



**COLLEGE OF HEALTH SCIENCES
SCHOOL OF NURSING AND MIDWIFERY
POSTGRAGUATE PROGRAM**

**EXPLORING THE NEED FOR PRECONCEPTION CARE: THE
PREGNANCY EXPERIENCE OF REPRODUCTIVE AGE WOMEN WITH
PREEXISTING MEDICAL CONDITIONS IN PUBLIC HEALTH
FACILITIES IN ADDIS ABABA, ETHIOPIA, 2024: AQUALITATIVE
STUDY**

BY

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I, the undersigned MSc student, declare that I have submitted my original work on a title exploring the need for preconception care and the pregnancy experiences of reproductive age women with pre-existing medical conditions in a public health facility in Addis Ababa, Ethiopia, in 2024: Qualitative study for the examination.

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STATEMENT OF DECLARATION

By my signature below, I declare and affirm that this thesis is my own work. I followed all scholarly ethical principles while preparing, collecting, analyzing, and completing this thesis. All scholarly content included in the thesis has been acknowledged through citation. I confirm that I have cited and referenced all sources in this document. Throughout the preparation of this thesis, every effort was made to avoid plagiarism. This thesis is submitted in partial fulfillment of the requirements for a graduate degree from Addis Abeba University's College of Health Science, School of Nursing and Midwifery. The thesis is deposited in the Addis Ababa University Digital Library and is made available to local, national and international scientific community. I hereby declare that this thesis has not been submitted to any other institution for the award of an academic degree, diploma, or certificate. Brief quotations from this thesis may be used without permission as long as the source is accurately and completely acknowledged. Requests for permission to quote or reproduce this thesis in whole or in part may be granted by the Head of Department or all advisers to the theses if the proposed use of the material is in the best interests of scholarship and publication. In all other instance, however, permission must be obtained from the author of the thesis.

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List of acronyms and abbreviation

ACOG-American College of Obstetrics and Gynecology

BMI-Body mass index

CDC- Center for Disease Control

CMC-chronic medical condition

EDHS-Ethiopian Demography and Health Statistics

HBV -Hepatitis B virus

HCW-Health Care Worker

HDP-Hypertensive Disorder in Pregnancy

HIV-Human Immunodeficiency Viruses

IDI-In-depth interview

MCH-Maternity and child health

MOH- Ministry of Health

PCC-Preconception Care

PI-Principal investigator

SPHMMC-Saint Paul's Hospital Millennium Medical College

T1DM-Type 1 diabetes mellitus

T2DM- Type 2 diabetes mellitus

UK - United Kingdom

UNICEF-United Nations International Children's Emergency Fund

US - United State

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ABSTRACT

Background: Pre-existing medical conditions result in poor maternal and child health outcomes. In order to reduce maternal, child, and newborn mortality, preconception care is the ultimate health care service for women with preexisting conditions. In spite of this, little is known about the need for preconception care for women with chronic medical conditions in Ethiopia.

Objective: Exploring the need for preconception care and the pregnancy experiences of reproductive age women with pre-existing medical conditions in a public health facility in Addis Ababa, Ethiopia, in 2024.

Method: A qualitative exploratory descriptive study was conducted on 19 women with specific preexisting medical conditions at the St. Paul's Hospital Millennium Medical College Obstetrics and Gynecology Unit from February to March 2024. Purposively selected pregnant women were interviewed face-to-face, using an interview guide. Audio tape recordings and field notes were taken. Data collection and analysis were conducted simultaneously. The audio record was transcribed and then translated from Amharic to English. Finally, the analysis was done manually guided by supervisors.

Result: An in-depth interview included a total of 19 participants and their mean age was 34.7 ($\pm$ SD=0.64). Four themes were developed through inductive analysis. Those were Experience of being pregnant and the desire to carry on current pregnancy, cultural barrier and the behavior of seeking health care, awareness and perception of preconception care and the need for preconception care. The themes were thoroughly described from the perspective of participants emphasizing the importance of PCC for women with preexisting conditions. According to the study's findings, women who participated in the study used PCC infrequently, so improving women's benefits from PCC is required to reduce complications. **Conclusion and recommendation:** The study found that only two-thirds of participants are aware of preconception care (PCC) needs, and their utilization is limited. Factors influencing PCC utilization include lack of information, service inaccessibility, cultural practices, and poor care provider-patient interaction. Regular follow-up and readiness for pregnancy complications can improve PCC utilization and reduce unintended pregnancies. The care provider effectively communicates with the client, emphasizing the government to prioritize (PCC) as a daily agenda. **Key words:** Preconception care, preexisting condition, the need for preconception care.

CHAPTER - ONE

1. Introduction

1.1. Back ground

Preconception care is defined as the delivery of biological, behavioral, and social health interventions to women and couples before conception aimed at improving maternal and child health outcomes both in short and long term (1). Preconception care also defined as a set of interventions or programs that aims to identify and enable informed decision-making to modify biomedical, behavioral and (psycho) social risks to parental health and the health of their future child through counselling, prevention and management, underlining those factors that must be acted on before conception and in early pregnancy, for a maximal impact and choice (2).

PCC is one of a maternal, child and neonatal mortality and morbidity preventive strategy which focuses on the aspects of PCC counselling, risk assessment, and interventions that ensure women enter pregnancy in good health condition (3). The major goal of preconception care is to improve pregnancy outcomes and general women's health through prevention of disease and management of preexisting conditions (4).

Globally, in 2020, the proportion of deaths from maternal causes among women of reproductive age is rise in three sub-regions: 23.9 percent in Middle Africa, 21.9% in Western Africa, and 15.5% in Eastern Africa (5).

Chronic medical conditions are becoming more common among reproductive-age women, and they require special concern due to the significantly increased risk of pregnancy-related morbidity and adverse pregnancy outcomes (6). The pregnancy related complications includes preeclampsia, infections, obstructed labor, postpartum hemorrhage, preterm births, stillbirths, macrosomia, miscarriage, intrauterine growth retardation, congenital anomalies, birth injuries and death (7).

Diabetes mellitus is related to a wide range of modifiable risk factors, which means that women of childbearing age who have diabetes mellitus stand to benefit from PCC (8).

Approximately half of all women in developed countries are overweight or obese prior to pregnancy (9–11). Obese women are more vulnerable to complications associated with pregnancy

and childbirth such as diabetes mellitus, pre-eclampsia and postpartum hemorrhage, instrumental delivery, surgical site infection to themselves and low birth weight, congenital mal-formation, and perinatal death for the newborn to prevent such complication obese patients should be encouraged to participate in a weight loss program before attempting pregnancy (12).

Chronic hypertension is another common medical condition that affect reproductive age women throughout the world. The most usual complication includes: superimposed preeclampsia, increase the rate of cesarean section, perinatal death. Because of the obstetric complications of hypertension disorder in pregnancy it is recommended that hypertension control be established prior to pregnancy (13).

Although many chronic medical conditions have great impact on pregnancy, this study focuses on the need of preconception care and pregnancy experience in a specific chronic medical condition (preexisting diabetes mellitus, obesity, and hypertension) to enhance reproductive outcome by preparing for pregnancy and maintaining optimal health prior to conception (14).

1.2. Statement of the problem

Preconception care is one of the grassroots strategies for addressing preventable causes of maternal ,child and perinatal mortality (15). For women with medical conditions, delaying, postponing, or achieving optimal pregnancy timing is frequently an important component of preconception care (16). In order to reduce maternal and neonatal death WHO recommended to improve utilization of preconception care set as strategy in reproductive age of women (3).

Optimizing preconception health is linked to a lower risk of adverse pregnancy health outcomes for both the mother and the baby (including caesarean section, glucose intolerance, hypertension, thromboembolic disease, and maternal mortality) and the baby, including pre-term birth, high or low birth weight, congenital disorders, neural tube defects, and infant mortality (17). However preconception care has not longer become a part of routine practice throughout the globe (18).

Worldwide every minute 380 women become pregnant and 190 face unwanted pregnancies, 110 experience pregnancy-related complications, and one woman dies from a pregnancy-related cause (19). Similarly a minimum of four from every ten women report that their pregnancies were unplanned globally, indicated that the need for population-wide approaches to evidence-based preconception care (20). In western country estimates of engagement with preconception care women with chronic health conditions range from 18.1% to 45% (21). The utilization of preconception care among reproductive age women in Ethiopia is 16.27% which is significantly low (22).

Consequently maternal deaths from maternal causes among women of reproductive age is still raised in three sub-regions: 23.9 percent in Middle Africa, 21.9% in Western Africa, and 15.5% in Eastern Africa (5). Also Ethiopia is one of a low income country in sub-Saharan Africa which account for 5% of all maternal death and 2.3% of neonatal mortality (23).

In Ethiopia, the incidence of preexisting medical conditions among reproductive-age women increases and worsens pregnancy-related risk, which is hypertension in pregnancy found 6.8% (24), obesity account 3.4% (25) and preexisting diabetes 2.8% (26). Chronic medical conditions like diabetes, hypertension, and obesity face especial reproductive planning challenges that may be related to the low utilization of preconception care (27).

Women with preexisting diabetes are 30-60% more likely to have infants affected by preterm delivery and macrosomia, as well as concomitant birth trauma events (28). Obese women are also more vulnerable to pregnancy and childbirth complications such as gestational diabetes, gestational hypertension, pre-eclampsia, and postpartum hemorrhage, as well as low birth weight, congenital malformation, preterm birth, large for gestational-age babies, and perinatal death for the newborn (29). Hypertension increases the maternal risk of HELLP syndrome, placental abruption, pulmonary edema, and renal damage, as well as the fetal risk of prematurity, perinatal asphyxia, intrauterine growth retardation, fetal loss, and low birth weight (30).

Majority of problem can be prevented through proper implementation of preconception care and integration of other continuum of care. Almost 77% of maternal, newborn, child death and stillbirth can be prevented by building a preconception platform at the community, health center, and hospital to implement essential packages such as nutritional optimization, preventing and treating infections, provision of family planning, screening and managing preexisting medical diseases, substance abuse and lifestyle modifications (18).

