

ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCES
SCHOOL OF NURSING AND MIDWIFERY
DEPARTMENT OF MIDWIFERY

**LIVED EXPERIENCES OF INFERTILE COUPLES WHO SEEK
TREATMENT AT SAINT PAUL HOSPITAL MILLENNIUM MEDICAL
COLLEGE, ADDIS ABABA, ETHIOPIA, PHENOMENOLOGICAL
STUDY, 2023 G.C.**

PRINCIPAL INVESTIGATOR; HAYMANOT ZEWDE

ADVISORS; ROZA TESHOME (MSC, ASSISTANT PROFESSOR)

KEREBIH ABERE (MSC, LECTURER)

**A RESEARCH THESIS TO BE SUBMITTED TO ADDIS ABABA
UNIVERSITY, COLLEGE OF HEALTH SCIENCES, SCHOOL OF
NURSING AND MIDWIFERY IN PARTIAL FULFILLMENT OF THE
REQUIREMENT FOR THE DEGREE OF MASTER IN MATERNITY AND
REPRODUCTIVE HEALTH NURSING.**

JUNE, 2023G.C

ADDIS ABABA ETHIOPIA
ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCE
SCHOOL OF NURSING AND MIDWIFERY
DEPARTMENT OF MIDWIFERY

Name of Investigator	Haymanot Zewde (BSc)
Name of Advisors	Roza Teshome (M.Sc., Assistant. Professor,)) Kerebih Abere (M.Sc.)
The full title of the research project	Lived Experiences Of Infertile Couples Who Seek Treatment At Saint Paul Hospital Millennium Medical College, Addis Ababa, Ethiopia, 2023 G.C
Study period	February 20- March 20, 2023
Budget	26,795 ETB
Study Area	Saint Paul Hospital Millennium Medical College center for fertility and reproductive medicine, Addis Ababa, Ethiopia
Contact address of Investigator	E-mail: haymizewde18@gmail.com phone: +251919758415
Contact address of the Advisors	E-mail: rozateshome2007@gmail.com kerebihab2015@gmail.com phone: +251911028610 +251912248621

APPROVAL BY THE BOARD OF EXAMINATION

This thesis by Haymanot Zewde is accepted in its present form by the board of examiners as satisfying thesis requirement for the degree of masters in maternity and reproductive health nursing.

Examiner:

Haweni Adugna (MSc, Assistant professor)

Name

Rank

Signature

Date

Research Advisors:

Roza Teshome (MSc, Assistant professor)

Name

Rank

Signature

Date

Kerebih Abere (MSc, Lecturer)

Name

Rank

Signature

Date

Department Head:

Endalew Gemechu (PhD)

Name

Rank

Signature

Date

STATEMENT OF DECLARATION

By my signature below, I declare and affirm that this thesis is my original work. I have followed all ethical principles of scholarship in the preparation, data collection, data analysis, and completion of this thesis. All scholarly matter that is included in the thesis has been given recognition through citation. I affirm that I have cited and referenced all sources used in this document. Every effort has been made to avoid plagiarism in the preparation of this thesis. This thesis has been accepted as a partial fulfilment of the requirement for graduate degree from the Addis Ababa University, College of Health Sciences, School of Allied Health Sciences, Department of Nursing and Midwifery. It has never been presented and submitted in a whole or in part, in this or any other university for the award of degree, diploma or other qualification certificates.

Student:

Name: Haymanot Zewde Signature: _____ Date: _____

Research Advisors:

1. Roza Teshome (M.Sc., Assistant professor)	_____	_____
Name Rank	Signature	Date
2. Kerebih Abere (M.Sc., Lecturer)	_____	_____
Name Rank	Signature	Date

ACKNOWLEDGEMENT

First I would like to express my gratitude to the School of Nursing and Midwifery at Addis Ababa University's College of Health Sciences for giving me the opportunity to perform this thesis.

Secondly, My sincere appreciation to my respected advisors Mrs Roza Teshome and Mr. Kerebih Abere for giving me their time, attention, their constructive and fruitful advice throughout the study period.

Finally, I would like to thank Saint Paul hospital millennium medical college center for fertility and reproductive medicine care providers and all study participants for their cooperation in providing thorough information on this study.

LIST OF ABBREVIATIONS

A.A.....	Addis Ababa
AAU.....	Addis Ababa University
ETB.....	Ethiopian Birr
G.C.....	Gregorian calendar
ICPD.....	International Conference on Population and Development
IRB.....	Institutional review board
IUI.....	Intrauterine insemination
IVF.....	Invitro fertilization
MOH.....	Ministry of health
NHIF.....	National Health Insurance Fund
PI.....	Principal investigator
SPHMMC.....	Saint Paul hospital millennium medical college
TFR.....	Total fertility rate
WHO.....	World health organization

TABLE OF CONTENTS

Contents

ACKNOWLEDGEMENT	v
LIST OF ABBREVIATIONS	vi
LIST OF TABLE	ix
LIST OF FIGURE.....	x
ABSTRACT.....	xi
1. INTRODUCTION	i
1.1. Background	1
1.2. Statement of the Problem.....	3
1.3. Significance of the Study	5
2. LITERATURE REVIEW	6
2.1. Introduction to Infertility and its treatment.....	6
2.2. Impacts of infertility and its treatment journey	6
2.2.1 Psychological Impacts of Infertility	6
2.2.1.1. Socio-cultural impacts of Infertility.....	8
2.2.1.2. Financial Impacts of Infertility Treatment	10
2.3. Coping mechanisms for infertility impacts	11
2.4. Theoretical Framework	12
3. OBJECTIVES	13
3.1. General objective	13
3.2. Specific Objectives	13
4. METHODS AND MATERIALS.....	14
4.1. Study setting and period.....	14
4.2. Study design.....	14
4.3. Study participants.....	14
4.4. Sample size and Sampling techniques	14
4.5. Eligibility Criteria	15
4.5.1 Inclusion criteria	15
4.5.2 Exclusion Criteria	15

