (26)

All LARC methods are MEC Category 1 for women with both complicated and uncomplicated cardiovascular disease. And the benefits of LNG-IUD outweigh any potential risks in diabetic women with and without vascular disease (WHO MEC category 2). (27)

FACTORS AFFECTING CONTRACEPTIVE USE

In the United States, women who were inconsistently or wrongly utilizing contraception at the time of conception accounted for 43% of unplanned births, while women who were not taking contraception but not planning a pregnancy accounted for 52%. (28) An unplanned pregnancy is a stressful situation for any woman, and it may force her to make difficult decisions, but an unintended pregnancy in a woman with a chronic medical condition exacerbates these challenges. If her health isn't stable or ideal for pregnancy, she could face significant morbidity or even death, and an unplanned pregnancy could result in less-than-ideal fetal or neonatal results. Maternal comorbidities are responsible for about half of all maternal deaths in the United States, and this number is rising.(29)

Safe, effective, and easy-to-use contraception is a crucial technique for preventing unintended births among women with medical issues.

According to a Malaysian study on contraceptive use among women with chronic medical conditions & factors associated with its non-use, 30.7% of women were reported using modern contraceptives out of 450 women. 69.3% of the participants didn't use contraceptives. The most popular method used was OCP where 40% of the study participants use it. This was followed by IUD, condoms, implants & injection. In another study done in US, of 4473 women considered at risk of unintended pregnancy, 87% reported using contraception, with 64.5% using highly effective method & 22.5% using a less effective method. According to this study, male & female sterilization were the most prevalent category of methods used among women 18-44 years of age (32.3%) while LARC methods were the least prevalent (6.7%). (1) According to cross sectional study done in north west Ethiopia, 53.8% of about 403 participants use modern contraceptive methods & the frequently used method was injectable (39.8%). The most frequently mentioned reasons for not using contraceptive were fear of side effects (12.8%), desire for children (12.2%), and religious prohibition (11.2%), and husband opposition (11%), lack of knowledge about contraceptives (8.9%). (5)

Studies done in different countries & some regional studies in Ethiopia reflected different factors contributing to use of contraceptives. (7) There is a body of literature that suggests some socioeconomic & demographic factors that are associated with contraceptive use. (30) For instance a study done in Ghana identified that contraceptives were used mainly by women with more living children and those who had previously used contraceptives. (31) In another study, the odds of using contraceptives were more than 4 times higher in women in their twenties as compared to teenagers. The increase was even greater in parous women. Prior experience of an unintended pregnancy, reported by 18% of women interviewed, seemed also to be a strong motivation to use LARCs, regardless of women's parity. (9)

According to a study qualities of LARCs such as reliability, high efficacy & long duration of action would encourage young women to accept LARCs. On another studies the most common reason for choosing LARC methods included requiring a client controlled method & desiring to conceive in the near future. The most common reasons for choosing short acting methods were ease of access, lower cost, privacy, perceived fewer side effects & freedom to stop using a method without involving the health provider. (30)

According to a study done in southern Ethiopia History of LARC use, discussion with health care provider on LARC in last 6 month, high knowledge of LARC method, and positive attitude towards LARC, to be associated with the LARC use. (32)

Another study done in Northwest Ethiopia concludes factors such as age 25–34 years having middle- and high-level incomes, receiving provider counseling, and controlled disease condition were significantly associated with contraceptive practice.(5)

2. RATIONALE OF THE STUDY

Women with chronic medical illnesses like diabetes, hypertension & cardiac illnesses are prone to severe complications. The problems are even more pronounced among reproductive age women. Thus, women with chronic medical illnesses must use valid contraceptive methods for reducing unwanted pregnancy & its complications. (4)

In spite of family planning benefits to this categories of population, practice of using contraceptive among these segments of the population in Ethiopia was not properly assessed. Therefore, this study with the purpose of assessing contraceptive practice by women with diabetes & hypertension on follow up at chronic illness care clinics at SPHMMC with the hope of bringing information to support & guide further development & accomplishment of specific intervention program targeted to women of reproductive age group with chronic medical illnesses. Besides it could serve as a baseline data for planning future studies.

CHAPTER THREE

OBJECTIVES

3.1. General objective

- To assess magnitude of modern contraceptive utilization & associated factors among reproductive aged women with diabetes & hypertension

3.2. Specific objective

- To determine magnitude of modern Contraception utilization among women with diabetes & hypertension
- To evaluate knowledge of women with diabetes & hypertension about modern contraceptives
- To assess factors affecting modern contraceptive use among women with diabetes & hypertension

CHAPTER FOUR

METHODS & MATERIALS

4.1. Study area and period

The study was conducted in St. Paul's Hospital Millennium Medical College. It is the largest referral center in Ethiopia located in the capital Addis Ababa. It is under the Ethiopian Federal Ministry of Health management; receiving patients from 10 catchment health centers and numerous non catchment health centers and hospitals in Ethiopia. According to a yearly HMIS registry at SPHMMC a total of 1608 diabetic and 715 hypertensive clients are having regular follow-up at SPHMMC chronic patient follow-up clinics. Among these, 1168 (829 diabetic, & 339 hypertensive) were women.

Data was collected from March 1/2021 to May 30/2021.

4.2. Study design

A facility based cross sectional study was conducted to assess factors affecting contraceptive use among women with diabetes & hypertension at SPHMMC

4.3. Source population

All women who has been diagnosed as having diabetes or hypertension or both was the source population

4.4. The study population

Women of reproductive age group between 18 to 45 years who has been diagnosed as having either hypertension, diabetes or both & having follow up at chronic illness clinics at SPHMMC who give their consent during the data collection period were the study population

4.5. Inclusion and exclusion criteria

Inclusion criteria

- Participants were selected among women of reproductive age group between 18 to 45 years who has been diagnosed as having at least one chronic medical condition including diabetes, hypertension or both.

Exclusion criteria

- Women who are pregnant or who are seriously ill were excluded from the survey.

4.6. Study Variables

Dependent Variable

Contraceptive use (outcome variable)

Independent variables

-Socio-demographic factors such as: age, religion, ethnicity, educational level and occupational status of woman, spousal educational and occupational status.

-Client' awareness about contraceptives

-Reproductive Health history.

- controlled disease condition

4.7. Sample size determination and sampling technique

Sample size

The sample size for the study is calculated by using the finite population formula for a single population proportion with assumption of 95% CI, 5% degree of precision and 53.8% Prevalence (using contraceptive prevalence rate from previous study).

$$n_f = \frac{N \left(Z_{1-\alpha/2} \right)^2 P(1-P)}{d^2 (N-1) + \left(Z_{1-\alpha/2} \right)^2 P(1-P)}$$

n -is minimum sample size

P -is estimate of the prevalence rate for the population

d- is the margin of sampling error

Z_{1- α /2} -is the standard normal variable at (1- α) % confidence level Usually 95% confidence level is used = 1.96

N -population size

By adding non-response rate of 10%, the final total sample size becomes 262 for diabetic & 180 for hypertensive patients. All consecutive patients having follow up during the study period were interviewed until sample size is reached.

4.8. Data collection procedure and instrument

The data was collected using a structured questionnaire. Nurses at medical OPD who were not directly involved in the care of patients collected the data via exit interview using structured questionnaire. The questionnaires were developed according to the objective of the study. The data collectors were trained nurses working at medical OPDs at SPHMMC. Two day training was organized for data collectors and supervisors about the purpose and the overall data collection process to make them familiarize with the questionnaires.

Data were collected on women's age, place of residence, educational status, occupation of mother, monthly income, media exposure, duration of follow-up, BP or glucose level, number of comorbidities and provider counseling, and number of living children and contraceptive practice.