As pre-existing medical conditions result in poor maternal and child health outcomes, refocusing the need for preconception care on women with chronic medical conditions to be our daily agenda in order to allow for a more comprehensive and exploration of PCC. In spite of this, little is known about the need of preconception care and experience of women with chronic medical conditions in Ethiopia. Therefore, this study aims to exploring the need for preconception care and pregnancy experience in relation to the current or previous pregnancy women with specific chronic medical conditions.

1.3. Significance of the Study

Women with preexisting condition like diabetes, hypertension, and obesity face especial reproductive planning challenges and obstetric problem. To reduce its impact preconception care is a cost effective service. The overall significance of this study is;

For individual client: It provides insight into the maternal and offspring risk factors and the importance of preconception care services for women with chronic medical condition.

For the Health care provider: It helps health care providers evaluate their practice for the need of preconception care women with chronic medical conditions. It also helps to identify client preference related to treatment option and redesign accordingly.

For the health care organization: It helps to strengthen the hospital's more robust delivery of preconception services in routine primary care.

For the researchers: Since this study is the first study in Ethiopia, it serves as a base line for further study.

CHAPTER -TWO

2. Literature Review

2.1. Preconception care overview

Globally, in 2020, the proportion of deaths from maternal causes among women of reproductive age is rise in three sub-regions: 23.9 percent in Middle Africa, 21.9% in Western Africa, and 15.5% in Eastern Africa. The major cause of maternal death was related to chronic medical conditions (5).

According to a study conducted in south Asia Sri Lanka on the level of preconception preparedness among pregnant women and the factors influencing it, utilization of preconception care and unplanned pregnancy were 27.2% and 38%, respectively. Knowledge about preconception risk associated with increased age, consanguinity, and passive smoking was adequate, whereas knowledge of pregnancy planning, awareness of PCC, effects of pre-pregnancy weight on fertility, folic acid supplementation, fertile period, and birth spacing were all inadequate (31).

In a meta-analysis of three African regions involving 13067 women, the overall prevalence of preconception care utilization among pregnant women in Africa found 18.72%. Preconception care awareness, preexisting medical conditions, and pregnancy intention were all associated with preconception care utilization (32).

Another study conducted in Nigeria on the utilization of preconception care services and the determinants of poor uptake found that only 10.2% of women receive PCC, health care providers were the primary source of information, and PCC awareness and level of education were significantly associated (33).

A study conducted on preconception care utilization among pregnant women in Ethiopia at Hadiya Hosanna shows that 19% of women receive preconception care, and factors affecting preconception utilization were history of family planning use before the current pregnancy, previous history of adverse birth outcomes, lack of awareness of preconception care, and receiving counseling on preconception care previously (34).

2.2. Chronic medical condition and pregnancy overview

The global prevalence of hyperglycemia in pregnancy (20–49 years) was 16.9% in 2019. The South-East Asia Region had the highest prevalence at 25%, compared to 10.4% in the North America and Caribbean Region, where more than 90% of cases of hyperglycemia in pregnancy are estimated to occur in low- and middle-income countries (35).

Women with chronic medical conditions have a poorer prenatal outcome than women without chronic medical conditions. The most common prenatal outcomes are preterm birth, cesarean section, admission to NICU due to neonatal asphyxia, and spontaneous abortion (36).

Women with pre-existing diabetes (T1DM and T2DM) are strongly advised to maintain optimal glycemic control prior to conception (37,38). Uncontrolled diabetes during pregnancy increases the risk of stillbirth, neonatal mortality, and congenital abnormalities, as well as the progression of diabetic complications such as diabetic retinopathy and nephropathy. Evidence shows that, preconception care is an important care for preventing maternal and neonatal complications (38,39).

The global prevalence of obesity ($\text{BMI} \geq 30 \text{ kg/m}^2$) has increased from 6% to 15% in reproductive-age women from 1975-2014 (40). Obese pregnant women are more likely to experience early pregnancy loss and are at a higher risk of congenital fetal malformations, large-for-gestational-age infant delivery, shoulder dystocia, spontaneous and medically indicated premature birth, and stillbirth. Later on, pregnancy problems include gestational diabetes and pre-eclampsia, both of which are associated with long-term morbidities in the post-partum period. Therefore understanding the management of obesity during pregnancy is essential, and management should begin before pregnancy and continue through the postpartum period (41,42).

Hypertensive disorders are estimated to affect 5-10% of pregnancies worldwide (43). According to a systematic review and meta-analysis on preconception care: screening and management of chronic disease, more than 12% of women of reproductive age in the United States suffer from a chronic medical condition, particularly diabetes and hypertension. Chronic diseases significantly increase the poor maternal and newborn outcomes in pregnant women. Preconception intervention reduces the occurrence of congenital malformations by 70% and perinatal mortality by 69% (44).

A meta-analysis of 55 studies from 25 countries found that chronic hypertension is associated with an increased risk of preeclampsia, caesarean section, preterm birth, LBW, perinatal death, and admission to a neonatal unit (13).

Another systematic and meta-analysis study on the prevalence of hypertensive disorders of pregnancy in Ethiopia found that 6.07% (45).

A qualitative study of pregnant women's perspectives and experiences with HDP clinical management found that women who had previously experienced HDP complications, such as pre-eclampsia, were more confident in their clinical management and knew what to expect, whereas those without prior experience were often in shock when they developed pre-eclampsia. Chronic hypertension patients had a limited understanding of the potential risks that they might face during pregnancy and thus underestimated the severity of the condition. They also lack knowledge of self-monitoring blood pressure, the use of appropriate antihypertensive medication, and the requirement for an early delivery (46).

A qualitative study on women with chronic diseases revealed that the majority participants experienced negative reactions when discussing pregnancy with family and friends, due to medical conditions, pregnancy complications, and fear of genetic transferability (47).

A qualitative scope review conducted in Ghana that included 16 articles that met the criteria revealed that women with preexisting hypertension faced complex difficulties from the long-term treatment process while transitioning to motherhood, such as life-threatening disorders for both mothers and their babies, as well as long-term psychological effects (48).

2.3. Factors impact on preconception care

2.3.1. Sociodemographic factor

The findings of a cross-sectional study on women's preconception health in England suggest that there are broader social, economic, and environmental determinants among all women of reproductive age, and that various socio-demographic subgroups require targeted interventions. As the study indicated, improving women's preconception health and reducing socioeconomic disparities are required (49).

Chronic medical conditions in child bearing women may result in increased resource consumption and costs for both mothers and newborns. A study on the incidence of health condition in pregnant women and the incremental price of chronic conditions on the care of mothers and their newborns shows that diabetes (0.97%) and hypertension (1.9%) were associated with the highest incremental costs of care in both mothers (\$6.211 and \$3.367, respectively) and newborns (\$2.067 and \$1.210, respectively) (50).

2.3.2. Preconception Knowledge

A systematic review and meta-analysis of women's preconception knowledge and utilization in Ethiopia revealed that 30.95% of women's awareness of preconception care was significantly related to education status and antenatal care (22). Similar study conducted in Jordan, Iran, Sudan, Ethiopia, and Nigeria shows low awareness and utilization of PCC services. Utilization of PCC was influenced by health care providers', the provision of PCC information, ANC contact, the presence of chronic medical conditions, and sociodemographic factors including educational and wealth status (51–53).

A qualitative study conducted in Kenya to assess determinants of PCC in urban and rural settings show that women's lack of awareness about PCC, in conjunction with attitudes towards PCC and pregnancy impact strongly on its utilization (54).

2.4. Pregnancy preparation

A qualitative study conducted in the United States found that women with preexisting conditions lacked preconception health promotion and pregnancy planning, as well as a lack of intent to engage in preconception care (55). Maternal pre-pregnancy diabetic care is a significant intervention that reduces the occurrence of congenital malformations by 70% and perinatal mortality by 69% (44).

2.5. Practice of preconception care women with preexisting condition

One-third of obese women report obtaining preconception care, and only those women state that weight issues were discussed at their visit (56).

In another study conducted in southern Ethiopia, 67.2% of women use folic acid supplementation and 16.1 percent use psychological counseling before pregnancy, respectively, while only 6.4% of mothers use all preconception services (57).

2.6. Pregnancy desire

A study conducted in Malaysia on the perception of pre-pregnancy care for preexisting medical conditions revealed that about 68.2% of preexisting chronic medical condition clients were frustrated with the higher risk of developing complications if pregnancy occurred with an existing condition, whereas about 69.7% of patients decided to discontinue the future pregnancy (58).

2.7. Benefit of preconception care women with preexisting condition

The preconception period allows for earlier intervention to optimize the health of potential mothers (and fathers) and to prevent harmful exposures from affecting the developing fetus. These interventions include birth spacing and preventing teenage pregnancy, promoting contraceptive use, optimizing weight and micronutrients, preventing and managing infectious diseases, and screening for and managing chronic conditions (59).

2.8. Barrier and enabler of PCC

HCPs working in an addiction service were unable to implement PCC due to a lack of comfort with the subject of family planning. HCPs were also concerned that the delivery of PCC would be perceived as judgmental about how many children a woman should have, infringing on women's choices. It is recognized that the incidence of unplanned pregnancies meant that women did not have the time to access PCC and change harmful behaviors before conception (60).

CHAPTER –THREE

3. Objective

3.1. General objective

Exploring the need for preconception care and the pregnancy experience of reproductive age women with pre-existing medical conditions in Public health Facilities in Addis Ababa, Ethiopia, 2024.

3.2. Specific objective

1. Exploring the need for preconception care among reproductive age women with pre-existing medical conditions in Public Health facilities in Addis Ababa, Ethiopia, 2024.
2. To examine the pregnancy experience of reproductive age women with pre-existing medical conditions in relation to the current pregnancy in Public Health facilities in Addis Ababa, Ethiopia, 2024.