4.6. Data collection tools and procedure.....	15
4.7. Data processing and Analysis	16
4.8. Trustworthiness.....	17
4.9. Operational Definitions.....	17
4.10. Ethical considerations	18
4.11 Dissemination of the study finding	18
5. RESULT	19
5.1. Characteristics of the Participants.....	19
5.2. Emerged Themes	21
Theme 1: Emotional-psychological impacts.....	23
Theme 2; Impacts on Relationship.....	24
Theme 3; Cultural Impacts.....	27
Theme 4; Treatment Related Challenges	29
Theme 5; Coping Mechanisms	31
6. DISCUSSION	33
7. STRENGTHS AND LIMITATIONS	37
8. CONCLUSION AND RECOMMENDATION.....	38
8.1. Conclusion	38
8.2. Recommendation	38
9. REFERENCES	40
ANNEXES.....	42
Annex-I. Information sheet for Participants in the Research Study.....	42
Annexes II: English version of a semi-structured questionnaire.....	43
Annex III: በጥናቱ ለሚሳተፉ የስምምነት ዉል እና አጠቃላይ መረጃ.....	48
Annex IV የአማረኛ ቃለ-መጠይቅ	50

LIST OF TABLE

Table 1; Characteristics of infertile couples who seek treatment at Saint Paul hospital millennium medical college, 2023(n=15 couple/30 individuals).....	20
Table 2. Themes, sub-themes, codes, and code description identified through interviews of infertile couples who seek treatment at SPHMMC. Ethiopia, 2023.	21

LIST OF FIGURE

Figure 1 Theoretical framework of the stress and coping mechanisms of infertility adapted from bio psychosocial theory (42).....	12
Figure 2 Figure of emerged themes on the lived experiences of infertility among couples who seek treatment at SPHMMC.	32

ABSTRACT

Background: In almost all cultures, having children and raising them are significant aspects of life, and for African women including Ethiopian women, it is their most important duty. Infertility is a medical condition that can touch every aspect of a couple's life with a wide range of sociocultural, psychological, and financial problems for individuals as well as couples. There is a scarcity of literature in the country focusing on couples experiencing infertility and going through a treatment journey.

Objective: This study aims to explore the lived experiences of infertile couples focusing on psychological, sociocultural and financial aspects among couples who seek treatment at Saint Paul hospital millennium medical college, Addis Ababa, Ethiopia 2023 G.C

Methods: a qualitative study with a phenomenological study design was employed from February 20- March 20/2023 among 15 infertile couples who seek infertility treatment at Saint Paul hospital millennium medical college. Study participants were selected purposively and the interviews were conducted with a face-to-face in-depth interview using a semi-structured interview guide. The analysis was conducted with thematic analysis by using both a priori codes (from the query guide) and emerging inductive codes approaches. ATLAS ti V 9 qualitative software was used to support the analysis of the data.

Result: Five themes and 14 sub-themes related to couple's lived experiences of infertility were identified. Including (i) Emotional-psychological impacts; (ii) impacts on relationships; (iii) cultural impacts (iv) treatment related challenges and (v) coping mechanisms. These result shed light on the multi-dimensional impacts faced by infertile couples.

Conclusion: According to this study, infertile couples seeking treatment encounter a number of psychological, sociological, and economical issues that have a grave impact on their mental health and general wellbeing. Therefore, including psychosocial interventions or counselling in the fertility treatment and receiving financial assistance from governmental agencies for the expense of treatment may lessen the burden of infertility.

Keywords: infertile couples, infertility, lived experience, Ethiopia

1. INTRODUCTION

1.1. Background

The desire to have a child is virtually universal, and the right to procreate is recognized as a basic human right by many international conferences. For most couples around the world, having and raising children is a major life event, Whether for biological reasons, emotional needs, or social pressures, most adults desire to have a child at some point in their lives. Generally, they can accomplish this through the usual biological route. However, not all people succeed in achieving this dream (1-3).

Couples are labelled as infertile when they are unable to have a child on reproductive age after 12 or more months of regular, unprotected sexual activity. Couples with primary infertility have never been able to conceive, whereas those with secondary infertility had previously been able to conceive but are unable to now. According to the World Health Organisation (WHO) estimates there are 48 million couples and 186 million individuals worldwide who are infertile. Infertility affects 5-8% of couples in developed countries and 5.8% to 44.2% of couples in developing nations (4, 5).

In Africa Primary and secondary infertility jointly amounted up a total pooled proportion of 49.91% and 49.79%, respectively. Of them, 54.01% and 22.26% of the infertility cases, respectively, were brought on by issues involving the females and the males and in Ethiopia the prevalence of infertility at three public hospitals of Addis Ababa, was 27.6%. of which 14.5% and 13.2% of them struggle with primary and secondary infertility, respectively (2, 5).

Worldwide, infertility has a significant impact on both men and women. Every element of a couple's life may be impacted. For both individuals and couples, it causes a wide range of psychological, sociocultural, physical, and economical issues. Treatment for infertility has a further dimension that extends beyond the natural and physical, and is deeply ingrained in each region's social and cultural context (6).

Most African traditional cultures place a great emphasis on fertility, particularly as a sign that a marriage is complete and as one way for a couple to display their social status. Even if the desire to have children is universal, it is particularly strong in African nations because children are regarded as assets and reliable sources of income Therefore in developing countries, despite the fact that psychological impacts exist, unlike in the Western world, the

socio-cultural impact and the expense of infertility treatment are the main concern for infertile couples (7-9).

Ethiopia is one of the countries where there is a high priority on marriage, parenthood, and women are defined in terms of motherhood. Childlessness continues to be the most unfavourable experience in marriage for the majority of couples due to cultural practises and attitudes that support reproduction as the most crucial aspect of families (10).

Even though it keeps resulting in a serious psychosocial and financial burden for infertile couples infertility appears to be a neglected health issue in many developing countries. And the coping mechanisms that couples use to minimize the burdens are not studied very well. A bold plan of action was given during the 1994 International Conference on Population and Development (ICPD) in Cairo, Egypt. This plan of action included reproductive health initiatives that linked infertility prevention and treatment with fertility control. However, neither the 2021 ICPD25 High-Level Commission Report nor the 2019 ICPD25 Nairobi Declaration made specific mention of infertility (11, 12).