Operational definitions

Modern Contraceptive use: if a woman is currently using any one of hormonal(Combined Oral Contraceptive, Progestin Only Pill, injectable, implants, Levonorgestrel containing IUCD) barrier(male or female condom), or male or female sterilization method. Hence, a woman was categorized as current contraceptive user if she used one of the methods, otherwise as a nonuser. (24)

Long acting reversible contraception (LARC) user: women who are using either of Implanon, Sino-implant/Jadelle or IUCD at the time of data collection (24)

Knowledge about modern contraception: women who know at least one of the Contraceptive methods i.e. hormonal, barrier, or sterilization method. (24)

Controlled hypertension: If a woman had maintained the average BP reading, 140/90 mmHg at the time of data collection irrespective of measurements at other times. However, readings $\geq 140/90$ mmHg is referred as uncontrolled hypertension. (5)

Controlled diabetes: If a woman had maintained mean fasting blood sugar <130 mg/dL for the last three consecutive visits. (5)

4.9. Data Analysis

The data were entered and cleaned using EPI info Version 7 statistical software (Centers for Disease Control and Prevention) and exported to SPSS Version 23 statistical packages for analysis. Frequencies, proportion and summary statistics were used to describe the study population in relation to relevant variables. Logistic regression was carried out to see the effect of each independent variable on the dependent variable. P-value, 0.05 was used to declare statistical significance. Odds ratio with 95% CI was computed to assess the strength of the association.

4.10. Data quality control

To maintain the data quality, a two days training was given to the data collectors and supervisors on the objectives, methods, confidentiality, about pre-test informed consent and other technical aspects of the study before data collection.

Primarily, the questionnaires were prepared in English and translated to local language (Amharic) to make the communication easy for data collectors then translated back to English, to check for consistency.

The collected data was checked for completeness and consistency by the principal investigator on daily bases. As clearly mentioned in the data collection procedure part applicable and standard questionnaire tools were searched literatures were reviewed to address the objective of the study.

4.11. Ethical Considerations

Ethical clearance was obtained from the Institutional Review Board of SPHMMC. After the purpose and objective of the study have been informed, verbal consent was obtained from each study participant. Participants were also informed that participation would be on voluntary basis, and they

could withdraw from the study at any time if they were not comfortable about the questionnaire. Participants were also informed that all data obtained from them would be kept confidential by using codes instead of any personal identifiers.

4.12. Dissemination Plan

This thesis will serve as a pilot for further studies. The results of this research will be disseminated on the college's website through articles published in peer- reviewed journals.

CHAPTER FIVE

RESULTS

In this study, a total of 441 women responded to the questionnaire, yielding a response rate of 99.8%

Sociodemographic characteristics of participants

The mean (SD) age of participants was 32 (8) years. The contraception use was higher among women aged between 30 to 40 years & lowest among women who are above 40. The use of modern contraceptive methods was also higher in those women who attended formal education. Similarly, the use of modern contraceptive methods was remarkably higher in those women who had their own income (*Table 1*).

Table 1: Sociodemographic characteristics of women who are diabetic and/or hypertensive in relation to contraceptive use, N=441, SPHMMC, March- May 2021

<i>Sociodemographic characteristics</i>	<i>Current contraceptive use</i>			<i>P value</i>
	<i>No (n=295)</i> <i>n (row %)</i>	<i>Yes (n=146)</i> <i>n (row %)</i>	<i>Total</i> <i>(N=411)</i>	
Age, years				0.001
15-19	14 (93.3)	1 (6.7)	15	
20-29	105 (63.6)	60 (36.4)	165	
30-39	103 (60.6)	67 (39.4)	170	
40-49	73 (80.2)	18 (19.8)	91	
Educational status				<0.001
Illiterate	60 (92.3)	5 (7.7)	65	
Primary/Secondary	113 (66.1)	58 (33.9)	171	
Higher	122 (59.5)	83 (40.5)	205	
Occupation				0.498
Student	35 (72.9)	13 (27.1)	48	
Unemployed	41 (71.9)	16 (28.1)	57	
House wife	79 (68.1)	37 (31.9)	116	
House maid	7 (70.0)	3 (30.0)	10	
Daily laborer	11 (78.6)	3 (21.4)	14	
Merchant	22 (56.4)	17 (43.6)	39	
Government employee	72 (62.6)	43 (37.4)	115	
Private employee	28 (66.7)	14 (33.3)	41	
Income				0.006
Yes	123 (60.3)	81 (39.7)	204	
No	172 (72.6)	65 (27.4)	237	
Relationship				<0.001
Married	185 (63.4)	107 (36.6)	292	
Live with a partner	12 (33.3)	24 (66.7)	36	
Not in a relationship	98 (86.7)	15 (13.3)	113	

Religion				0.272
Orthodox	131 (63.9)	74 (36.1)	205	
Muslim	86 (66.2)	44 (33.8)	130	
Protestant	52 (78.8)	14 (21.2)	66	
Catholic	22 (64.7)	12 (35.3)	34	
Other	4 (66.7)	2 (33.3)	6	
Husband or partner occupation				<0.001
Daily laborer	24 (66.7)	12 (33.3)	36	
Merchant	105 (58.3)	75 (41.7)	180	
Government employee	45 (59.2)	31 (40.8)	76	
Private employee	19 (61.3)	12 (38.7)	31	
Other	4 (80.0)	1 (20.0)	5	
Not applicable	98 (86.7)	15 (13.3)	113	
Gave birth				<0.001
163 (59.3)	112 (40.7)	275		
132 (79.5)	34 (20.5)	166		

Clinical and follow-up related characteristics

In this study, 177 (40.2%) diabetic, 180 (40.7%) hypertensive, and 84 (19.0%) of the participants were diabetic, hypertensive, and both diabetic and hypertensive, respectively. There was no significant difference in contraceptive use among the chronic illnesses ($p=0.456$). Around two-third of the participants had a chronic illness that lasted for years. Among those women who were hypertensive, about two-third (177/264) of them had blood pressure above 140/90 mmHg. Likewise, among diabetic participants, two-thirds of them had a blood sugar level above 130 mg/dl. Half of the participants prefer to get family planning service at family planning clinic. Regarding the relationship between partner support and contraceptive use, those who had partner support were 30% more to use contraceptive methods and this difference in rate of use was highly statistically significant (<0.001) (

Table 2).

Table 2: *Clinical and follow-up related characteristics of women who are diabetic and/or hypertensive in relation to contraceptive use, N=441, SPHMMC, March-May 2021*

<i>Clinical characteristics</i>	<i>Current contraceptive use</i>			<i>P value</i>
	<i>No (n=295)</i> <i>n (row %)</i>	<i>Yes (n=146)</i> <i>n (row %)</i>	<i>Total</i> <i>(N=441)</i>	
Type of chronic medical illness				0.456
Diabetes	108 (65.1)	58 (34.9)	166	
Hypertension	126 (66.0)	65 (34.0)	191	
Both	61 (72.6)	23 (27.4)	84	
Duration of chronic medical illness				0.138
Months	82 (64.1)	46 (35.9)	128	
Years	213 (68.1)	100 (31.9)	296	
Duration of follow-up for chronic the illness				0.430
Months	94 (65.7)	49 (34.3)	143	
Years	201 (67.4)	97 (32.6)	280	
Blood pressure (n=275)				0.841
Below 140/90	27 (64.3)	15 (35.7)	42	
140/90	39 (69.6)	17 (30.4)	56	
Above 140/90	121 (68.4)	56 (31.6)	177	
Fasting blood sugar (n=250)				0.770
Below 130	20 (62.5)	12 (37.5)	32	
130	34 (66.7)	17 (33.3)	51	
Above 130	115 (68.9)	52 (31.1)	167	
Pregnancy counselling				0.330
Yes	84 (68.9)	38 (31.1)	122	
No	182 (65.9)	94 (34.1)	276	
I don't remember	29 (67.4)	14 (32.6)	43	
Family planning counselling				0.632