CHAPTER - FOUR

4. Method and material

4.1. Study setting and period

The study was conducted at Saint Paul Hospital Millennium Medical College (SPHMMC), obstetrics and gynecology unit, Addis Ababa, from February to March 2024. As per the UN-World Population Prospects, the current estimated population of the metro area of Addis Ababa in 2023 is 5,461,000. The city is divided into 11 sub-cities and have 13 public hospitals and 25 private hospitals. One of the tertiary governmental hospitals in Addis Ababa is SPHMMC. SPHMMC is purposively selected for the current study as it is the only public health hospital with having independent preconception care unit. Currently, it has over 480 beds and serves an average of 300,000 patients annually, catering to a catchment population of over 5 million. The hospital has over 18 departments, including the obstetrics and gynecology departments, which serve over 2,000 ANC follow-ups per month (HMIS registration). The study was conducted at Saint Paul's Hospital, found in Addis Ababa city, from February to March 2024.

4.2. Study design

A qualitative, exploratory, and descriptive research design were employed to address the goal of this study. The researcher is only able to comprehend the participants' perspectives, thought towards PCC in which they expressed in their own words and within the context of their lives, regarding their experiences with pregnancy and their actions in this study. Since the study's results are context-specific, its main goal is not to generalize them to other contexts.

4.3. Study participants and Eligibility criteria

The study were involve women with preexisting medical conditions, current pregnancy who are between the ages of 18 and 49. As preexisting medical conditions are common in reproductive age women in Ethiopia such as, preexisting diabetes mellitus, hypertension and obesity were purposively included in this study.

4.4. Recruitment and sampling

Nineteen pregnant women with preexisting medical conditions such as T1DM, T2DM, obesity, and hypertension who given their consent were take part in the current study. Women's who have preexisting medical condition such as T1DM, T2DM, obesity, hypertension and has additional preexisting condition were included in this study. The women was purposively chosen from the gynecological and obstetric departments using chronic medical conditions from their previous or current pregnancy. The midwives in charge of the gynecologic and obstetric units of the chosen hospital getting in touch with the women who fit the eligibility requirements to discuss the goals of the study, the activities involved, and the request for involvement. After each participant gives their consent, the researcher was approach them and follow them for conducting the interview. Since the study is qualitative study it included until saturation was reached. According to different literature explained that most of time the qualitative study reach saturation with a minimum of twelve interview (61) but for this study due to variability of the case the data was saturated at the nineteen participant. By guiding this literature I was able to collect an in-depth interview of nineteen women that means four obesity, six diabetes mellitus and nine chronic hypertensive pregnant women.

4.5. Data collection tool and procedure

The principal investigator with the trained female research assistant was conduct in-depth face-to-face interviews in a private room in the designated hospital. An interview guide has been used to outline the open-ended question in English and Amharic. The interview guide was developed from previous study conducted similar topic. The interview guide were include questions about demographics data, prior and current pregnancy experience, the awareness of preconception care, getting readiness for pregnancy, potential benefit of PCC and contraception usage. Participant were encouraged to share their pregnancy experiences and the significance of preconception care for women with preexisting conditions. Data was collected until saturation were reached, when more data fails to reveal any new emergent codes or themes. The time and place of the interviews was based on the convenience of the participants. With the participants' permission, the assistant researcher was audio-record and take written notes during the interviews. The interviews was done in Amharic and was last average of 30 minutes.

4.6. Data analysis

We were use thematic analysis to examine all of the data we've gathered. The primary investigator was conduct data analysis in simultaneously with data collection. An inductive coding has been used after data collection, and emerging inductive codes were generated. The supervisors was verify that the principal investigator accurately transcribed the field notes and audio data. In the thematic data analysis, three inter-related stages are involved, namely data reduction, data displays, and data conclusion. The participants' socio-demographic data is reported using descriptive statistics. Quotations from the participants' statements has been used to illustrate the findings and highlight the key themes. The analysis was done manually with guided by qualitative researcher expert supervisor.

4.7. Trust worthiness

To ensure accuracy and reliability of the data, the study were consider credibility, transferability, dependability, and confirmability.

Credibility- To ensure credibility, the investigator was fully engage with participants, a record of the interview has been kept, and qualified qualitative researchers assistance was contacted with face-to-face interviews. Furthermore, supervisors were verify that the principal investigator accurately transcribed the field notes and audio data.

Dependability- The investigator was describe detail process of selecting participant, data collection process, time of interview and way of analysis finally raw data has been submitted to the department to ensure data reliability.

Transferability- This study is consistent with other studies related to existing literature. The situation is also similar across the country. To ensure that the research sample, setting area, and procedure was addressed clearly, intertextual participant statements were quoted directly.

Conformability- The study was checked and confirmed by a qualitative researcher expert. As much as possible, the investigator was recheck the raw data, transcription, translation, and way of understanding several times to avoid researcher bias.

4.8. Ethical consideration

Ethical clearance and an official letter was taken from Addis Ababa University (department of midwifery) to Saint Paul's Hospital Millennium Medical College to get permission and support for conducting this study. A permission letter were obtained from the SPHMMC IRB board. Before starting the interview, verbal and written consent has been obtained from each participant. Participants was also be informed about the purpose of the study, advantages and disadvantages of being a participant, confirm confidentiality, and be fully informed that the interviewed data will be stored in a file without their name and with a code number assigned to it. It will not be revealed to anyone except the principal investigator, and it is not used for anything other than research purposes. To ensure the right of refuse or withdraw they have a full right to refuse to participate in this research. They were inform also having the full right to withdraw from this study at any time they wish, without losing any of their rights.

4.9. Dissemination of result

The result of the study first presented to Addis Ababa University College of Health Science School of Nursing and Midwifery, Department of Midwifery, as part of partial fulfillment of the degree of Master in Maternity and Reproductive Health Nursing, and the result is also be presented at SPHMMC.

CHAPTER- FIVE

5. Result

5.1. Sociodemographic

Nineteen Participants included in this study and their mean age was 34.7 ($\pm$ SD=0.64) years. Of all the participants, nine had completed their secondary education, two had done their primary education, seven had completed their tertiary education, and just one was illiterate. Participants included in this study were nine chronic hypertensive, six individuals with underlying diabetes mellitus, and four obese pregnant women. Three out of the nine women with chronic hypertension, half of the six women with diabetes mellitus, and one overweight pregnant mother received preconception care (PCC). [See Table 1]

Table 1. Sociodemographic characteristics of the participants, SPHMMC, Addis Ababa, 2024

SN	Code	Age	Type of preexisting condition	Marital status	Educational level	BMI	Parity
1	P1	26	T1DM	married	Tertiary	24.5kg/m ²	I
2	P2	35	Chronic Hypertension	married	Secondary	26.3kg/m ²	I
3	P3	34	T2DM	married	Tertiary	28kg/m ²	III
4	P4	35	T2DM	married	Tertiary	29.75kg/m ²	I
5	P5	36	Chronic hypertension	married	Primary	25.64kg/m ²	I
6	P6	33	T2DM	married	Secondary	37.56kg/m ²	II
7	P7	32	Class II Obesity	married	Tertiary	38.01kg/m ²	Null
8	P8	38	T2DM	married	Secondary	32.42kg/m ²	II
9	P9	36	Obesity	married	secondary	32.53kg/m ²	I
10	P10	30	Chronic hypertension	married	Primary	23.8kg/m ²	III
11	P11	35	Chronic hypertension	married	Tertiary	28.7kg/m ²	I
12	P12	30	Chronic hypertension	Married	secondary	19.61kg/m ²	Null
13	P13	32	Class I Obesity	Married	Tertiary	31.71kg/m ²	III
14	P14	35	Chronic hypertension	Married	Secondary	28.06kg/m ²	IV
15	P15	39	Chronic hypertension	Married	secondary	28.7kg/m ²	II
16	P16	38	Chronic hypertension	Married	Tertiary	29.74kg/m ²	IV
17	P17	42	Class III Obesity	Married	Secondary	46.24kg/m ²	IV
18	P18	40	Chronic hypertension	Married	Illiterate	29.4kg/m ²	V
19	P19	33	T2DM	Married	Secondary	24.9kg/m ²	I

P* indicates that participant

5.2. Theme development

Four main themes that arose from the nine subthemes were developed inductively following the analysis and coding of the data. These include the experience of being pregnant and the desire to carry on current pregnancy, cultural barrier and the behavior of seeking health care, awareness and perception of preconception care and the need for preconception care. [See Table 2]

Table -2 thematic presentation of the Main theme and subtheme

Main Themes	Subtheme/categories
Theme –I: Experience of being pregnant and desire to carry on with the current pregnancy	I. Experience of being pregnant
	II. Desire to carry on with the current pregnancy
Theme-II: Cultural barriers and the behaviour of seeking health care	I. Positive health care seeking behavior
	II. Culture as a hindrance to the pursuit of health
Theme III: Awareness and perception of preconception care	I. Level of PCC Awareness
	III. Source of PCC information
Theme III: The need for preconception care	I. Pregnancy planning helps to lessen the severity of pre-existing conditions
	II. Preventing of unplanned pregnancy

5.3. Them -I: Experience of being pregnant and desire to carry on with the current pregnancy

Pregnancy experience and the desire to continue the current pregnancy are the two subthemes that fall under this main subject. These themes complement one another and have varying degrees of influence on one another. The positive experience of being pregnant may encourage or impact the desire to get pregnant in the future. The positive experience of the current pregnancy can also influence the use of healthcare services throughout pregnancy.