1.2. Statement of the Problem

Infertility has been portrayed as one of the most devastating life crises that a couple can face. The diagnosis of infertility and its treatment journey is enormously stressful for couples facing this problem. The diagnosis with infertility can lead to feelings of guilt, shame, fear, rage, worry, despair, and loss of control. It affects more than just quality of life and has significant negative effects on public health, including psychological impacts such as depression and anxiety (13-17).

In Africa In terms of sociocultural impact, childless women in many cultures are discriminated against, marginalized, and stigmatized if they are unable to conceive or carry a pregnancy to term. They might even be categorised as cursed or considered non-human. This societal concern leads to a psychological imbalance between couples and sometimes to a disruption of the marital relationship, resulting in a deterioration of sexual satisfaction and even divorce (18).

Additionally, infertile couples have trouble interacting with their loved ones, friends, and colleagues; as a result of their infertility or the infertility treatment process, they feel socially isolated and lack enough social support. They are degraded and treated with disrespect by society, which considers their infertility as a form of social punishment (15).

A study in Ethiopia shows that infertile women face social consequences such as disregard by their husbands and families, divorce, in-law neglect, deprivation of their property, and financial repercussions such as selling property and taking loans (19).

Infertility is a challenging circumstance to adapt to because it is linked to profound loss because the infertile couple loses the anticipation of a child, the joy of raising a child, and the recognition of others. They acknowledge that they haven't lived up to their own expectations and worry that they won't be able to remodel and rebuild their future. In such a circumstance, the success of continued development is influenced not only by the psychological health of the person, but also by the situation's adaptive coping mechanism. Couples or individuals use or engage in different activities to cope with the burden of infertility (20).

In many developing countries, infertility is neglected and not considered as an important health problems because it is not a fatal disease and these countries are more concerned with ways to control people's fertility potential because of their high total fertility rate (TFR) and

limited resources. However, despite overpopulation, unintended childlessness is a major social and economic burden that requires attention (19, 21-23).

WHO and researchers in the field have long been identified infertility as a major crisis that deserves more attention, and the fifth Millennium Development Goal states the right to infertility treatment. As part of building worldwide norms and standards for quality care in infertility treatment, WHO is creating guidelines for the prevention, diagnosis, and treatment of infertility (4, 24).

However, in addition to addressing the physical impairment, there is an urgent need to address the psychological, sociocultural, and financial aspects of infertility as well as the coping mechanisms used by individuals and couples, especially in resource-poor countries such as Ethiopia, where perceptions of the causes and treatment are mistaken and infertile couples are particularly vulnerable to abuse and exploitation (9, 25).

In Ethiopia There isn't much literature on this issue. And those limited studies focus on women's experiences of infertility and neglect men's perspectives. Because it was previously believed that only women were physiologically incapable of reproducing, social blame and stigma were generally placed only on women (5).

Although the phenomenon affects both men and women, focusing exclusively on women limits the possibility of gaining a fruitful understanding of the social consequences that infertility brings to couples. Therefore, the purpose of this study is to look at infertility from the perspective of couples and provide a detailed understanding of the psychological, sociocultural, and financial impact of infertility and their strategies for coping with this burden.

1.3. Significance of the Study

Infertility is an under-observed significant public health issue. Knowing the psychological, socio-cultural and financial aspects of infertility will help to acknowledge the impacts that infertile couples face through their infertility as well as their treatment journey. The results of this study can help healthcare professionals to plan and create holistic care that meets the psychosocial requirements of infertile people/couples. Additionally, it will assist in the development of strategies by policymakers to lessen the negative effects and concentrate on prevention of both infertility and its impacts. Since few studies have been conducted in our country on the experiences of couples with infertility, Researchers in the future will use this study as a guide.

2. LITERATURE REVIEW

This chapter presents the literature by overviewing infertility and then discussing psychological, socio-cultural and financial impact of infertility and its treatment and also the mechanisms help to cope with the burden of infertility. It also includes the theoretical framework based on bio psychosocial theory of infertility.

2.1. Introduction to Infertility and its treatment

Infertility is a disorder of the reproductive system. This is defined by the failure to establish a clinical pregnancy after 12 months or more of regular, unprotected sexual contact. About 1 in 7 couples have difficulty getting pregnant. Male infertility accounts for 20–30% of cases of infertility, female infertility accounts for 20–35% of cases, combined difficulties with both parts account for 25–40% of cases, and no reason is identified in 10%–20% of cases (4, 26).

An estimated 40.5 million women seek infertility treatment. The treatment offered depends on the cause of the problem and the options available locally. In general, there are three main types of fertility treatment: medication, surgery, and assisted fertilization-including intrauterine insemination (IUI) and in vitro fertilization (IVF) (27).

The involuntary childlessness is a life crisis that causes numerous sociocultural, emotional, physical, and economical issues and individuals or couples engage in or use different coping mechanisms to cope with the burden of infertility. That will be discussed in the subsequent subtopics (6).

2.2. Impacts of infertility and its treatment journey

Studies are being conducted to examine the impact of infertility on individuals and couples. The effects that infertility has on individuals and couples include emotional, sociocultural, and financial/economic.

2.2.1 Psychological Impacts of Infertility

Emotions are complex mental states made up of many several elements, including instrumental activity, cognitive processes, expressive behaviour, psychophysiological changes, and subjective experience (28).

The emotional impacts of infertility are profound. Couples or individuals who struggle with infertility frequently experience feelings of grief, frustration, loneliness, tearfulness, inadequacy, guilt, and wrath (6). Different studies have attempted to examine the

psychological and emotional effects of infertility diagnoses on people who have faced many difficulties as a result of their infertile status.

In the result of multi-country survey conducted in nine countries with a total of 1944 patients, Sadness, stress, depression, disappointment, frustration, worry, confusion, and loss of confidence were the most frequent emotional responses to an infertility diagnosis. In the study conducted in Hong Kong, China, in addition to the above-mentioned emotional effects, psychological distress such as hopelessness, losing control, and low level of life satisfaction were also reported by most participants. They also admitted to experiencing some degree of envy and resentment. when their friends gather with children and when their friends talk gleefully about their kids (29).