Yes	87 (64.0)	49 (36.0)	136	
No	181 (67.8)	86 (32.2)	267	
I don't remember	27 (71.1)	11 (28.9)	38	
Ever referred to family planning clinic				0.133
Yes	92 (62.2)	56 (37.8)	148	
No	203 (69.3)	90 (30.7)	293	
Preferred family planning service site				0.015
Here	93 (69.4)	41 (30.6)	134	
FP clinic	135 (61.1)	86 (38.9)	221	
No preference	67 (77.9)	19 (22.1)	86	
Integration				0.191
Agree	240 (68.4)	111 (31.6)	351	
Disagree	55 (61.1)	35 (38.9)	90	
Owner of decision for FP use				<0.001
Respondent	32 (56.1)	25 (43.9)	57	
Husband/Partner	13 (52.0)	12 (48.0)	25	
Both	150 (61.5)	94 (38.5)	244	
Self- No husband/Partner	100 (87.0)	15 (13.0)	115	
Partner support on FP use				<0.001
Yes	115 (52.0)	106 (48.0)	221	
No	180 (81.8)	40 (18.2)	220	

Contraceptive use and knowledge

Nearly all participants are aware about contraceptive methods and the source of information for majority of women was multiple. More than two-third (71.4%) of women have ever used contraceptive methods. Among the contraceptive methods, injectables (28.9%) and implants (28.3%) were the most commonly used methods. Almost all (98.4%) contraceptive methods use were modern. One-third of

this study participants used long-acting reversible contraceptives (LARC). Concerning current contraceptive use, about one-third of women were using contraceptive methods at the time of interview. The most common reasons for use and non-use were spacing and desire of having a baby, respectively (**Table 3**).

Table 3: *characteristics of participants in relation to contraceptive methods use, N=441. SPHMMC, March-May, 2021*

<i>Contraceptive use related characteristics</i>	<i>Frequenc y (N=441)</i>	<i>Percentage (95% confidence interval)</i>
Have you ever heard about family planning?		
Yes	427	96.8 (94.9, 98.2)
No	14	3.2 (1.8, 5.1)
Have you ever used contraceptive?		
Yes	315	71.4 (67.1, 75.5)
No	126	28.6 (24.5, 32.9)
Type of contraceptives ever used (n=315)		
Pill	59	18.7 (14.7, 23.3)
Injectable	91	28.9 (24.1, 34.1)
Implants	89	28.3 (23.5, 33.4)
Condom	8	2.5 (1.2, 4.7)
IUCD	16	5.1 (3.1, 7.9)
Natural method	3	1.0 (0.3, 2.5)
Breast feeding	2	0.6 (0.1, 2.0)
Multiple	47	14.9 (11.3, 19.2)
Type of contraceptive based on effect (n=315)		
Short acting	210	66.7 (61.3, 71.7)
Long acting	105	33.3 (28.3, 38.7)
Type of contraceptive based on modernity (n=315)		
Traditional	5	1.6 (0.6, 3.4)

Modern	310	98.4 (96.6, 99.4)
Current contraceptive use		
Yes	146	33.1 (28.8, 37.6)
No	295	66.9 (62.4, 71.2)
Duration of current contraceptive use (n=146)		
<3 months	11	7.5 (4.1, 12.7)
3-6 months	22	15.1 (10.0, 21.5)
>6 months	113	77.4 (70.1, 83.6)
Reason of current contraceptive use (n=146)		
Spacing	127	87.0 (80.8, 91.7)
Limiting	19	13.0 (8.3, 19.2)
Reason of non-use currently (n=295)		
Desire of having a baby	111	37.6 (32.2, 43.3)
Infrequent sex	102	34.6 (29.3, 40.1)
Fear of disease condition or side effects	50	16.9 (12.8, 21.7)
Other	32	10.8 (7.5, 15.0)

Factors affecting contraceptive use

The impact of selected sociodemographic and other characteristics on contraceptive practice was investigated using both the classic bivariate methods and the multivariate logistic regression technique. Variables found to be significant at P-value of 0.2 were included in the multivariate analysis.

After fitting multivariable logistic regression composed of seven predictors, five variables (age, education, relationship, giving a birth, and partner support) were identified as significant predictors of contraceptive use. Accordingly, the odds of contraceptive use were more than three-fold higher in younger age group (i.e., <40 years old) compared to those who are above 40 years old. Those who attended primary education and beyond were more than ten times more likely to use contraceptive compared to those who are illiterate. Those who live with a partner were also several folds more

probably to use contraceptives than those who have no partners. The chance of contraceptive use was also about six times higher in those who gave birth. Lastly, partner support on family planning use was also found to increase the likelihood of contraceptive use by nearly three-fold. This final multivariable model was good fit for the data (Hosmer-Lemeshow test: $\chi^2(8) = 5.158$, $p=0.741$). Multicollinearity was not an issue in this model (maximum variance inflation factor (VIF)=1.969) (Table 4).

Table 4: *Factors affecting contraceptive use among women who have diabetes and/or hypertension, N=441.SPHMMC, March-May 2021*

Predictors	COR (95% CI)	P value	AOR (95% CI)	P value
Age				
<30	2.1 (1.1, 3.8)	0.017	3.2 (1.5, 6.9)	.003
30-39	2.6 (1.4, 4.8)	0.002	3.0 (1.5, 5.9)	.002
40-49	1.0		1.0	
Education				
Illiterate	1.0		1.0	
Primary/Secondary	6.2 (2.3, 16.2)	<.001	13.6 (4.0, 45.7)	<.001
Higher	8.2 (3.1, 21.2)	<.001	12.4 (3.6, 43.1)	<.001
Income				
Yes	1.7 (1.2, 2.6)	0.007	1.5 (0.8, 2.5)	.170
No	1.0		1.0	
Relationship				
Married	3.8 (2.1, 6.8)	<.001	0.8 (0.3, 1.9)	.557
Live with a partner	13.1 (5.4, 31.5)	<.001	14.0 (4.5, 43.4)	<.001
Not in a relationship	1.0		1.0	
Gave birth				
Yes	2.7 (1.7, 4.2)	<.001	5.9 (2.8, 12.6)	<.001
No	1.0		1.0	
Chronic medical illness				.563

Diabetes	1.4 (0.8, 2.5)		1.4 (0.7, 2.8)	.313
Hypertension	1.4 (0.8, 2.4)		1.4 (0.7, 2.8)	.330
Both diabetes and hypertension	1.0		1.0	
Partner support on FP use				
Yes	4.1 (2.7, 6.4)	<.001	2.7 (1.5, 4.9)	.001
No	1.0		1.0	

Factors affecting Long Acting Reversible Contraceptive (LARC) use

All variables with a p-value of less than or equal to 0.2 in the bivariable model was fitted to the multivariable model. After fitting multivariable logistic regression composed of six predictors, two variables (education & relationship) were identified as significant predictors of contraceptive use. Accordingly, those who attended primary education and beyond were more than ten times more likely to use contraceptive compared to those who are illiterate. Those who live with a partner were also several folds more probably to use long acting reversible contraceptives (LARCs) than those who have no partners. The chance of LARC use was also higher in those who are married or living with a partner (Table 5).