5.3.1. Subtheme-I: The experience of being pregnant

When a woman has a chronic medical condition, they experienced positive or negative feelings during their current or past pregnancy. There are woman experienced healthy pregnancy throughout their pregnancy, despite experiencing no headaches or any complications and few of them experience were feelings that a normal pregnant woman experiences, like vomiting, headaches, nausea, and tiredness, loss of appetite. However, most of the study participants had experienced being boring and full of stress, as they expressed the feeling of disease increasing eventually during pregnancy. Some of the participants are not interested in remembering the past pregnancy because they had scared experiences. Maternal complications reported in the current study included uncontrolled blood sugar, prolonged infertility, surgical site infections, generalized body weakness, and insomnia; perinatal outcomes included early neonatal death, recurrent spontaneous abortions, preterm delivery, and neonatal admission to the intensive care unit. A sample response includes.

“Which pregnancy story would I be able to share with you? Every prior pregnancy came to an end at the start of the month. All but one of the previous seven pregnancies ended in spontaneous abortion. I only have one child at the moment. I had no idea why women get abortions. There was hypertension when I saw the doctor regarding my situation. But I didn't know whether or not I had hypertension before that”. (Participant 2, hypertensive age,35)

Another diabetes mellitus women narrated that

"This pregnancy has been difficult; I've even needed medical treatment and been unconscious due to low blood sugar. Despite giving birth to three children, I never experienced headaches during any of my previous pregnancies". (Participant 2, T2DM, age 38)

"Hypertension is extremely difficult. It is not as simple as you may believe. For example, I was seen in two hospitals: a private clinic and St. Paul's Hospital. When I was seen in the private hospital, my blood pressure was 170/120, which was shocked the doctor. The doctor advised me on a plan to letdown the pregnancy. I totally refused the decision and took the risk, and thanks God we are still alive" (Participant 11, hypertensive, age 35).

"We don't know if this pregnancy may be as complicated as the previous one. It may be safe if Allah calls it. Since I had complications in the previous pregnancy and my fear it may happen again, I will only know after delivery". (Participant 15, hypertensive, age 39).

5.3.2. Subtheme-II: Desire to carry on with the current pregnancy

Women with preexisting medical conditions have a range of feelings and desires about a potential pregnancy and childbearing. Some people may clearly want or not want a pregnancy, but many are uncertain, have mixed feelings, or do not have conscious preferences. The majority of the women have a desire for the current pregnancy; explain the current pregnancy was extremely wanted, and it is planned and supported however few of them expressed that the pregnancy was happened suddenly, but it was supported by the couple. The other also explains that pregnancy has happened unintentionally or suddenly; however, complain that no alternative other than accept it.

"I want this pregnancy ... My newborn died two years ago from cardiac problem. For my family and myself, hearing that news was devastating. Because of this, I would like to have another child". (Participant 1, T1DM, age 26)

"... I truly want this pregnancy. The provider says that I have a high chance of being infertile. In this case, having a child is a unique gift..." (Participant 11: hypertensive, age 35).

"...My current pregnancy was unplanned; I did not use family planning. Unintentionally, my partner isn't with me at present his work place is out of Addis Ababa and comeback at least every 6 moth". (Participant 17, obese, age 42)

"No... I want this pregnancy because I enjoy having children and would be delighted to have another one. Alhamdulillah's, I already have a child, but I would like to have additional. Childbearing makes interesting to me." (Participant 10, hypertensive, age 30)

"...It is happen suddenly, I hadn't plan to be pregnant but it happen. I was on pill by default pregnancy happen..." (Participant 4, T2DM, age 35).

5.4. Theme-II: Cultural barriers and the behavior of seeking health care

This main theme includes subtheme of positive health care seeking behavior and culture as a hindrance to the pursuit of health.

5.4.1. Subtheme-I: Positive Health care seeking behavior

Positive health care seeking behavior is any action undertaken by women with preexisting medical conditions who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy. In this study women who have had previous difficulties medical condition and pregnancy complicated has positive health seek activity such activity includes: Annual health check-up, regular follow-up, goes to health care facility and has been seen by health provider, visit health institution before pregnancy, seen a diet physician and tried to control the weight. Whereas those who have had no previous complications went to the hospital when they became pregnant for antenatal care. They do not know the medical treatment for obesity yet, despite knowing the presence of condition, had no follow-up and went to health seeking for antenatal care follow up. A sample response involved were

“....Before I got pregnant, I had visited the doctor for follow-ups regarding my diabetes. I was hospitalized after my blood sugar level rose”. (Participant 3, T2DM, age 34).

“....and I had regular check-ups as I want this pregnancyI had abortion before and was told that it might be due to my diabetes”. (Participant 19, T2DM, age 33).

"After discussing my weight problem with a dietitian, I made an effort to control it. But it is difficult to control... I can only control my weight when I'm not under any stress". (Participant 17, obese, age 42).

“...it is most commonly done only for diabetes mellitus patients. Unless it is beyond your means, all women need an annual check-up. An annual health check-up is essential; it includes determining the current status of every part of your body. I am the one user of it”. (Participant 6, T2DM, age 33)

5.4.2. Subtheme-II: Culture as a hindrance to the pursuit of health

Some participants engaged in cultural activities that hampered their pursuit of health, despite having a known preexisting medical condition. There were women who preferred traditional treatments over modern ones, such as holy water, traditional remedies, lemon, tosigne, and they were also frustrated saw a doctor. These may have a negative impact on receiving appropriate

preconception care. When participants do not receive care on time, they risk losing compressive preconception care, which is hampered by individual cultural practices. Some participants believed that preconception care and health seeking before pregnancy were not part of their culture, which prevented them from using PCC services. Women with preexisting conditions who delay preconception may face an increased risk of maternal and fetal complications. A sample response included

“Essentially, unless they are ill, Ethiopian women do not go to healthcare facilities. In our culture, going to the doctor is something you do not do until you are sick. I am one of those people who are unfamiliar with yearly health examinations”. (Participant 6, T2DM, age 38).

"I don't know...to tell the truth, I don't believe in the treatment, and I don't fully believe in science. My habit is self-treatment at home". (Participant 1, T1DM, age 26)

“If I have feeling of illness, and I have gone to holy water other than a hospital. I went to the hospital only for pregnancy follow-up”. (Participant 15, hypertensive, age 39)

"...I experienced severe headaches, dizziness, and blurred vision. Since my mother has hypertensive and I was seen here when she was drinking lemon, when her blood pressure was raised, by remembering this, I was drinking lemon combined with water while I felt severe headache and dizziness." .(participant 16, hypertensive, age 39)

“I try to avoid stress by eating food. If there is anything that anger to me I start eating dry injera when I am starting eating a food I have forgotten things that was anger to me and reduce the blood presser”.(Participant11, hypertensive, age 35)

5.5. Theme -III: Awareness of PCC and perception of preconception care

This main theme arose from the subtheme of participants' level of awareness and their perception of preconception care and source of information from women with chronic medical condition. These two subthemes are interconnected each other. Those who have good information about PCC raise awareness, whereas those without information miss out on the opportunity to beneficial the services.

5.5.1. Subtheme -I: Level of PCC awareness

The majority of diabetes, chronic hypertensive, and obese participants are aware of preconception care; however one third of participants with preexisting medical conditions are unaware about preconception care. The study found that one-third of women with preexisting medical conditions in this findings are unaware of preconception care, a crucial service for maternal and fetal health. Most women with diabetes and chronic hypertension receive preconception care, but some pregnant women do not receive it due to lack of awareness and unavailability of the service. Some obese women, while not aware of the need for preconception care, are often restricted from discussing the service due to its unfamiliarity. Preexisting diabetes and chronic hypertension and obese participant explain about the preconception care includes self-care, folic acid intake, stress management, fruit consumption, food and treatment correction, control preexisting condition, and awareness for their health condition.

"A woman seeking a pregnancy should be qualified to become pregnant and aware of her current health status," (Participant 16, hypertensive, age 38).

"....This is a self-care prior to pregnancy, as well as preparing the uterus for a comfortable birth. The care can be provided at home or in a hospital, such as eating healthy foods and taking care of one's personal hygiene prior to pregnancy". (Particiiant10, hypertensive, age 30)

"Yes, I know this before. It refers to your readiness before pregnancy. It includes things like feeding habits and vitamin and folic acid intake... I am aware that folic acid should be taken prior to pregnancy". (Participant 17, obese, age 42)

"I'm not sure if taking folic acid before getting pregnant is done. This is what I learned today." (Participant 1, T2DM, age 26).

"...Yes, if I had known PCC earlier before getting pregnant, I might have followed up..." (Participant 5, hypertensive, age 36)

".....I don't know what preconception means. There is no such kind of care in our health center, if there is, the doctor might have told me there" (Participant5, hypertensive, age 36).

5.5.2. Subtheme –III: Source of PCC information

The social media and healthcare providers are the primary sources of information for women with chronic medical conditions about preconception care. However, confidential information is often

obtained from healthcare providers. Other sources of information include friends, family, and the community. Education is also a significant source of information.

"My primary source of information was the Internet, though occasionally I also turned to television (Participant 16, hypertensive, age 38).

"...my source of information regarding PCC is any healthcare provider that I may consult. Most of the information you receive from media is false..." (Participant 4, T2DM, age 35).

"....Just health extension workers came to our village and though as and also I have gotten this information from doctor other than this I have no heard from others...."(Participant 8,T2DM,age 38).

"I got information for PCC from a health care provider during a hospital visiting" (Participant 17, Obese, age 42,).

"My source of information was the doctor when I was visited the hospital for routine hypertensive follow up". (Participant, 11, hypertensive, age 35)

5.6. Theme –IV: The need for preconception care

This main theme contains two subthemes: Pregnancy planning helps to lessen the severity of pre-existing conditions and preventing of unplanned pregnancy. The main theme and subtheme complement each other, as increasing preconception care utilization reduces complications and prevents unintended pregnancy while increasing contraception utilization, and vice versa. The primary goal of preconception care is to prevent unintended pregnancy and improve maternal and neonatal outcomes through reducing preliminary risks such as providing information about the chronic condition, the likelihood of pregnancy complications, and risk-reducing methods. The participant explained the potential benefits of preconception care in a variety of ways. Some of these participants explained that preconception care is very essential to early detection of the condition and readiness of the pregnancy, controlling the chronic condition before pregnancy, abstinence from previous substance addiction, starting folic acid that must be taken before pregnancy, identifying the type of medication given before and after pregnancy, and reducing the possible complications both maternal and fetal in general. They support the idea of planned pregnancy. On the contrary, there were women supporting unplanned pregnancies because they believe that pregnancy happens when it happens, that is a gift of God, and pregnancy might give once if that lost once there might not gain again. Additionally, some of the participant expect that PCC is required for teenagers and older women to reduce pregnancy complication.