A qualitative phenomenological study of 33 Kenyan women seeking infertility treatment reached a similar conclusion. The results suggest that all of the women experienced emotional distress, including worry, anxiety, despair, and loneliness. One woman compared her fertility therapy to "crossing the desert" with nothing to eat or drink except the searing sun, meaning that the procedure is uncomfortable and accompanied by emotional turmoil. (30).

Moreover, The results of the two studies conducted in Ethiopia (in Addis Ababa and southwest Ethiopia) among infertile women also show that the women face quite diverse Psychological consequences like feelings of emptiness, unworthiness, un desirableness anxiety, low self-esteem, depression, emotional liability, becoming easily agitated, feeling alone, becoming irritated, and fearing divorce (9, 19).

Regarding men's emotional reactions to infertility, it is thought to be a "appropriate" reaction, which means a guy should "be "strong" for his spouse, even to the point of repressing his own feelings. Men who struggle with infertility do not open up to others about their suffering and loss, nor do they accept comfort from others as they work through their grief. They repress their own feelings in order to help their relationship, and they frequently put their lover's wellbeing above their own, whereas males put themselves at a lower priority. Although men often play the position of the "rock," this does not mean that they do not experience other emotions related to infertility or that playing the "strong" role is a role that is easy for men (29, 31).

Despite the narrative of "being strong" is ubiquitous, in the little research that have been done on the subject of male infertility, various emotions have come to light. Men who are diagnosed with infertility often express sentiments of grief, loss, rage, frustration, guilt, depression, feelings of powerlessness, or anomie (32-34).

2.2.1. Socio-cultural impacts of Infertility.

A couple's relationship may require more support from family and friends during the infertility and treatment process so they may get through the challenges of infertility. Even though coping with such a difficult issue should help a relationship grow, sometimes it seems to negate that possibility (35).

There is a lot of social pressure to have children. Within a year of getting married, a woman should start showing signs of pregnancy. If she does not get pregnant, her husband, in-laws, neighbours, and family members could make fun of her and call her different names, such male papaya, barren sister, empty basket, witch, or walnut. Family, friends, neighbours, and other close relatives won't be able to support them. Additionally, women who are infertile are verbally assaulted, made fun of, and laughed at (36).

According to the review of the literature, the sociocultural environment in which the infertile person lives has a significant impact on the difficulties and experiences that are associated to infertility. And it affects marital relations, relation with family members, and relation with other members of the community like friends, colleagues and neighbours (6).

Marital Relationship

Conflicting information has been reported on how infertility and its treatment affect relationships between couples. According to certain studies, infertility treatments tended to strengthen relationships between spouses. In contrast, wives in other studies reported disappointment over their husbands' refusal to engage in decisions regarding infertility treatment (37).

The result of the study conducted in Iran and Gambia shows that few couples were able to manage the stress of infertility and support one another throughout the various stages of treatment and in the resulting consequences. However, most participants face various adverse effects on their marriage, such as being beaten by their husbands, being threatened with divorce, and their husbands engaging in polygamous and extramarital relationships and there is also unwillingness of the husband to pay for treatment costs (38, 39).

Moreover the study of Kenyan women's infertility treatment experience shows that most women's marital relation has negatively impacted; their sexual life was one of the most negatively impacted aspects of their lives. They claimed that their husbands had lost interest in them sexually and that the stress of the infertility therapy had changed sexual encounters from romantic and intimate to stressful events (30).

In addition, the finding of the study conducted in Addis Ababa and south-western Ethiopia also show that the women have relationship problems with their partners because of their infertile status. The majority of infertile women claimed their spouses had lost interest in them. Some infertile women divorced because of their childlessness. Many women lack proper care and respect from their husbands, threatening them with divorce, and kicking them out of the house (9, 19).

Relationship with Families

The impact of infertility on Chinese women's social relationships shows that there is an inescapable cultural burden. In their culture, the family serves as more than just a social unit; it also serves to maintain the family line and childbearing is also seen as a means to maintain a harmonious relationship between families. Unable to bear a child is considered as a violation of filial piety. Parents and in-laws would be upset. Infertile women thus face lack of love, disrespect, and neglect from their parents, relatives, and even in-laws (29).

From the study conducted in urban Gambia, two cultural practices were found to increase tensions in relationships with in-laws. The first is the maiden residence pattern, in which the newly married woman moves into her in-laws home. In this new house, women who cannot have a child face harassment and pressure from their in-laws. Moreover the bride price (exchange between families): the transfer of a woman's reproductive and productive skills to her husband's family. Her family will receive plenty of commodities, money, or animals in exchange. The in-laws' family frequently argues that despite paying the bride price, they failed to find a good daughter in-law. Therefore, they will advise their son to marry another woman. (39).

Relationships with other members of the community

The social relationships of Chinese women are impacted by their withdrawal from all interactions with their friends and co-workers who have children and their avoidance of women who have recently given birth. They mention having a heavy heart when listening to

their friends' happy children's stories and how being around kids may make their internal feelings of shame and jealousy worse (29).

In the two study conducted in Gambia and Iran among infertile women, most women faced the social consequences of infertility which includes stigmatization, social isolation, life instability, relative deprivation, and social alienation. Specific exclusions from social occasions like weddings and naming ceremonies applied to some responders. Women also complained about the pain caused by the community's members calling them "infertile," "witch," and "eating their own children." (38, 39).

Moreover, in the study conducted in Kenya also found that infertility treatment negatively affected their relationships with their friends. Once their friends found out about their fertility therapy, they abruptly lost interest in them and started treating them differently. The women were disappointed by this response (30).

2.2.2. Financial Impacts of Infertility Treatment

Infertility treatment is an expensive endeavour, especially if surgical intervention and assisted reproduction is required. Many couples were able to afford treatment through bank loans or loans from friends, selling property, and paying with the National Health Insurance Fund (NHIF) card. Those who pay medical bills out of pocket reported financial losses due to treatment costs, transportation costs, accommodation costs, time spent during treatment, quitting, and loss of job to focus on treatment (19, 29).