Table 5: *Predictors of LARC use among women who have diabetes and/or hypertension, N=441.SPHMMC, March-May 2021*

<i>Predictors</i>	<i>COR (95% CI)</i>	<i>P value</i>	<i>AOR (95% CI)</i>	<i>P value</i>
Age				
<30	1.6 (0.8, 2.9)	0.154	1.4 (0.7, 3.0)	.4
30-39	1.3 (0.7, 2.4)	0.425	1.2 (0.6, 2.3)	.6
40-49	1.0		1.0	
Education				
Illiterate	1.0		1.0	
Primary/Secondary	2.7 (1.1,6.6)	<.001	11.1 (5.6, 21.8)	<.001

Higher	8.9 (5.6,14.1)	<.001	14.3 (8.1, 25.3)	<.001
Relationship				
Married	4.1 (2.0, 8.6)	<.001	3.0 (1.2, 7.5)	.19
Live with a partner	12.9 (5.0, 33.2)	<.001	16.0 (5.4, 52.7)	<.001
Not in a relationship	1.0		1.0	
Gave birth				
Yes	1.3 (0.8, 2.0)	0.2	1.1 (0.6,2.1)	0.762
No	1.0		1.0	
Chronic medical illness				
Diabetes	1.6 (0.9, 3.2)	0.131	1.8 (0.9,3.7)	.117
Hypertension	1.5 (0.8, 2.8)	0.254	1.6 (0.8, 3.2)	.230
Both diabetes and hypertension	1.0		1.0	
Partner support on FP use				
Yes	2.45 (1.45,3.9)	0.123	1.2 (0.7, 2.2)	.0460
No	1.0		1.0	

CHAPTER SIX

DISCUSSION

The overall level of modern contraceptive use in women of reproductive age with diabetes & hypertension at SPHMMC in Addis Ababa, Ethiopia, was analyzed in this study. It has also tried to figure out what might be affecting the contraceptive utilization. These statistics serve as a baseline for future comparisons and monitoring, as well as laying the groundwork for determining a target level for the reproductive needs of women with chronic medical illnesses.

A key strategy to prevent unplanned pregnancies among women with medical conditions is to provide safe, effective, easy-to-use contraception. (2)

In this study more than two third (71.4%) of women have ever used contraceptive methods & about one third of women are using contraceptive methods at the time of interview. According to the Ethiopian demographic & health survey 2019, 41% of married Ethiopian women practiced modern contraceptive methods. In the same survey, contraceptive prevalence rate was reported to be 52% which combined the prevalence of both modern & traditional contraceptive practices. (3) This study showed a comparable contraceptive utilization in women with chronic medical illnesses with the general population. According to similar studies done in Ethiopia, we can see a comparable contraceptive utilization rate. One such study was a cross sectional study done in northwest Ethiopia on women with hypertension & diabetes, where 69.1% of the study population reported that they ever used contraceptive methods. 53.8% of which were using methods during the time of the data collection. (4) The other study was done on women with cardiovascular diseases at SPHMMC, where the contraceptive utilization rate is 30.2%. (5)

According to a similar study done in south Africa, 10.4% of the participants never used any contraception & a further 33% of them were not currently using contraception. 26.1% of the participants have previously received contraceptives. (6) The possible reason for this might be due to geographic and time variation and study design used.

The necessity for increased spending in treatments targeted at regulating the spike in contraception demand has been highlighted by global trends over the last two decades. (7) The impact of information on the selection and correct and consistent use of contraception demonstrates the relevance of contraceptive education. When choosing a technique, many women say that contraceptive effectiveness is one of the most crucial factors to consider. Better understanding of contraceptive effectiveness is linked to higher adoption rates for long-acting reversible contraceptives (LARCs), which have extremely low failure rates even when used as directed. Inadequate contraception knowledge, on the other hand, is linked to erroneous views of the dangers and side effects of contraceptive usage, inaccurate or inconsistent use, and method dissatisfaction. (8) Nearly all participants in this study are aware about contraceptive methods and the source of information for majority of women was multiple. Similarly, in the national studies, the Knowledge of contraceptive methods is virtually universal in Ethiopia, with 96% of currently married women age 15-49 knowing at least one method of contraception. (3) However, the high knowledge & awareness on contraceptives didn't match with high contraceptive practices. The mere physical access & awareness of contraceptives are not sufficient to ensure that contraceptive needs are met. There should be an

integrated work in line with better counselling & better partner participation. Especially for women with chronic medical illnesses, due to their better access for health care areas there should be integration of family planning services with contraception counselling & provision.

In this study among the contraceptive methods, injectables (28.9%) and implants (28.3%) were the most commonly used methods. Almost all (98.4%) contraceptive methods use were modern. This is similar to the national contraception utilization practices where most well-known methods for currently married women are injectables (93%), implants (87%) and pills (83%). Among all women, male sterilization is the least-known modern contraceptive method (13%). (3)

One-third of this study participants used long-acting reversible contraceptives (LARC). Overall, there is substantial evidence that LARC is superior to SARC in terms of technique effectiveness, side effects, safety, and cost. For communities like Ethiopia, where high maternal and neonatal mortality and morbidity are aggravated by high fertility rates, big populations, and imbalanced economic growth, the use of such highly effective birth control technologies is critical. Furthermore, LARCs have the potential to reduce the high maternal and newborn mortality rates seen in underdeveloped countries such as Ethiopia. LARC use is lower than SARC use among sexually active reproductive-age people over the world. Despite an overall increase in contraceptive prevalence in Ethiopia over the previous two decades, SARCs are now used 3.6 times more than LARCs. The prevalence of contemporary contraception is 47 percent in Ethiopia's Amhara region, with LARC usage accounting for only 15 percent. (9)

The most common reasons for use and non-use were spacing and desire of having a baby, respectively. According to national studies in the general population, the most common reasons for nonuse of contraceptives among married reproductive-age women were thinking that contraceptives are fatalistic (17.6%), menses not returned (15.2%), on breastfeeding (9.1%), infrequent sex or have no sex (5.9%), and fear of side effect (3.0%). (10) Similarly studies done among women with hypertension & diabetes, the most commonly mentioned reasons for not using contraceptive were fear of side effects (12.8%), desire for children (12.2%), religious prohibition (11.2%), husband opposition (11%), and lack of knowledge about contraceptives (8.9%) (4)

In this study, the odds of contraceptive use were more than three-fold higher in younger age group (i.e., <40 years old) compared to those who are above 40 years old. In national studies, the odds of modern contraceptive use among women aged 35–49 years were 30% less compared to women aged

15–34 years (AOR = 0.7; 95% CI: 0.5–0.9). (38) This finding was in line with studies done in Ethiopia. The reason might be that older women preferred traditional methods to delay or limit the number of birth. This may be one of the reasons why the prevalence of unplanned pregnancy is generally higher among older women compared to younger women

Those who attended primary education and beyond were more than ten times more likely to use contraceptive compared to those who are illiterate. This finding was in line with other studies done in Ethiopia, Sudan, Ghana, and Afghanistan. (15) The reason for this might be that women's education helps them to understand their rights and responsibilities on the reproductive and sexual issues. And also it enables them to discuss with their partners and make joint decisions on FP and family size. Women empowerment is essential to improve maternal health service uptake. Also, educated women are more likely to receive family planning-related messages from different sources. Furthermore, the positive effect of education on modern contraceptive use may be associated with the delay in marriage and first pregnancy.

The chance of contraceptive use was also about six times higher in those who gave birth. Different national studies has shown that women who have several children are more likely to use contraception to limit their number of subsequent pregnancies. (19)

Lastly, partner support on family planning use was also found to increase the likelihood of contraceptive use by nearly three-fold. This finding is consistent with the pattern in the Ethiopian demographic and health survey, which reported higher contraceptive use among women having one to four living children than those without children. (16) This is because the main determinant to contraception continuation and type seems to be the size of the family, which is determined by the number of children. It is also considered as one of the major determinants in the developing countries.