5.6.1. Subtheme-I- Pregnancy planning helps to lessen the severity of pre-existing conditions

Most of the participants support the idea of pregnancy to be planned as they explained that pregnancy needs more attention because of their chronic medical condition, pregnancy is better to be planned and programmed furthermore they explained that when they planned pregnancy there are needed many prerequisites due to the presence of chronic medical condition it does not similar to the general population thus are, knowing their general health condition, well controlling the weight, screening sexual transmitted disease, able to controlling diabetes mellitus, identifying things to be done and not to be done, assured current general health condition before conception, and maturity in both economically and physically for the pregnancy. Some of them also stated that they are not at the stage of planning an additional baby because they are afraid of complications and are not yet ready to deliver an additional baby based on their current circumstances. They choose to live rather than complicate their life with pregnancy. They assumed that if preconception care is properly utilized for preexisting medical women, there is a greater tendency to be able to control the condition and reduce complication. A sample response contains

“...Ahhh.....thank you the care provider those advice the preconception care service gives to me a healthy child and the pregnancy period making healthy...” (Participant 11, hypertensive, age 35).

“Pregnancy needs to be planned and prepared for.... to lessen the severity of pre-existing conditions”. (Participant 13, obese, age 32)

“Preconception care is crucial for all pregnant women, especially those with chronic medical diseases, to reduce complication and the pregnancy itself should be planned”. (Participant 15, hypertensive, age 39)

“When a pregnancy is planned, it's great to take care of yourself and your child, but when it happens suddenly, it can be difficult”. (Participant 17, Obese, age 42)

“After delivery I will be consult the doctor and if there is probability of increase risk I will be discontinued the plan of additional pregnancy and if there is low risk I will continue the pregnancy”. (Participant 4, T2DM, age 35)

5.6.2. Subtheme-II: Prevention of unplanned pregnancy

Participants primarily used contraception and pregnancy planning to prevent unintended pregnancies, with some believing in God's provision, while most women favored after consultation

of health care provider and well control preexisting condition in addition contraception as the best method for preventing unintended pregnancies. Some participant share the factor affecting planned pregnancy were secondary infertility and sex determination.

"...If I were healthy, I would deliver up to my favorite, but this is restricted due to presence of the condition." (Participant 4, T2DM, age 35).

"...As you have seen, pregnancy is better than enough. It is better to live with your children and help them rather than complicate your health with additional childbearing" (Participant 16, hypertensive, age 38).

"My error caused the doctor to bear the risk, which is not fair. The doctor is currently taking the risk of pushing the pregnancy until the due date. There may also be an accident in my life that not only affects me but also complicates the fetal health. It is better to avoid unplanned pregnancy" (Participant 8, T2DM, age 38.)

"Yes...it is difficult for not only the fetus but also mine. It may result in the loss of my life unless I am well controlled the condition and planned pregnancy". (Participant 17, obese, age 42).

"I accept that if pregnancy happens, it is happen. You may lose your chance of pregnancy if you lost the gift of God because the power is in the hands of God. I believe pregnancy is the gift of God" (Participant 3, T2DM, age 34).

"Children are the gift of God. You are not going to bed for the purpose of childbearing, but God changed it, is that? ... If pregnancy is planned, it is okay, but the giver is God. He may give or deprive from you". (Participant 1, T2DM, age 26)

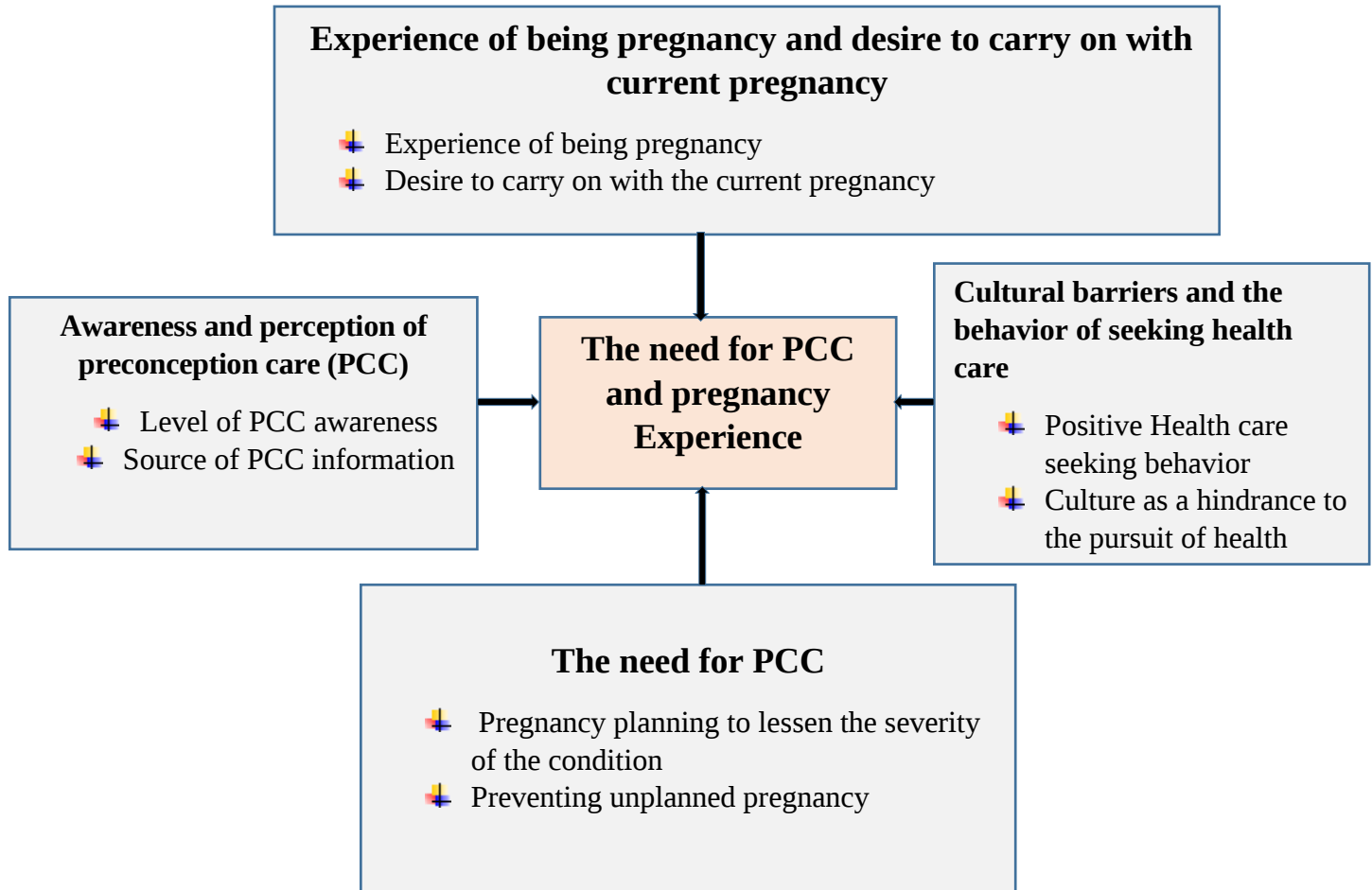


Figure -1 The diagrammatic summary of the thematic presentation of the study

CHAPTER - SIX

6. Discussion

In Ethiopia, little is known about the importance of preconception care for reproductive-age women suffering from chronic medical conditions. This study tried to address the need for preconception care (PCC) and the pregnancy experience of women with preexisting medical conditions at selected governmental hospitals in Addis Ababa. The quantitative study was conducted on awareness, knowledge, and utilization of preconception care, but there is limited qualitative study done on this topic in Ethiopia. So this study tried to address specific selected women with pre-existing diabetes, chronic hypertension, and obesity, considering their prevalence and increased risk of maternal, child, and neonatal mortality in Ethiopia (24,25,62).

The primary goal of preconception care is to raise awareness among women with preexisting medical conditions about the importance of weight control, glycemic control, and blood pressure control in optimizing pregnancy outcomes (15).

Participants in this study were able to discuss their pregnancy experiences, desire of carry out the current pregnancy, cultural barriers and the behavior of seeking health care, awareness and perception of PCC furthermore the need for preconception care.

Chronic medical conditions can impact a woman pregnancy experiences, with some experiencing healthy pregnancies but most experiencing boredom and stress. Previous pregnancy complications include loss of conciseness, uncontrolled sugar levels, infertility. This finding is in line with a previous study on role of preconception care women suffering from chronic condition (47). Women with preexisting conditions had also experienced poor perinatal outcomes in their previous pregnancy, such as early neonatal death, repeated spontaneous abortion, preterm delivery, and neonatal admission to neonatal intensive care unit This poor perinatal outcome and maternal complication are the result of a lack of compressive preconception care, which could have allowed for early detection and management of the cause (36).

Women with preexisting medical conditions have a variety of emotions and desires regarding potential pregnancy and childbearing. Some people clearly want or do not want a pregnancy, but many others are unsure, have mixed feelings, or do not have explicit preferences. The majority of the participant have a desire for the current pregnancy; explain that current pregnancy was

extremely wanted, and it is planned and supported however few of them expressed that the pregnancy was happened suddenly, but it was supported by the couple. The other also explains that pregnancy has happened unintentionally similar finding were in the previous studies (63).