The United Kingdom (UK) study on the impact of infertility on men's work and finances found that infertility has a direct impact on couples' financial situations and it have a significant impact on men's work lives, including their identity as productive workers. Men reported that they had to deplete savings, take loans from family, or go into debt to finance fertility treatment (40).

Furthermore, the findings of two studies carried out in Kenya and Ethiopia reveal that practically all women, regardless of their level of education and line of work, viewed fertility therapy as a costly adventure. The women said that they were able to pay for the treatment because they sold their properties, borrowed from friends or took out bank loans (19, 30).

2.3. Coping mechanisms for infertility impacts

The term "coping" describes an individual's efforts to fulfil internal and external pressures that place a strain on and exhaust their available resources. It involves techniques like emotional coping, deliberate problem-solving, seeking out social support, distance, self-control, escape and avoidance, positive situational analysis, or negative confrontation (41).

Both individuals and couples make an effort to deal with the stress of fertility treatment in a variety of ways, including through their personal beliefs and religious practises, giving in to emotions like crying, changing their attention, staying with the kids of their relatives, sharing the burden with another infertile person, and asking for help from others (36).

Religion can provide psychological stability for individuals or couples with infertility. The majority of participants in the various studies firmly thought that their sincere prayers, especially their unwavering faith in God, would ultimately give them the power to fight and overcome the crisis, and enable them to conceive (25).

According to studies, some women put themselves further away from their memories of their infertility by staying busy, partaking in decadent activities like shopping, and avoiding events like baby showers, family gatherings, and reunions. Others made the decision to keep their infertility a secret from everyone besides their husband. Additionally, they read as much as they can to feel in control of the unknown (19).

Some chose to repress their suffering and work on developing a more optimistic perspective on infertility. They considered the advantages of living childless lives, having more time, money, and interests or hobbies, and they made an effort to be the best versions of themselves at work, at home, or in their appearance (29).

2.4. Theoretical Framework

The theoretical framework presented in Figure 1 below was modified from the 1997 bio-psycho-social theory created by Pasch and Dunkel-Schetter. The impact of existential, emotional, physical, and interpersonal difficulties that take place for many couples is explained by the bio-psycho-social theory. The theory makes an effort to describe human behaviour in a way that takes into account how these variables interact. It enables the conception of infertility as both an immediate life crisis and a non-event with long-term repercussions for the person, his or her partner, their relationship, as well as family and friends. Moreover According to bio psycho-social theory, social support and coping are two crucial strategies for reducing the impact of infertility (42).

This model will be used in the study because it is a theory and it enables to address both the stress of infertility and the coping mechanisms at the couple level.

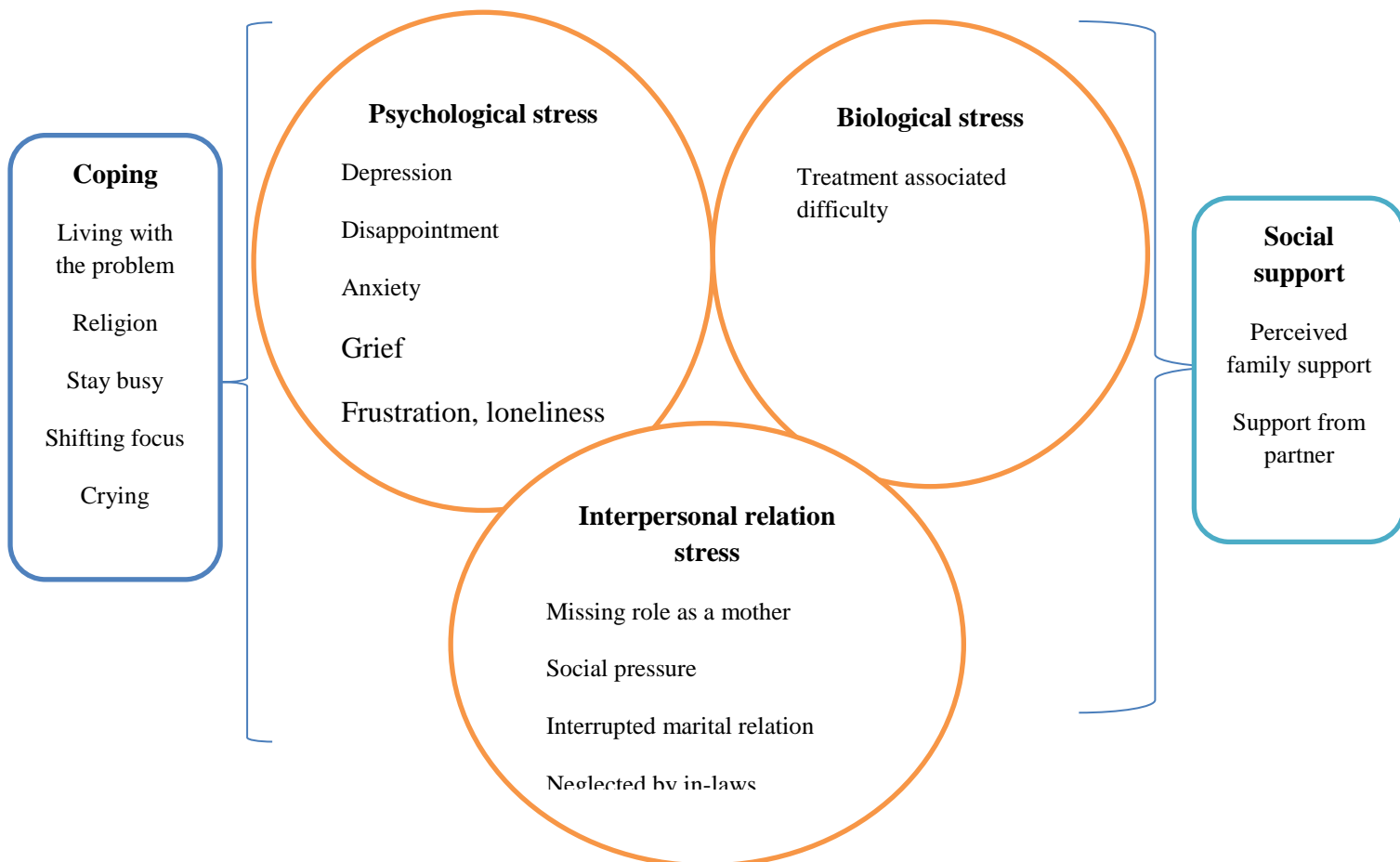


Figure 1 Theoretical framework of the stress and coping mechanisms of infertility adapted from bio psycho-social theory (42).