CHAPTER SEVEN

STRENGTH & LIMITATIONS OF THE STUDY

STRENGTH OF THE STUDY

- In order to analyze their impact on the outcome of interest, a large number of independent variables were identified from diverse literatures.
- The use of standard operational definitions enabled results to be compared to global, national, and regional findings.
- In addition to the overall contraceptive utilization rate, LARC utilization rate was assessed since it is most effective form of contraceptive use.
- Use of logistic regression helped to control possible confounding factors in order to assess the relative effect of independent variables.

LIMITATIONS OF THE STUDY

- The information was self-reported, and there was no verification of contraception collection. These self-reports may not accurately reflect the women's actual activities and intentions.
- Other socioeconomic factors may also influence contraceptive usage, therefore the background data obtained in this study that may influence contraceptive use are not exhaustive.
- The research was conducted solely in the medical OPD of SPHMMC, a teaching hospital in the nation's capital. As a result, the findings may not be applicable to the entire country.

CHAPTER EIGHT

CONCLUSION & RECOMMENDATION

CONCLUSION

- The overall contraceptive utilization rate among women with diabetes & hypertension is lower than previous similar studies.

- The requirement for contraception in women with diabetes & hypertension followed the same pattern as contraceptive use in the general population, in that there were more spacers than limiters.
- Among the contraceptive methods, injectable (28.9%) and implants (28.3%) were the most commonly used methods. Almost all (98.4%) contraceptive methods use were modern.
- Long-acting and permanent techniques were not widely used.
- Less than half of the study participants talked to their physician about using a contraceptive technique. The absence of such discussion was linked to a decreased contraceptive utilization rate.
- Those who had partner support were 30% more to use contraceptive methods. Active male partner involvement can have a significant impact on contraceptive utilization particularly in the context of chronic medical illnesses.
- The most common reasons for use and non-use were spacing and desire of having a baby, respectively.
- Woman's age, education, relationship, giving a birth, and partner support were identified as significant predictors of contraceptive use.
- One of the missed opportunities to introduce and promote contraception was the medical OPDs.
- The reproductive health requirements of women with diabetes and hypertension can be addressed by integrating family planning and other reproductive health care with the regular OPD program.

RECOMMENDATIONS

1. FOR POLICY MAKERS & STAKEHOLDERS IN THE STUDY AREA

- Family planning should be embraced as a fundamental technical component of care as part of preconception care, and new techniques to administer contraceptive technologies in medical OPDs should be developed by policymakers and stakeholders.
- It is recommended that existing policies, strategies, and guidelines be reviewed, and new integration guidelines be developed.
- To guarantee that rules and guidelines are implemented at all levels, improve the systems for distributing and disseminating them.

- Family planning needs to be re-enforced at the national, provincial, and institutional levels so that it is seen as a priority by everybody.

2. FOR HOSPITAL MANAGERS & UNIT LEADERS

- Create a system for incorporating family planning services into all medical outpatient clinics that treat women with chronic conditions.
- Improve health-care providers' ability to handle the reproductive health needs of women with chronic illnesses.
- Organize training/reorientation to health care providers in the family planning and medical OPDs on how to offer integrated services and screen clients for contraception utilization.
- Ensure that medical OPDs are sufficiently extended to accommodate integrated service in terms of human resources to handle workloads, space for service delivery, and storage of additional supplies that come with integration.

3. FOR HEALTH CARE PROVIDERS IN THE UNIT

- Concentrate your attention on the people who have least contraceptive utilization rates. Women who have no partner or partner support require special attention.
- Provide a variety of contraceptive techniques and make them more accessible. Women need access to a wide choice of contraceptive techniques in order to negotiate the adverse effects associated with various contraceptive methods and avoid those that are unacceptable to them.
- Advocate for contraceptive methods that have few risks or adverse effects as compared to the maternal health difficulties caused by unplanned births.
- In addition, improving access to long-acting and permanent methods should be a top priority for women who want to limit family size.
- Pay attention to both men and women. Improving contraceptive utilization rates requires encouraging couples to communicate and increasing male partner involvement through a renewed focus on couples counseling.

4. FOR RESEARCHERS

- Conduct more research on the same topic in different sections of the country to obtain more representative results.

- Conduct a similar study to determine the unmet contraceptive needs of women with chronic medical illnesses.
- Conduct longitudinal research to see how reproductive and fertility intentions vary over time before and after a diagnosis of a chronic medical illness, or other comparative studies to see how contraceptive use and associated factors differ between women with and without chronic medical illnesses.
- Conduct a study to evaluate the quality of family planning counseling in the context of chronic medical diseases at several entry points, such as prenatal, postnatal, family planning, medical OPDs, and hospital post-abortion service units.
- Assess the readiness of medical OPDs to provide integrated medical care and family planning services by conducting a situational analysis.
- Look for integrated service delivery models that are effective and understand their impact on contraception use.
- This study could have been done as a comparative study to assess the contraceptive utilization among women with chronic medical illnesses & those without. Even a comparison can be made among LARC utilization rate & SARC utilization rate.

ANNEX I

DATA COLLECTION FORMAT AND CONSENT-ENGLISH

Hello, my name is _____

First of all I would like to thank you for your time.

I am a member of research team in Saint Paul's Hospital Millennium Medical College. The research team is conducting a study on contraception use among women with diabetes & hypertension at SPHMMC. We are inviting women between the ages of 18 and 49 years to contribute for the study.

We would very much appreciate your participation in this study. Your responses will help through policy formulation and program implementation to improve family planning service needs and access. It would be a building block to decrease maternal mortality and morbidity in general. The study usually takes between 20 and 30 minutes to complete.

Your name will not be recorded and whatever information you provide will be kept strictly confidential and is to be used only for the purpose of this study. You have the right not to respond any question you don't want to and your participation is absolutely voluntary. It's also your right to quite the research response at any time.

This research will have no any fee or gain for your response .However, we hope you will participate in the study since your views are important.

In case you need more information about the study, you may contact the person listed on this card. (GIVE CARD WITH CONTACT INFORMATION)

Do you have any questions?

May I begin the interview now?

SIGNATURE OF INTERVIEWER: _____

DATE: ____/____/____

(DD/MM/YYYY)

RESPONDENT AGREES TO BE

INTERVIEWED....1



RESPONDENT DOES NOT AGREE TO BE
INTERVIEWE....2



END

Questionnaire factors affecting contraceptive use among women with diabetes & hypertension at SPHMMC and its affiliate hospitals, Addis Ababa, Ethiopia.

Questionnaire Data

1. Code Number_____
2. Date of Interview ____/____/_____
(DD/MM/YYYY)

Interviewer Data

1. Interviewer's Name_____
2. Interviewer Signature_____

Supervisor Data

1. Supervisor Name_____
2. Supervisor Signature_____

Result of the Interview

1. Complete
2. Incomplete
3. Refused
4. Other (specify)_____

PART 1-SOCIO-DEMOGRAPHIC CHARACTERISTICS

No.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	How old are you?	YEARS (AGE IN COMPLETED YEARS)	
102	Have you ever attended school?	YES. 1 NO 2	→ 104
103	What is the highest level of school you attended?	PRIMARY. 1 SECONDARY. 2 TECHNICAL/VOCATIONAL. 3 HIGHER. 4	
104	What is your occupation?	STUDENT. 1 UNEMPLOYED. 2 HOUSEWIFE. 3 HOUSE SERVANT. 4 DAILY LABORER. 5 MERCHANT. 6 GOVERNMENT EMPLOYEE. 7 PRIVATE EMPLOYEE. 8 OTHER (SPECIFY). 9	
105	Do you have a monthly income?	YES. 1 NO. 2	→ 226
106	What is your total monthly income?	_____Eth.Birr	
107	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED. 1 YES, LIVING WITH A MAN 2 NO, NOT IN UNION 3	
108	What is your religion?	Orthodox.....1 Muslim 2 Protestant.....3 Catholic.....4 Other.....5	
109	What is the occupation of your husband/partner?	Daily laborer.....5	