The majority of diabetes and hypertensive participants engage in positive health seeking behavior, which is influenced by their prior chronic medical conditions and pregnancy experiences. Those who have had previous difficulties medical condition and complicated pregnancy has early health seek activity and had awareness possible complication whereas those who have had no previous complications delay health seeking and visited the hospital for antenatal care. This finding supported by A qualitative study done on pregnant women's perspectives and experiences found that women who had previously experienced complications were more confident in their clinical management and knew what to expect, whereas those without prior experience were often in shock when they developed complication. This indicated that the preexisting condition enhanced the participant seeking of preconception care due to the fear of pregnancy complications and a poor neonatal outcome (19,46,48).

Despite knowing they had a preexisting medical condition, some participants engaged in cultural activities that hampered their pursuit of good health. Some women preferred traditional treatments over modern ones, so as they treated themselves at home with holy water, traditional remedies and lemon. Some participants also mentioned how they were frustrated with going to the doctor and would prefer home treatment over care from a health care provider. These have a negative effect on receiving appropriate and compressive preconception care (64).

This study found that around one-third of women with preexisting medical conditions are unaware of preconception care, a crucial service for maternal, child and fetal health. Most women with diabetes and chronic hypertension receive preconception care, but some pregnant women didn't. The reason were lack of awareness or lack of source of information and inaccessibility of the service. Preexisting diabetes and chronic hypertension and obese participant explain about the preconception care includes self-care, folic acid intake, stress management, fruit consumption, food and treatment correction, control preexisting condition, and awareness about their health condition. Half of obese participants sought the advice of a diet physician and attempted to lose weight prior to their pregnancy. This study is in line with the study done on previous a qualitative study (65). Another finding which supported this finding is a qualitative study done in the USA,

which showed that hypertensive and diabetes mellitus women are aware of the increased risk of pregnancy complications while obese women were optimal (55).

While majority of the participants were aware of the concept of preconception care, its uses, and when and who required it, however less than half of the participants received preconception care. This indicated that women who have chronic medical conditions enhance their awareness, but all are not engaging in preconception care due to a lack information about the consequences of the condition. Controversially to this finding, a study conducted in Nigeria, women with chronic medical conditions lack awareness about the need of PCC for women with preexisting condition (51,56). This variation could be attributed to the fact that this study is conducted at a site where preconception care services are available and the study only included participants with specific preexisting conditions. This finding implies that the need for increasing access to and acceptance of PCC at the population level can improve reproductive health.

The social media was the most common source of information for this study participant, followed by the health care provider. When the participant asked about the source of information for preconception care their response were confidential information is often obtained from healthcare providers, and another most listed source of information was social medias, in addition to this other sources of information include friends, family, and the community. This could be attributed to increase as a result of routine preexisting condition follow-up and increased health-related social media's coverage. This finding is in line with previous study conducted in Sub-Saharan Africa found that health care provider were the most common source of information about PCC (22,29).

Most obese and hypertensive women are confidential about preconception care to reduce their risk of pregnancy complications. If they prepare themselves well, control the hypertension, and reduce their weight, they are able to deliver a healthy child without complications, but if the condition is uncontrolled, it increases their risk of life threatening condition. Almost half of the participants are afraid of pregnancy complications and have awareness about possible maternal and neonatal complications. Those who had previous pregnancy complications are more frustrated than others due to the increasing rate of re-existing with the previous condition. Their fear of complications depends on their preexisting condition. Those who had diabetes mellitus listed possible maternal complications as increasing or reducing their sugar level, loss of consciousness and transmission of the DM to the newborn, Down syndrome, and autism (66), whereas those who had chronic

hypertensive women had fear of increase their blood pressure, eclampsia, and nonatal distress (67,68). On the other hand, obese women believe that their weight increases the risk of a cesarean section, surgical infection, difficulty of labor, and low birth weight. This shows that due to the benefits of preconception care, women with chronic medical conditions increase their readiness for possible pregnancy complications.

This study discovered that the participants held differing opinions about unplanned pregnancy. Majority of participants who has preconception awareness approve that pregnancy should be planned and that unintended pregnancy should be avoided. However, some participant against pregnancy planning perceived that if pregnancy happen it is happened and childbearing is a gift of God. To summarize, pregnancy planning is influenced by religious beliefs, fear of side effect of contraception. This finding is consistent with a study conducted on the pregnancy planning health information and service needs of women with chronic medical conditions in Austria (66).

The preconception care utilization for those women with preexisting medical conditions also creates an influence on shifting the idea of a pregnancy. Since they saw the attention of the care provider restricted follow-up and daily advice, they pray to save the current pregnancy free from complication. The participants expected that the problem of unintended pregnancy solved with regular follow-up of preexisting condition and clear communication with care provider. This finding is in line with a previous study conducted in Malaysia on the perception of pre-pregnancy care for preexisting medical conditions revealed that about 68.2% of preexisting chronic medical condition clients were frustrated with the higher risk of developing complications if pregnancy occurred with unintentional, whereas about 69.7% of patients felt that they should discontinue their future pregnancy (58).

The important care that is able to address unplanned pregnancy is creating awareness about the importance of contraception utilization and preventing misconceptions about contraception usage, thus placing individuals at high risk. All participants were aware of contraception, but the majority of them did not use it. The most common barriers to contraception utilization for the participant were fear of side effects, rumors, and religion. Only two chronic hypertensive and one obese participant were knew that their chronic medical condition limited their option of contraception. This finding supported with similar study conducted in Nigeria (51).

6.1. Strength and limitation of the study

6.1.2. Strength

This study is the first in the study area.

The study is exclusively based on primary data collected from the selected sample.

6.1.3. Limitation

The study is conducted only on women who had chronic medical conditions

The information was gathered exclusively from one public hospital and the findings of the study is limited to the study setting.

This research is limited to the client's experience requiring preconception care; the opinions and experiences of healthcare practitioners regarding these matters were not included.

Social desirability of bias

CHAPTER –SEVEN

7. CONCLUSION AND RECOMMENDATION

7.1. Conclusion

This study revealed that around two-thirds of the participants were aware of the usage of PCCs. The results beg the question of why the rates of PCC usage are lower among women with prior medical condition. Lack of awareness, service inaccessibility, cultural practice, and poor care provider to patient interaction were all influenced preconception care utilization. Pregnancy planning and readiness for pregnancy complications enhance the benefits of preconception care services for those in need. It is to be expected that those who had previous pregnancy complications enhanced early health seeking activity. Preconception care, including contraception, early detection of complications through screening, and reducing fear of neonatal complications, significantly reduces unintended pregnancies. Most of the participants are aware of contraception, but few understand that their health condition limits their choice of contraception method.

7.2. Recommendation

For mothers:

Preconception care services should be used by all women with past medical disorders. They should also prepare themselves before getting pregnant and be fully informed of the risks associated with their illnesses, both for the mother and the unborn child.

Health Facilities and Providers:

The community and women in the reproductive age who attend health facilities should be prepare and given preconception care leaflets and posters by the health facilities in collaboration with the Addis Ababa Health Bureau. Health care professionals are expected to provide adequate counselling to women who have had previous illnesses before being pregnant. It is necessary to improve patient to provider contact through efficient communication. The health authority should also improve PCC service accessibility and use accessible media to boost community awareness.

Researchers: Additional nationally representative research is required to determine the variables that prevent women from using preconception care and utilization of PCC for unmarried peoples.

CHAPTER – Eight

8. References

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CHAPTER NINE-ANNEX

ANNEX-A: Respondents information sheet, English version

This study exploring the need for preconception and the pregnancy experience of women with pre-existing medical conditions in Public health Facilities in Addis Ababa, Ethiopia, 2024.

By: Binalfew Abebe

Name of organization: Addis Ababa University, College of health Sciences School of Nursing and Midwifery.

Name of sponsor: Addis Ababa University

Purpose of research: The aim of this study is exploring the need for preconception and the pregnancy experience of reproductive age women with pre-existing medical conditions in Public health Facilities in Addis Ababa, Ethiopia, 2024.

Participants to be included: Purposely selected women with preexisting condition (DM, obesity and hypertension)

Benefits: Participating in the study has no direct cost but it helps to you beneficial from the concept of preconception care and for as in deep understanding of your pregnancy experience and need of preconception care in the presence of preexisting condition.

Incentive/payment for participating: You had not been provided any incentives or payment to take part in this project.

Risk and Discomfort: The study was carried out by asking already prepared and semi-structured questions. The procedure doesn't cause any physical or psychological trauma. Furthermore, you will not be forced to respond to the information you do not know, and by participating in this research project, you may feel that it has some risks or discomfort, but it has no risk or discomfort. The interview may take approximately 45 minutes.

Confidentiality: The information collected from you will be kept confidential. It will be stored in

a file using codes without your name. And it will not be exposed to anyone except the investigators. In addition, it will be used only for this particular research and not for other purposes.

Right to refuse or withdraw: You have a full right to refuse to participate in this research. You also have the full right to withdraw from this study at any time you wish, without losing any of your rights.

Consent: Your participation in the study will be totally based on your willingness. You have the right not to participate from the beginning or to stop at any time after starting participation. You will not be forced to respond to the information you do not know. Finally, I would like to acknowledge your responses after listening to me. If you want to know more information, you can contact the individual, and you may ask at any time you want.

ANNEX-B: Consent sheet English Version

Informed Consent

This questionnaire is prepared to explore pregnancy experience and the need for preconception care among pregnant women with preexisting conditions visiting the SPHMMC obstetrics and gynecology unit. The study is made for the partial fulfillment degree of Master in Maternity and Reproductive Health Nursing thesis. The questionnaire guide contains semi-structured, open-ended questions.

You are therefore kindly requested to provide real answers to the questions. The information you provide is secret and is used only for the purpose of this study. If you have any questions, don't hesitate to ask the interviewer. Your cooperation and participation until the completion of the questionnaire are very necessary for the successful completion of the study. I am therefore asking for your authentic willingness. However, you have the right to decline if you are not willing. Then fill in **yes** if you are voluntary and **no** if you are involuntary below.