3. OBJECTIVES

3.1. General objective

- The study aims to explore the lived experiences of infertile couples who seek treatment at Saint Paul hospital millennium medical college center for fertility and reproductive medicine, Addis Ababa, Ethiopia 2023 G.c

3.2. Specific Objectives

- To explore psychological impacts of infertile couples who seek treatment at SPHMMC.
- To explore the socio-cultural impacts of infertile couples who seek treatment at SPHMMC.
- To assess the financial impacts of infertile couples who seek treatment at SPHMMC.
- To assess coping mechanisms of infertile couples

4. METHODS AND MATERIALS

4.1. Study setting and period

This study was conducted at Saint Paul hospital millennium medical college center for fertility and reproductive medicine (SPHMMC), Addis Ababa, Ethiopia from February 20 to March 20, 2023. Addis Ababa is the capital and largest city in the country of Ethiopia. The current metro area population of the city in 2022 is 5,228,000 (35).

Addis Ababa has 13 public Hospitals and 98 Health Centers which provide different health services. All public hospitals in the city, with the exception of Amanuel Specialised Hospital, have obstetrics and gynaecology wards that carry out the initial evaluation, diagnosis, and some treatment of infertility. but advanced options of infertility treatment like Invitro fertilization (IVF) and Intrauterine insemination (IUI) is given only at St. Paulo's hospital from public hospitals (36).

SPHMMC center for fertility and reproductive medicine was launched at the end of January 2019 G.c. The center has 7 subspecialists in Reproductive endocrinology and infertility (REI), 6 Embryologists, 2 Andrologists, and 18 Nurses. While the inpatient capacity is 8 beds, an average of 40 outpatient clients visit the facility daily and the annual outpatient case flows are around 12,000 clients.

4.2. Study design

Qualitative study with phenomenological approach was employed to explore the 'lived experience' of infertile couples. A person's lived experience is a description of their experiences, decisions they make, and the knowledge they learn as a result (43).

4.3. Study participants

The study Participants are couples with primary and secondary infertility with no surviving children coming to SPHMMC for infertility treatment during the study period and who match the inclusion criteria.

4.4. Sample size and Sampling techniques

A purposeful sampling technique was used, which means the selection of couples who are rich sources of information needed to examine the phenomenon under study (44). These couples were selected with the help of staffs in the centre moreover; purposeful sampling is based on the inclusion criteria. 15 couples (8 primary and 7 secondary infertility) with either

of the couples infertile were interviewed. Data collection was continued till saturation of data is reached. Data saturation was assessed using informational redundancy, which means that it was considered to have been attained when no new categories or information emerged from the data and when more interviews stopped producing new categories.

4.5. Eligibility Criteria

4.5.1 Inclusion criteria

- Couples in the reproductive age group with either of the partner diagnosed with infertility with no surviving children before.
- Couples Undergone through treatment at least for a year,
- Both partners' Willingness to participate in the study was the inclusion criteria.

4.5.2 Exclusion Criteria

- Couples with either or both partners with known mental illnesses.

4.6. Data collection tools and procedure

In-depth, interviews were conducted with both partners of a couple by using a Semi-structured interview guide to lead the discussion. Each partner was interviewed individually to allow them an opportunity to give a true reflection of their experience. The interview guides are developed based on the relevant areas necessary to address the study objective.

Prior to the actual data collection, two infertile couples who were not part of the sample were interviewed as a pre-test for the prepared interview guide. On the basis of these preliminary interviews, the PI then made changes to enhance clarity and understandability. A series of prompts like 'Can you tell me more?' and 'What else have you felt?' were used to encourage participants to clarify or expand on their responses. In addition to verbal communication, the participants' nonverbal responses, such as their facial expressions, were also noted in field notes to help interpret their responses.

All interviews was conducted by the principal investigator (PI) and a trained research assistant that was a nurse who has been working in the infertility clinic for two years, who has previously participated in data collection. The research assistant was assisted in the recruitment of the study participants as well as in the data collection. The interview was occurred in a private quiet room at the infertility clinic after participants doctor visit. Their

duration ranged from 15min to 1 hr. All interviews were audio- recorded. Interviews were transcribed verbatim in the original languages (Amharic) and then translated into English.

4.7. Data processing and Analysis

Descriptive statistics was used to summarize the characteristics of participants. And the analysis process was performed using ATLAS. ti V.9 qualitative software. Both a priori codes (from the query guide) and emerging inductive codes were used in the study. the researcher follows a systematic approach with the following six steps.

Step 1: Verbatim transcription in this step, the PI was fully immersed and actively engaged in the data by first verbatim transcribing the audio recordings of individual interviews and then reading repeatedly to familiarize oneself with aspects of the data. Then the transcripts were translated from Amharic to English with the help of a language expert.

Step 2: Coding in this step, texts were separated into meaningful segments made up of crucial transcript-derived phrases. Then, these meaningful segments were compressed and given codes that were formed inductively. Data are then organised into clearer concepts that can be grouped into topics by using codes to identify aspects of the data that are relevant to the research questions.

Step 3: Generating themes in this step, the researcher checked the codes for consistency and clarity before classifying the identified codes into a number of categories. The underlying themes were then organised from the subthemes.

Step 4: Reviewing themes. The researcher evaluates themes that provide an accurate and relevant description of the data.

Step 5: The researcher then describes the themes and categories of the data and interprets the coded data. The final list of themes was named and specified in this step.