		Merchant.....6	
		Government Employee.....7	
		Private Employee.....8	
		Other.....9	

PART 2-ASSESSMENT OF FAMILY PLANNING

No.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
226	Are you pregnant now?	YES 1 NO 2 UNSURE 8	→ 238
228	When you got pregnant, did you want to get pregnant at that time?	YES 1 NO 2	→ 238
229	Did you want to have a baby later on or did you not want any (more) children?	LATER 1 NO MORE 2	
230	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES 1 NO 2	
231	Have you ever given birth?	YES 1 NO 2	
232	How many children do you have?		
233	When did you give birth to your last baby?		
234	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (ANOTHER) CHILD 1 NO MORE/NONE 2 SAYS SHE CAN'T GET PREGNANT. 3 UNDECIDED/DON'T KNOW. 8	
235	How long would you like to wait from now before the birth of (a/another) child?	SOON/NOW. 1 SAYS SHE CAN'T GET PREGNANT .2 AFTER MARRIAGE. 3 OTHER (SPECIFY) _____ 4	

		DON'T KNOW. 5	
--	--	--------------------	--

PART 3- Knowledge and utilization of Contraceptive methods among women

No.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
301	Have you ever heard of contraceptive methods?	YES.....1 NO.....2	
302	If yes to the above question, from where did you get the information about contraceptives?	HEALTH WORKERS 1 FRIENDS 2 TELEVISION 3 RADIO 4 HUSBAND.....5 OTHER.....6	
303	Have you ever used Contraceptives?	YES.....1 NO.....2	
304	If your answer for the previous question is 'YES' what Contraceptive method have you used previously?	PILL 1 INJECTIBLES 2 IMPLANTS 3 DIAPHRAGM.....4 CONDOM.....5 TUBAL LIGATION.....6 IUCD.....7 NATURAL METHODS.....8	

		LACTATIONAL AMENORRHEA..9	
305	Are you currently using any contraceptive method?	YES.....1 NO.....2	
306	If your answer for the previous question is 'YES' when is the time of adopting current use of Contraceptive	LESS THAN 3 MONTHS.....1 3 TO 6 MONTHS.....2 MORE THAN 6 MONTHS.....3	
307	If your answer for question '305' is 'YES' Purpose of using	SPACING BETWEEN CHILDREN..1 LIMITING NUMBER OF CHILDREN.....2	
308	If your answer for question '305' is 'NO' what are your reasons for nonuse?	Fear of side effect.....1 Not aware of contraceptive.....2 Husband opposition.....3 Method of choice not available.....4 Religion prohibition.....5 Desire for children.....6 Fear of disease condition.....7 Not able to use.....8 Infrequent sex.....9	

PART 4-INFORMATION ON DM & HYPERTENSIVE TRETMENT

No.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
529	How long ago did you find out that you are Diabetic or Hypertensive?	MONTHS AGO 1 YEARS 2 DON'T REMEMBER. . . . 8	
530	How long have you been receiving any form of care or treatment services?	MONTHS 1 YEARS 2 DON'T REMEMBER. . . . 8	
531	What is the type the disease condition identified?	Diabetes Mellitus.....1 Hypertension.....2 Both.....3 OTHER(SPECIFY).....4	
532	Average BP in the past 3 visits	<140/90.....1 140/90.....2 >140/90.....3	
533	Average FBS in the past 3 visits	<130.....1 130.....2 >130.....3	
534	When receiving care or treatment, has a provider talked with you about whether or not you would like to have (more) children? <i>PROBE: Did they talk with you about whether you wanted to become pregnant?</i>	YES 1 NO. 2 DON'T REMEMBER 8	
535	While receiving care or treatment, has a provider talked with you about the need to prevent unintended pregnancy?	YES 1 NO. 2 DON'T REMEMBER 8	
536	When receiving care or treatment, has a provider talked with you about use of contraceptives?	YES 1 NO. 2 DON'T REMEMBER 8	535

537	About which method of contraceptive were you counseled on?	FEMALE STERILIZATION. 1 MALE STERILIZATION. 2 IUD. 3 IMPLANTS 4 INJECTIBLES 5 PILL 6 MALE CONDOM.....7 FEMALE CONDOM 8 LACTATIONAL AMEN METHOD...9 RHYTHM METHOD 10 WITHDRAWAL 11 EMERGENCY CONTRACEPTION. . 12 OTHER (Specify) 13	
538	If yes 533, How often your cardiac physician discussed you about contraception?	EVERY VISIT 1 SOME-TIMES 2 NEVER 3	
539	Have you ever been referred to family planning unit for counseling and provision of contraception?	YES.....1 NO 2	
540	Would you prefers Family planning service to be provided integrated in the clinic or would you prefer referral to family planning clinic?	I would prefer here 1 I would prefer referral to family planning clinic 2 I would have no preference.....3	
541	Integration of family planning unit and cardiac clinic improve use of more contraception. What do you think?	Yes, I AGREE.....1 No, I disagree DISAGREE.....2	
542	Who determine the use of contraceptive	RESPONDER ONLY.....1 HUSBAND.....2 BOTH.....3 OTHER(SPECIFY 4	

543	Do your partner help you on your DM/HTN care and treatment?	YES.....1 NO 2	
544	Do your partner support you on use of contraception	YES.....1 NO 2	
THANK RESPONDENT FOR HER TIME AND PARTICIPATION			

ANNEX II

DATA COLLECTION FORMAT AND CONSENT-AMHARIC

የቃለ-መጠይቅ ፎርም

የግንዛቤ እና ፈቃደኝነት መጠየቂያ ቅጽ
እንደምን አደሩ/ ዋሉ? እንደምን ነዎት? እኔ ስሜ.....ይባላል። በቅዱስ ጳውሎስ ሆስፒታል ሚሊኒየም ሜዲካል ኮሌጅ የጥናት ቡድን አባል ነኝ፡፡ : በመጀመሪያ ስለሰጡኝ ጊዜ በጣም አመሰግናለሁ፡፡ ጥናቱ የሚያተኩረው ህክምና መስጫ ተቋም ለሚመጡ የስኳር ወይም የደም ግፊት ህመም ያለባቸው ተገልጋዮች የሚሰጠውን የቤተሰብ እቅድ አገልግሎት አሰጣጥ ሁኔታ ለማየት የሚያስችል ዳሰሳ ነው፡፡ ለዚህም እድሜያቸው ከ 18 እስከ 49 ያሉ የአገልግሎቱ ተጠቃሚዎችን ቃለ መጠይቅ በማድረግ ላይ አንገኛለን፡፡ እርሶም በዚህ ጥናት እንዲሳተፉ ተመርጠዋል፡፡ ቃለ ምልልሱ በግምት ከ 20 እስከ 30 ደቂቃ ይፈጃል፡፡ የእርሶ ስምም ሆነ መለያ መረጃዎች አይመዘገቡም፡፡ የሚሰጡን መረጃ ሚስጥራዊነቱ ፍፁም የተጠበቀ ሲሆን መረጃውም ለጥናቱ አላማ ብቻ ይውላል፡፡ በጥናቱ የመሳተፍም ሆነ ያለመሳተፍ መብት ያለዎት ሲሆን ጥያቄዎችን ያለ መመለስ ወይም የማቋረጥ መብት የተጠበቀ ነው፡፡ : ነገር ግን እርሶ የሚሰጡን መረጃ በጤና ተቋሞች የሚሰጠውን አገልግሎት ለማሻሻልና ፖሊሲዎችን ለማውጣት ጠቃሚ ሲሆን የእናቶች ህክምና ጥራት አስተዋጾ ግብዓት ይሆናል፡፡