YES _____ NO _____

If your answer is yes, please put your signature on the space provided

Signature _____

Thank you for your cooperation

Data collector sign: _____

Investigator name: _____

Investigator phone no: _____

Anonymous Identity code of the participant: _____

Investigator address. Binalfew Abebe Nigus

Phone No: +251922432954

Email address: binalfewabebe4@gmail.com

SEMI-STRUCTURED IN-DEPTH INTERVIEW GUIDE

Title: Exploring the need for preconception and the pregnancy experience of reproductive age women with pre-existing medical conditions in Public health Facilities in Addis Ababa, Ethiopia, 2024: A qualitative study

Participant ID: _____

INTERVIEWER INITIALS (XXX): _____

DATE: _____ START TIME: _____ AM/PM End Time _____

Introduction and Interview Purpose

Welcome and thank you again for agreeing to participate in this study. I'm _____, and I will be talking with you regarding your pregnancy experiences and your interactions with your provider during your pregnancy, and views and understanding about preconception care.

Consent

- For the purpose of analysis, I would like to record our conversation. I will just take notes if you would prefer that our conversation not be recorded.

Do you have any questions before we begin?

I. Pregnancy Experiences and Engagement with Provider with preexisting medical condition

1. Tell me about your healthcare; for example, how often do you see a doctor and for what reasons?
2. Let's talk about your experience preexisting condition during your most recent pregnancy
Did you want to be pregnant at the time or would you have wanted to delay it a little?
Why?
What type of medical problem did you experience and what component of PCC did you receive? Did you receive any special care at the time? Why and for what? Were you healthy or ill? What medications were you using? Did you believe that they need to be changed or adjusted? Why?

II. Women's Awareness about PCC and Source of Information

1. What is your understanding of preconception care?

2. What does the term mean to you? Who needs such care and for what?
3. What component of PCC did you received?
 - ✓ Probe: PCC aims to prepare the mother and baby to maintain their health from conception to delivery and beyond.
 - ✓ Includes **Behavioral changes**: [Folic acid intake, contraception, discontinue alcohol and smoking, Wt. management and balanced diet, STD screening including HIV, HBV, Syphilis, CA etc.]

III. Information sources about PCC

1. What were your information sources about PCC when planning to get pregnant?
2. Tell me in your own words what you have heard, if anything, about PCC

Probe: [Friends, family, internet, media and providers?]

IV. Potential Benefits of PCC

1. Some people think pregnancies should be planned and some people think that pregnancy happens when it happens. What do you think?
2. What do you mean when you say you are planning a future pregnancy?
3. Does planning pregnancy mean changing any of ‘**your behaviors?** ‘ e.g. contraception use

V. Potential barrier of PCC

1. What were the barrier that prevent you from participating in PCC? What and how?

VI. Future pregnancy plan

1. We would like to know if you are thinking about having any/more children in the future.
2. What factors are important to you in thinking about whether or not you want to have any/more children?
3. Does having diabetes/having hypertension/being overweight factor into your decision about having children in the future?

VII. Risk perception of adverse pregnancy outcomes

1. Do you think that diabetes/hypertension/being overweight makes you any more or less likely to have a difficult pregnancy?
2. Do you think diabetes/hypertension/being overweight makes you any more or less likely to have a baby with a complication?

3. Are there any consequences you have **experienced with the current pregnancy** that could have been avoided if you knew about and used preconception care? Please provide details

VIII. Contraceptive use

1. Does having diabetes/hypertension/being overweight affect your decision about what type of birth control to use?
2. Do you think certain types of birth control are less safe or less effective because you are diabetic/hypertensive/overweight?

IX. Demo-graphic data

1. Age _____
2. Educational Status _____
3. Marital status _____
4. BMI _____
5. Parity _____
6. Type of preexisting condition _____

Closing

Thank you for your time and thoughtful responses. That is all the question that I have for you. Is **there anything else that you think we should know that I did not ask about?**

[Pause for participant response]

Thanks again for your time.

አባሪ

አባሪ-ሀ፡ የአማረኛ መረጃ ወረቀት፣ የእንግሊዝኛ ቅጂ

የፕሮፖዛሉ ርዕስ፡ ይህ ጥናት በአዲስ አበባ ፣ ኢትዮጵያ ፣ በሕዝብ ጤና ተቋማት ውስጥ የቅድመ እርግዝና እንክብካቤ አገልግሎትን አስፈላጊነት ለመደገፍ በልዩ ሥር የሰደዱ የእናቶች በሽታዎች አውድ ውስጥ የእርግዝና ልምዶችን እና የቅድመ እርግዝና-ሀሳብ የጤና እውቀትን ይዳስሳል።

አዘጋጅ፡ብናልፈው አበበ

የድርጅቱ ስም፡ አዲስ አበባ ዩኒቨርሲቲ፣ የጤና ሳይንስ ኮሌጅ የነርቪንግ እና ሚድዋረር ትምህርት ክፍል።

የስፖንሰር ስም፡-አዲስ አበባ ዩኒቨርሲቲ

የምርምር ዓላማ፡-አላማው ይህ ጥናት በ 2024፣ በአዲስ አበባ ፣ ኢትዮጵያ ፣ በሕዝብ ጤና ተቋማት ውስጥ የቅድመ እርግዝና እንክብካቤ አገልግሎትን አስፈላጊነት ለመደገፍ የእርግዝና ልምዶችን እና የቅድመ እርግዝና-ሀሳብ የጤና ዕውቀትን በልዩ የእናቶች በሽታዎች አውድ ውስጥ ይዳስሳል።

የሚካተቱት ተሳታፊዎች፡- የተመረጡ ቅድመ ሁኔታ ያለባቸው ነፍሰጡር እናቶች (ስኻር፣ ከመጠን ያለፈ ውፍረት እና ግፊት ናቸው)

ጥቅሞች፡-በዚህ ጥናት ውስጥ ለመሳተፍ ምንም አይነት ቀጥተኛ ጥቅም የለም, ነገር ግን ቀደም ሲል የነበረ ሁኔታ ሲኖር ስለ እርግዝና ልምድ እና ቅድመ ፅንሰ-ሀሳብ እንክብካቤን በጥልቀት እንድንረዳ ያግዛል.

ለመሳተፍ ማበረታቻ/ክፍያ፡-በዚህ ፕሮጀክት በመሳተፍ ምንም አይነት ማበረታቻ ወይም ክፍያ የለውም።

ስጋት ወይም ምችት ማጣት፡ጥናቱ የሚካሄደው አስቀድሞ የተዘጋጀ እና ከፊል መዋቅር ጠያቂን በመጠየቅ ነው። አሰራሩ ምንም አይነት አካላዊ እና ስነልቦናዊ ጉዳት አያስከትልም። በተጨማሪም ለማያውቁት መረጃ ምላሽ ለመስጠት አይገደዱም, እና በዚህ የምርምር ፕሮጀክት ውስጥ በመሳተፍ, አንዳንድ አደጋዎች ወይም

ምቶች እንዳሉ ሊሰማዎት ይችላል፣ ነገር ግን ምንም አይነት ስጋት እንደማይኖረው ቃል እንገባልዎታለን። ቃለ መጠይቁ በ አማካኝ 60 ደቂቃ ሊወስድ ይችላል።

ሚስጥራዊነት፡-ከእርስዎ የሚሰበሰበው መረጃ በሚስጥር ይጠበቃል። ያለእርስዎ ስም ኮድ በመጠቀም በፋይል ውስጥ ይከማቻል። እናም ከመርማሪዎቹ በስተቀር ለማንም አያጋልጥም። በተጨማሪም፣ ለዚህ የተለየ ምርምር ብቻ ጥቅም ላይ ይውላል እና ከዚህ ውጭ የተልየ አላማ የለውም ።

ከጥናቱ የመውጣት መብት፡-በዚህ ጥናት ውስጥ ላለመሳተፍ ሙሉ መብት አልዎት። እንዲሁም ማንኛውንም መብቶችዎን ሳያጡ ከዚህ ጥናት በማንኛውም ጊዜ የመውጣት ሙሉ መብት አለዎት።

ፍቃድ፡ በጥናቱ ውስጥ ያለዎት ተሳትፎ ሙሉ በሙሉ በእርስዎ ፍላጎት ላይ የተመሰረተ ይሆናል። ከመጀመሪያው ጀምሮ ላለመሳተፍ ወይም ተሳትፎ ከጀመሩ በኋላ በማንኛውም ጊዜ ለማቆም መብት አለዎት። ለማያውቁት መረጃ ምላሽ ለመስጠት አይገደዱም።

በመጨረሻም፣ እኔን ካዳመጡኝ በኋላ ለሰጣችሁኝ ምላሽ ላመሰግናችሁ እወዳለሁ።

ተጨማሪ መረጃ ማወቅ ከፈለጉ የጥናቱን ባለብት ማነጋገር ይችላሉ እና በፈለጉት ጊዜ መጠየቅ ይችላሉ።

አባራ-ለ፡ የፍቃድኝነት ወረቀት

በመረጃ የተደገፈ ስምምነት

ይህ መጠይቅ የተዘጋጀ ነው። በቅ/ጽ/ሆ/ሚ/ም/ኮ ውስጥ ቅድመ-ነባር የጤና እክል ካጋጠማቸው ነፍሰ ጡር እናቶች መካከል የእርግዝና ልምድ እና የቅድመ እርግዚና-ሀሳብ እንክብካቤ አስፈላጊነትን ማሰስ. ጥናቱ የሚደረገው በእናቶች እና በስነተዋልዶ ነርሲንግ የማስተር ፕሮፖዛል በከፊል ለማሟላት ነው። የመጠይቁ መመሪያው ከፊል መዋቅር ክፍት የሆነ ይዟል።

ስለዚህ ለጥያቄዎቹ ትክክለኛ መልስ እንድትሰጡ በትህትና ተጠይቅዋል። ያቀረቡት መረጃ ሚስጥራዊ ነው እና ለዚህ ጥናት ዓላማ ብቻ ጥቅም ላይ ይውላል። ማንኛቸውም ጥያቄዎች ካሉዎት ጠያቂውን ከመጠየቅ ወደኋላ አይበሉ። መጠይቁ እስኪጠናቀቅ ድረስ የእርስዎ ትብብር እና ተሳትፎ ለጥናቱ ስኬታማነት በጣም አስፈላጊ ነው። ስለዚህ የእርስዎን ፍቃድኝነት እጠይቃለሁ ነገር ግን፣ ፈቃደኛ ካልሆኑ ውድቅ የማድረግ መብት አልዎት። በፈቃድኝነት ከሆኑ **አዎ ይሙሉ**፣ ፍቃድ ካልሆኑ **አይ** የሚለውን ይሙሉ።

አዎ /አይ መልስዎ አዎ ከሆነ፣ እባክዎትን ፈርማዎትን በተዘጋጀው ቦታ ላይ ያስቀምጡልን።

ፊርማ _____

ለትብብርዎ እናመሰግናለን!