Step 6: The researcher write up the analysis of the data with Representative quotes for each theme.

4.8. Trustworthiness

To determine the accuracy and reliability of the data, the criteria of credibility, transferability, dependability, and conformability was considered (38).

Credibility (Truth Value) to ensure credibility Peer-debriefing was used by Presentation of the preliminary findings to colleagues and peer which allows the researcher to receive input and comments. In addition triangulation of the data was assured by interviewing both partners of couples, including the use of the same interview guide throughout the study.

Dependability (Consistency) It was achieved by saving audio records of participants' interview, notes taken during the interview and transcription verbatim for cross checking the process and sending all data collected tools, the raw data, the codes made during the analysis phase and the drawn inferences to the researchers not involved in the research as an external audit. In addition, the result and discussion of this study was supported by relevant and directly related literatures.

Transferability (Applicability) to ensure transferability the investigator provided a thick description about research context, methodology, participants and final report. Purposive sampling also used to focus on selected participants who could gave rich information about the issues under investigation and maximize the range of in-depth findings obtained from purposely selected participants.

Conformability (Neutrality) By meticulously looking over the interview transcripts, comparing the codes with the raw data, and repeatedly comparing the results with the perspectives of the participants, it was made sure to retain reflexivity and prevent the investigators' own opinions from influencing the study data. The supervisor and other investigators who have experience in qualitative studies have supported this approach for validation from outside sources.

4.9. Operational Definitions

A Couple: In this study, a couple refers to two heterosexual persons who are married, engaged, or romantically paired in a relationship.

Infertile couples: In this study, couples are considered to be infertile if either of the partners has a known condition that makes conception unlikely and it includes primary and secondary infertility with no surviving children before.

Experience: events encountered in personal and social life in association with infertility.

Infertility Treatment: Medical procedures, surgical procedures, and medications used to mimic nature regard to conception.

4.10. Ethical considerations

Ethical clearance was obtained from Addis Ababa University College of Health Science School of nursing and midwifery department of midwifery. Permission to conduct the study was obtained from the SPHMMC center for fertility and reproductive medicine. The PI obtains informed written consent from all participants to conduct the interviews. The study participants were given a thorough description of the study's objective (purpose) and benefits in order to ensure their full cooperation. The voluntary nature of participation in this study was underlined. Participants were fully informed about and respected in their right to say no to participate in the study, to withdraw from the study, and even not to respond to some of the questions. Each participant was given a code that was only known by the PI, and participant names were not used while analysing the data. Only the PI got access to the data, which was kept private.

4.11 Dissemination of the study finding

The findings of this study were submitted and presented to the School of Nursing and Midwifery, department of midwifery at Addis Ababa University's College of Health Sciences. And the finding will be submitted to SPHMMC center for fertility and reproductive medicine. Finally, attempts will be made to publish portions of the research findings in reputable local and/or international journals. Workshops and seminars will also be used to disseminate the findings.

5. RESULT

This study set out to explore the lived experiences of infertile couples who seek treatment at Saint Paul hospital millennium medical college center for fertility and reproductive medicine in Addis Ababa. The results of this study are presented in two sections: an overview of characteristics of the participants and the emerged themes.

5.1. Characteristics of the Participants

The study was conducted among 15 infertile couples (15 male partners and 15 female partners). The age range was from 28 to 46 years and 27 to 36 years for males and females respectively. Out of 15 couples nine couples come from the urban areas of Ethiopia. And Two participants had no formal education (one male and one female), seven (three male and four female) had completed primary school, seven (three male and four female) had completed secondary education and fourteen (seven male and seven female) had attended university/college. Seven of the participants were unemployed. Eight of the couples had primary infertility and 11 couples had female factor infertility. The duration of marriage ranged from 2 to 18 years, and the duration of infertility and the duration of treatment ranged from 2 to 17 yrs. and 1 to 10 yrs. respectively. Eight of the participant had only medication as an infertility treatment.

Table 1; Characteristics of infertile couples who seek treatment at Saint Paul hospital millennium medical college, 2023(n=15 couple/30 individuals).

Variable	Frequency(n)
Age	
24-29 years	3
30-35 years	19
36-41 years	5
Above 41 years	3
Residence	
Urban	9 couples
Rural	6
Educational status	
No formal education	2
Primary Education	7
Secondary education	7
College/University	14
Occupation	
Unemployed	7
Employed	15
Private	8
Duration of marriage	
1-5 years	5 couples
6-10 years	7
More than 10years	3
Types of infertility	
Primary infertility	8 couples
Secondary infertility	7
Duration of infertility	
1-5 years	6 couples
6-10 years	6
11-15 years	1
More than 15 years	2
Infertile partner	
Male	4 couple
Female	11
Duration of treatment	
1-5 years	13
6-10 years	2
Type of treatment	
Medication only	8
Surgery	2
IVF	5
IUI	1

5.2. Emerged Themes

Five themes have emerged from the analysis of the couple's in-depth interview. The themes were identified as rich and detailed accounts of the lived experiences of infertility among couples who seek treatment at SPHMMC. These themes with their respective sub-themes, codes and code descriptions have been summarized by the following table (table 2).

Table 2. Themes, sub-themes, codes, and code description identified through interviews of infertile couples who seek treatment at SPHMMC. Ethiopia, 2023.