ጥናቱን በተመለከተ የሚጠይቁት ነገር አለዎት?	
የጠያቂው ፊርማ:	ቀን: (ቀ/ወ/ዓም)
በጥናቱ ላይ ለመሳተፍ ፈቃደኛ ሆነዋል	በጥናቱ ላይ ለመሳተፍ ፈቃደኛ አልሆኑም. . .
አመስግነው ቃለ ምልልሱን ይቀጥሉ	አመስግነው ወደ ሌላ ተጠያቂ ይለፉ

ቃለ-መጠይቅ ቅጽ
1. የኮድ ቁጥር _____ 2. ቃለ-መጠይቅ የተደረገበት ቀን ____/____/____ 3. ስልክ ቁጥር
ቃለ-መጠይቅ ውጤት
1. በሙሉ ተጠናቋል 2. አልተጠናቀቀም 3. ተጠያቂዋ ፈቃደኛ አልሆኑም

በቅዱስ ጳውሎስ ሆስፒታል የስኳር እና የደም ግፊት ህክምና መስጫ ተቋም ለሚመጡ ተገልጋዮች የሚሰጠውን የቤተሰብ እቅድ አገልግሎት አሰጣጥ ሁኔታ ለማጥናት የተዘጋጀ የቃለ-መጠይቅ ቅጽ።

ክፍል 1 ማህበራዊ እና ስነ ህዝባዊ ገፅታዎች

ተ.ቁ	ጥያቄዎች	ምድብ	ዝላላ
101	ዕድሜዎ ስንት ነው?	ዓመት	
102	የቀለም ትምህርት ተምረዋል?	አዎ.....1 የለም፤አልተማርኩም.....2	
103	ያጠናቀቁት ከፍተኛ የትምህርት ደረጃ ስንት ነው?	አንደኛ ደረጃ (ከ 1-8 ኛ ክፍል).. 1 ሁለተኛ ደረጃ(ከ 9-12 ኛ ክፍል) . .2 ቴክኒክና ሙያ ሰርተፊኬት...3 ከፍተኛ ትምህርት (ኮሌጅ/ዩኒቨርሲቲ) . 4	→
104	የሥራ ሁኔታ?	ተማሪ.....1 ሥራ የሌለት.....2 የቤት እመቤት.....3 የቤት ሠራተኛ.....4 የቀን ሠራተኛ.....5 ነጋዴ.....6 የመንግስት ሠራተኛ.....7 የግል ሥራ ተቀጣሪ.....8 ሌላ (ይገለጽ) 9	
105	የወር ገቢ አለዎት?	አዎ.....1 የለኝም.....2	
106	ጠቅላላ ወርሃዊ ገቢዎ ስንት ነው?	_____ ብር	
107	በአሁኑ ወቅት ባለትዳር ነዎት ወይንስ እንደ ባለትዳር አብሮዎት የሚኖር ሰው አለ?	አዎ፤ባለትዳር ነኝ.....1 አዎ፤አብሮኝ የሚኖር ሰው አለ.. 2 ግንኙነት የለኝም 3	→
108	ሃይማኖትዎ ምንድን ነው?	ኦርቶዶክስ.....1 ሙስሊም.....2 ፕሮቴስታንት.....3 ካቶሊክ.....4 ሊላ.....5	
109	የባለቤትዎ/የትዳር አጋርዎ የስራ ሁኔታ	የቀን ሠራተኛ.....5 ነጋዴ.....6 የመንግስት ሠራተኛ.....7 የግል ሥራ ተቀጣሪ.....8 ሌላ (ይገለጽ) 9	

ክፍል 2 የቤተሰብ እቅድን የተመለከቱ ጥያቄዎች

ተ.ቁ	ጥያቄዎች	ምድብ	ዝላል
226	በአሁኑ ወቅት ነፍሰ-ጡር ነዎት?	አዎ..... 1 አይደለሁም.....2 እርግጠኛ አይደለሁም..... 8	
228	ከዚህ በፊት ነፍሰ-ጡር ሆነው ከነበር ነፍሰ-ጡር በሆኑበት ሰዓት፤ እርግዝናውን በዛን ጊዜ ፈልገውት ነበር?	አዎ..... 1 የለም፤አልፈለኩም.....2	
229	ለወደፊት ነበር ልጅ የፈለጉት፤ወይንስ ምንም (ተጨማሪ) ልጅ አልፈለጉም ነበር?	ለወደፊት ነበር ልጅ የፈለኩት..... 1 ምንም (ተጨማሪ) ልጅ አልፈለኩም ..2	
230	በአሁኑ ወቅት እርግዝናን ለማራራቅ ወይንም ለማስቀረት ያደረጉት ነገር ወይንም የተጠቀሙት ዘዴ አለ?	አዎ.....1 የለም.....2	
231	ልጅ ወልደው ያውቃሉ?	አዎ.....1 የለም አላውቅም.....2	
232	ስንት ልጆች አልዎት?		
233	መጨረሻ የወለዱት መቶ ነበር?		
234	አሁን ስለ ወደ ፊቱ ጥቂት ጥያቄዎች አሉኝ። (ሌላ) ልጅ መውለድ ይፈልጋሉ ወይንስ (ሌላ) ልጅ አለመውለዱን ይመርጣሉ?	(ሌላ) ልጅ መውለድ እፈልጋለሁ....1 ሌላ ልጅ አለመውለዱን እመርጣለሁ..2 መፀነስ አልችልም.....3 አልወሰንኩም/አላውቅም 8	
235	ከአሁን በኋላ (ሌላ) ልጅ ከመውለድዎ በፊት ምን ያህል ጊዜ መቆየት ይፈልጋሉ?	በቅርብ/አሁን.....1 መፀነስ አልችልም 2 ከጋብቻ በኋላ.....3 ሌላ.....4 (ይገለፅ) አላውቅም..... 5	

ክፍል 3 የወሊድ መቆጣጠሪያ ዘዴዎችን በተመለከተ ይሎትን ግንዛቤ እና አጠቃቀም የሚመለከቱ ጥያቄዎች

ተ.ቁ	ጥያቄዎች	ምድብ	ዝላል
301	ስለ እርግዝና መከላከያ ዘዴዎች ሰምተው ያውቁሉ?	አዎ.....1 አይ.....2	
302	ለጥያቄ 301 መልስ አዎ ከሆነ ስለ እርግዝና መከላከያ ዘዴዎች የሰሙት ከምንድ ነው?	ከጤና ባለሙያዎች.....1 ከጓደኞች.....2 ከቴሌቪዥን.....3 ከሬዲዎ.....4 ከባለቤት.....5 ሌላ.....6	
303	ከዚህ ቀደም የእርግዝና መከላከያ ዘዴ ተጠቅመው ያውቁያሉ?	አዎ.....1 አይ.....2	