የመረጃ ሰብሳቢ ፊርማ፡_____

የመርማሪ ስም፡_____

መርማሪ ስልክ ቁጥር፡_____

የተሳታፊው ስም-አልባ ማንነት ኮድ፡_____

አባሪ ፣ ሐ፣ ለቃለ መጠይቅ የተዘጋጀ በክፈል የተዋቀረ ጥያቄ

ክፈል-የተዋቀረ ጥልቀት ያለው የቃለ መጠይቅ መመሪያ

ርዕስ:- በአዲስ አበባ፣ ኢትዮጵያ ውስጥ በሕዝብ ጤና ተቋማት ውስጥ ቅድመ-ነባር የጤና እክል ያለባቸውን እናቶች የእርግዝና ተሞክሮ ማሰስ፣ የጥራት ጥናት።

የተሳታፊ መታወቂያ፡ _____

የቃለ-መጠይቅ መግቢያዎች (XXX) ፡- _____

ቀን፡- _____ የመጀመሪያ ሰዓት፡ _____ ጥዋት/ከሰዓት _____ ያበቃበት ሰዓት _____

የመግቢያ እና የቃለ መጠይቅ ዓላማ

እንኳን ደህና መጣችሁ እና በዚህ ጥናት ላይ ለመሳተፍ ስለተስማማችሁ በድጋሚ እናመሰግናለን። እኔ _____ እባላልሁ፣ እና ስለ እርግዝና ልምዶች እና በእርግዝና ወቅት የህክምና አገልግሎት ሰጪዎ ጋር ስለሚደርጉት ግንኙነት እና ስለ ቅድመ እርግዝና-ሀሳብ እንክብካቤ እይታ እና ግንዛቤ ከእርስዎ ጋር እንነጋገራለን ።

ፍቃድ

- የእርስዎ ፍቃደኝነት ከሆነ ለትንታኔ ዓላማ ንግግራችንን የድምጽ ቅጽ መመዝገብ እፈልጋለሁ። ንግግራችን እንዳይመዘገብ ከፈለግን ማስታወሻ ልውሰድ?

ከመጀመራችን በፊት ጥያቄዎች ካሉዎት?

I- የእርግዝና ልምዶች እና ከህክምና ባልሙያ ጋር ያለው ግንኙነት፡-

1. ስለ ጤና ጥበቃዎ ይንገሩኝ; ለምሳሌ, ምን ያህል ጊዜ ዶክተር ይመለከታሉ እና በምን ምክንያቶች?
2. በቅርብ እርግዝናዎ ወቅት ስላጋጠመዎት ነገር እንነጋገር?
 - በወቅቱ እርግዝና ይፈልጉ ነበር ወይስ ትንሽ ማዘግየት ይፈልጉ ነበር? ለምን?
 - በእርግዝናዎ ወቅት ምን ልዩ እንክብካቤ አግኝተዋል? ምን እና ለምን? በእርግዝናዎ ወቅት ጤነኛ ነበሩ ወይስ ታመው ያቃሉ? ምን ዓይነት መድኃኒቶችን ይጠቀሙ ነበር? መለወጥ ወይም ማስተካከል ነበረባቸው? ለምን?

II- ስለ ቅድመ እርግዝና እንክብካቤ እና የእናቶች የመረጃ ምንጭ እና ግንዛቤ:-

1. ስለ ቅድመ እርግዝና እንክብካቤ ምን ግንዛቤ አለዎት?
2. ቃሉ ለእርስዎ ምን ማለት ነው? ማን እንዲህ ዓይነት እንክብካቤ ያስፈልገዋል እና ለምን?
 - ✓ ምርመራ: ቅድመ እርግዝና እንክብካቤ ለእናት እና ለሕፃን ከተፀነሱ ጀምሮ እስከ ወሊድ እና ከዚያም በላይ ጤንነታቸውን እንዲጠብቁ ለማዘጋጀት ያለመ ነው።
 - ✓ የባህሪ ለውጦችን ያካትታል:- አይረን መውሰድ፣ የወሊድ መከላከያ መጠቀም፣ አልኮልን ማቆም፣ ማጨስ፣ ክብድትን መቀነስ እና የተመጣጠነ አመጋገብ፣ የአባላዘር በሽታ ምርመራ ለምሳሌ[ኤች አይቪ፣ ኤች.ቢ.ቪ፣ ቂጥኝ፣ ካንሰር ወዘተ.]

III- ስለ ቅድመ-እርግዝና እንክብካቤ የመረጃ ምንጮች:-

1. ለማርገዝ ሲያቅዱ ስለ ቅድመ-እርግዝና የእርስዎ የመረጃ ምንጮች ምን ነበሩ? ስለ ቅድመ-እርግዝና እንክብካቤ የሆነ ነገር ካለ የሰማሸውን በራስሽ አባባል ንገረኝ።

ምርመራ: [ከጓደኞች፣ ከቤተሰብ፣ ከኢንተርኔት፣ ከሚዲያ እና ከህክምና ባለሙያ?]

IV- የቅድመ-እርግዝና እንክብካቤ ሊሆኑ የሚችሉ ጥቅሞች:

1. አንዳንድ ሰዎች እርግዝና መታቀድ አለበት ብለው ያስባሉ እና አንዳንድ ሰዎች እርግዝና በሚከሰትበት ጊዜ እንደሚከሰት ያስባሉ። እርስዎ ምን ይመስልዎታል?
- 2-ለወደፊት እርግዝና ለማቀድ እያሰብኩ ነው ስትይ ምን ማለትሽ ነው?
- 3.እርግዝናን ማቀድ ማለት የትኛውንም "ባህሪሽን መቀየር ማለት ነው? "ለምሳሌ የወሊድ መከላከያ መጠቀም?

V- የ ቅድመ-እርግዝና ክትትል መሰናክሎች

1. የቅድመ እርግዝና ክትትል ውስጥ እንዳይሳተፉ የሚከለክሉዎትን መሰናክሎች ያብራራሉ? ምን እና እንዴት?

VI- የወደፊት እርግዝና ዓላማ

1. ለወደፊት ተጨማሪ ልጆች መውለድ ያስባሉ?
- 2.ተጨማሪ ልጆች እንዲኖርዎት ወይም እንዳይኖርዎት ሊያድርጉ የሚችሉ ጠቃሚ ምክንያቶች ምን ምን ናቸው?
- 3.ለወደፊት ልጆች ለመውለድ በሚወስኑት ውሳኔ ላይ የስኳር ህመም/የደም ግፊት/የወፍረት መሆንም ምክንያት ይሆናል?

VII ስለ አሉታዊ የእርግዝና ውጤቶች ስጋት ግንዛቤ

1. የስኳር በሽታ/የደም ግፊት/ከመጠን በላይ መወፈር ለአስቸጋሪ እርግዝና የመጋለጥ እድሎች ከፍተኛ ደረጃ ያሉ እንዲሆን የሚያደርግ ይመስልዎታል?
2. የስኳር ህመም/የደም ግፊት/የወፍራም መሆን ችግር ያለበት ልጅ የመውለድ ዕድሉ ከፍተኛ ደረጃ ያሉ ወይም ያነሰ እንዲሆን የሚያደርግ ይመስልዎታል?
3. የቅድመ እርግዝና እንክብካቤን ካወቁ እና ከተጠቀሙበት አሁን ባለው እርግዝና ያጋጠሙዎት ውጤቶች አሉ? እባክዎ ዝርዝሮችን ያቅርቡልኝ?

VIII-የወሊድ መከላከያ አጠቃቀም

1. የስኳር ህመም/የደም ግፊት/የወፍራም መሆን ምን ዓይነት የወሊድ መቆጣጠሪያ መጠቀም እንዳለበት በሚወስኑት ውሳኔ ላይ ተጽእኖ ይኖረዋል?
2. የስኳር ህመምተኛ/ከፍተኛ የደም ግፊት/የወፍራም ውፍረት ስላለብዎት የተወሰኑ የወሊድ መቆጣጠሪያ ዓይነቶች ደህንነታቸው የተጠበቀ ወይም ያነሰ ውጤታማ ናቸው ብለው ያስባሉ?

IX-ማሳያ-ግራፊክ ውሂብ፡

1. ዕድሜ _____
2. የትምህርት ሁኔታ _____
3. የጋብቻ ሁኔታ _____
4. ቀደም ሲል የነበረ የጤና ሁኔታ _____
5. ከዚህ በፊት ስንት ልጆች ወልድዋል _____

መዝጊያ

ለጊዜዎ እና ከውስጥዎ ለምነጩ ምላሽዎ እናመሰግናለን። ለእርስዎ ያሉኝ ጥያቄዎችን ጨርሻለሁ። ማወቅ ያለብን ሌላ ያልጠየቅኩት ነገሮች ካሉ?

[ለተሳታፊ ምላሽ ባለበት አቁም]

ለጊዜዎ በድጋሚ አመሰግናለሁ።

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