304	ለጥያቄ 303 መልስ አዎ ከሆነ የትኛውን ዘዴ (አሁን ወይም ከዚህ ቀደም) ተጠቅመው ያውቁያሉ?	እንክብል.....1 መርፌ.....2 በክንድ ስር የሚቀበር የእርግዝና መከላከያ ዘዴ.....3 ዲያፍራም.....4 ኮንዶም.....5 የማህፀን እንቁላል ማስተላለፊያ ትቦ መቋጠር.....6 በማህፀን ውስጥ የሚቀመጥ የእርግዝና መከላከያ.....7 የተፈጥሮ የእርግዝና መከላከያ ዘዴዎች.....8 ጡት በማጥባት የእርግዝና መከላከል ዘዴ.....9	
305	አሁን የእርግዝና መከላከያ ዘዴ በመጠቀም ላይ ነዎት?	አዎ.....1 አይደለም.....2	
306	ለጥያቄ ቁጥር 305 መልስዎ አዎ ከሆነ የእርግዝና መከላከያ ዘዴውን መጠቀም ከጀመሩ ስንት ጊዜ ሆነ?	ከሶስት ወር በታች.....1 ከሶስት እስከ ስድስት ወር.....2 ከስድስት ወር በላይ.....3	
307	ለጥያቄ ቁጥር 305 መልስዎ አዎ ከሆነ የእርግዝና መከላከያ ዘዴ የሚጠቀሙበት ምክንያት ምንድን ነው?	ለማራራቅ ስለምፈልግ.....1 ከዚህ በኋላ መውለድ ስለማልፈልግ.....2	
308	ለጥያቄ ቁጥር 305 መልስዎ አይደለም ከሆነ የእርግዝና መከላከያ ዘዴ የማይጠቀሙበት ምክንያት ምንድን ነው?	የመድሃኒቱን የጎንዮሽ ጉዳት ስለምፈራ.....1 ስለማላውቅ.....2 ባለቤቴ ስለማይፈቅድ.....3 የመረጥኩት ዘዴ የለም.....4 ሃይማኖቴ ስለማይፈቅድ.....5 ልጅ እንዲኖረኝ ስለምፈልግ.....6 የሀመሙ ሁኔታ ስለሚያስፈራኝ.....7 ለመጠቀም ስለማይመች.....8 ግንኙነት አልፈፅምም.....9	

ክፍል 4 የስኳር ወይም የደም ግፊት ክትትልን የተመለከቱ ጥያቄዎች

ተ.ቁ	ጥያቄዎች	ምድብ	ዝላል
529	የስኳር/የደም ግፊት ህመም እንዳለብዎ ካወቁ ምን ያህል ጊዜ ይሆንዎታል?	ወራት 1 ዓመታት 2 አላስታውስም. 3	
530	የስኳር/ የደም ግፊት ህክምና ክትትል ከጀመሩ ምን ያህል ጊዜ ይሆንዎታል?	ወራት 1 ዓመታት 2 አላስታውስም. 8	
531	ምን አይነት ህመም ነው ያለብዎ? (ከታካሚው ከርድ ላይ ይመልከቱ)	የስኳር ህመም 1 የደም ግፊት/ HTN..... 2 ሁለቱም.....3 ሌላ(ይገለፅ).....4	
532	ባለፉት ሶስት ጉብኝቶች አማካኝ የደም ግፊት መጠን	ከ 140/90 በታች..... 1 140/90.....2 ከ 140/90 በላይ.....3	
533	ባለፉት ሶስት ጉብኝቶች አማካኝ የጠዋት የስኳር መጠን(FBS)	ከ130 በታች..... 1 130 2 ከ 130 በላይ..... 3	
534	የስኳር/ የደም ግፊት ህክምና ክትትል ሂደቱ ላይ የሚገኙ ጥቃቶች ስለሆኑ ለሌላ ልጅ መውለድ ወይም ያለመውለድ ፍላጎትን አማክሮታልን? የማርገዝ ፍላጎትን የጤና ባለሙያዎች ጠይቆታልን?	አዎ. 1 የለም፤አላማከሩኝም 2 አላስታውስም. 3	
535	ከህመሞ አንፃር ያልተፈለገ እርግዝና እንዳይፈጠር (እንዲከላከሉ) ከሀኪምዎ ተነግረው ያውቃሉ?	አዎ. 1 የለም፤አላማከሩኝም 2 አላስታውስም. 3	

536	የስኳር/የግፊት ህክምና ክትትል ሂደቱ ላይ የሚገኙ ስህተቶች ስለ የእርግዝና መከላከያ ዘዴዎች አጠቃቀም አማካሪታልን?	አዎ. 1 የለም፤ አላማከሩኝም 2 አላስታውስም 8	537
537	ስለየትኛዎቹ የእርግዝና መከላከያ ዘዴዎች ተወያዩ?	የማህፀን ቱቦ ማስቆጠር 1 የወንድ ዘር ፍሬ ቱቦ ማስቆጠር 2 የማህፀን ሉፕ (አይ ዩ ዲ). 3 በክንድ የሚቀበር... 4 መርፌ (ዲፖ). 5 እንክብል(ፒልስ). 6 የወንድ ኮንዶም. 7 የሴት ኮንዶም. 8 ጡት ማጥባት 9 ለእርግዝና አስጊ በሆነ ወቅት መታቀብ . . 10 ዘርን ውጪ ማፍሰስ. 11 ድንገተኛ የእርግዝና መከላከያ. . . . 12 ሌላ(ይገለጽ) 13	
538	ሀኪምዎ በምን ያህል ጊዜ ስለወሊድ መቆጣጠር ያማክርዎታል?	ሁልጊዜ. 1 አንዳንድ ጊዜ 2 ምንም ተወያይተን አናውቅም . . . 3	
539	የወሊድ መቆጣጠር ምክር እና አገልግሎት እንዲያገኙ ወደ አገልግሎት ማዕከል(ምቹ ክሊኒክ) ተልከው ያውቃሉ?	አዎ(ተልኬ አውቃለሁ) 1 የለም (አልተላኩም). 2	
540	<u>የወሊድ መከላከያ እና ምክር አገልግሎት እዚህ ህክምና ክፍል ቢሰጥ ይመርጣሉ ወይስ ወደ ማዕከሉ (ምቹ ክሊኒክ) ቢሰጥ ይመርጣሉ?</u>	እዚህ ቢሰጥ እመርታለሁ. 1 ወሊድ መቆጣጠሪያ(ምቹ) ክፍል ብላክ እመርጣለሁ 2 የትም ቢሰጥ ግድ የለኝም 3	
541	<u>የወሊድ መከላከያ እና ምክር አገልግሎት እና የስኳር/የግፊት ህክምና በጥምረት ቢሰጥ አገልግሎቱን የተሻለ ያደርጋል?</u>	አዎ ያስማማኛል. 1 የለም አያስማማኝም..... 2	
542	የእርግዝና መከላከያ ዘዴ የመጠቀም ወይም ያለመጠቀም ውሳኔው የእርስ ነው፤ የባለቤት/ዳደኛው ነው ወይስ ሁለታችሁም አብራችሁ በጋራ ነው የወሰናችሁት።	የተጠያቂው ውሳኔ. 1 የተጠያቂው ባለቤት/ዳደኛ ውሳኔ. . . . 2 የጋራ ውሳኔ 3 በአሁኑ ወቅት ባለቤት/ዳደኛ የለኝም. . 4 ሌላ(ይገለጽ).. 5	
543	ባለቤት/ዳደኛዎ የስኳር/የግፊት ህክምና እና ክትትሉን ያግዛል?	አዎ. 1 የለም፤ አይደግፈኝም. 2 አላውቅም. 8	
544	ባለቤት/ዳደኛዎ የእርግዝና መከላከያ ዘዴ መጠቀሙን ይደግፋታል?	አዎ. 1 የለም. 2 አላውቅም. 8	
ስለ ትብብርዎ እና ስለሰሎኝ ጊዜ በጣም አመግንዎታለሁ!!!			

ANNEX III

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ANNEX IV

DECLARATION

I, the undersigned declare that this thesis is my original work in partial fulfillment of the requirement for the postgraduate study in OBGYN. I also declare that it has never been presented in this or any other university and that all resources and materials used in the thesis have been duly acknowledged.

Resident's Name: Dr. Alferid Abrar

Signature: _____

Date of submission: September, 2021

This thesis has been submitted for examination with my approval as an advisor.

Advisor Name: Dr. Matiyas Asrat

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Date of submission: September, 2021