Theme	Subtheme	Codes	Code description
Emotional- psychologic al impacts	Emotional reaction to the diagnosis of infertility	Shocked	Disturbed to hear the case
		Regret	Feel sorry for their previous deeds
		Feeling guilty	Self-blaming for being the cause
		suicidal attempt	Trying to kill oneself
	Psychological impacts	Depression	Loss of pleasure or interest
		Stress	Worry about their condition
		Anxiety	Worry about the unknown
Jealousy		feeling envious or resentment	
Impacts on Relationshi p	Relationship with a partner	Losing self confidence	feel doubtful of their abilities
		Decreased love	Reduced affection and concern
		loss of sexual interest	Less interest and ability to have sex
	Relationship with a family	have a child from outside	Go to another woman and have a child
		Avoiding family events	Not attending family gathering events
		cut off relationship	Termination of relations with family
	Relationships with friends, colleagues, and neighbors	hiding about the treatment	Keeping the treatment as a secret
		avoiding social events	Not attending events like birthdays,
		cutting off r/ships	Terminating interaction with
		hiding about the treatment	Keeping the treatment as a secret
Cultural impacts	Cultural perceptions toward infertility	consider infertility as a curse	Consider as it comes from a sin
		A women-only problem	Consider that it is only women's problem
		misjudge infertile person	perceive them as irresponsible and selfish
	Cultural perceptions toward infertility treatment	consider divorce as the option	Think of divorce as a way of giving birth
		unnecessary cultural activities	Activities that believed to cure infertility
Treatment- related challenges	Access to inferility treatment service	wrong saying about treatment	Misconception about treatment
		a small number of facility	A low no of facilities that give the service
		a lot of appointment	A lot of scheduling
	Financial impacts	need of mediators to get the treatment	Need to have a person in the facility to get the treatment
		Expensive treatment cost	Unaffordable price of the treatment
		borrowing money	Borrow money from family/friends
		selling property	Selling house and land to cover the cost
		Bed cost	Bed cost when they come from far
		transportation cost	cost when they come from a rural area
	Healthcare provider factors	leaving work	leaving the workplace to get the treatment
		not giving enough information	Not giving detailed information
		mismanagement of the case	Mistreating the case properly
		repeated surgery	Mistreating the case properly
Coping mechanisms	Religious Activities & Faith	going to a religious place	Going to church and mosques
		Prayer	Pray to have a child
		reading bible	Reading biblical story
	Being self-compassionate	being strong	being emotionally strong and hopeful,
		giving birth as a suffering	consider giving birth as a suffering
		putting oneself first	Prioritize oneself over other things
	Shifting focus	going to bed early	going to bed early to avoid the feeling,
		keeping oneself busy	Stay busy with work or other activities
		Reading	Reading magazines and fiction
		support from infertile people	Emotional support from those who give

	support from others	who passed through infertility	birth after passing through infertility
		support from partner	Encouragement of the husband

Theme 1: Emotional-psychological impacts

Couples were asked to describe their initial emotions during their infertility diagnosis and the psychological impacts they face because of their status. From their responses, 11 codes were found and categorised into two subthemes. Which are initial emotional reaction to infertility diagnosis and psychological impacts of infertility (table 2).

Subtheme 1: Initial Emotional Reaction to Infertility Diagnosis

When they initially learned that they or their spouses had a fertility problem, the majority of the participants were shocked, feeling sad, and angry, and the female partners were crying a lot as well because it was unexpected. Furthermore, some participants expressed regret for not getting married sooner, for being married, for utilizing contraception, and for previously committing abortion.

“if I continue my spiritual life without getting married, at least I would have made my last eternal home. But now what is the point of getting married, I don’t even know who I am living for.”[couple 4,male,35yrs]

Most infertile partners feel sad for their partners and blame themselves for their inability to have a child. and they are worried about losing their marriage.

“I feel sad and guilty because my wife is childless because of me.”[couple 5,male,36yrs old]

Few participants stated that they don't feel anything bad for their or their partner diagnosis with infertility. because their partner is understanding, because of their great hope in the treatment, and also because of the reason that they believe in God.

"I don't feel anything different, it doesn't bother me because I'm sure I'll be able to give birth, it is just a delay.”[couple 11, female,34yrs old]

Subtheme 2; psychological impacts

Stress, depression and anxiety are described as common psychological consequences of infertility reported by most participants. Participants sometimes experienced a sense of loneliness and They acknowledged some degree of suffering from a feeling of jealousy when seeing others with a children.

“There Is Anxiety, depression, headache. i put myself in a depression that won't come out. Then to avoid this I will just sleep, but I wake up with another pain.”[couple 8,female,36yrs old].

“All my brothers and sisters have three and four children. My face turns black when I see them. I am so jealous of them.”[couple 5,female,35 yrs old].

Participants also stated that they have lost their self-confidence, and the courage to say or do anything. they also lose their interest and energy for work

“Not having a child has made me lose my self-confidence and courage to talk about anything, it makes me bow my neck.”[couple 10,male,35 yrs old].

Two participants stated that the problem makes them stronger and helped them to be a hopeful person.

“My condition has made me to know that everything on this earth is fleeting. now I will live whether I have child or not. I have become a determined person.”[couple 15,female,35yrs old].

Theme 2; Impacts on Relationship

The second theme identified from the data is the impact of infertility on relationships. Within this theme, 21 codes were identified from participant's responses and grouped into three subthemes. These subthemes go into specifics about how infertility affected their marital relationship, relationships with their families, and their relation with other community members including friends and neighbors.

Subtheme 1; Relationship With A Partner

Most participants stated that their relationships with their partners have suffered as a result of being unable to have children.They claim that their love for one another has diminished and they frequently argue and disagree with their partners.

“...marriage is said to be strong when it is possible to work well thinking about tomorrow but since I gave up in everything, I am not doing what I should be doing at home and this is affecting our marriage.” [couple 10, female,30yrs old].

Due to the disagreement two men's partners leave home and had a child with another woman which makes the womens very disappointed. A female partner whose husband had a child

with another woman stated that *“I was very disappointed, and thought of ending my marriage. But in the middle, an elder came in and reconciled us.”* Also another male participant reminds the moment as ;

“there was a disagreement between us and I was drunk and mistaken for another woman and gave birth to a daughter.”[couple 4, male,35yrs old].

Their sexual life was the other element of their lives that was impacted. Some individuals said they loss their sexual interest. Additionally, several of the participants claimed that the infertility treatment process had changed sexual interactions from pleasurable to stressful situations.

“My husband insists that we always have sex, but I won't be interested, especially from a religious perspective; I tell him that I don't do it on religious holidays. He then becomes really angry.”[couple 8, female,36 yrs old].

“When we have sexual intercourse, I think about whether pregnancy will occur or not. I get so stressed that my penis won't be volunteer to have sex or I ejaculate too quickly, Also, we prevent the sperm not to leaks out.”[couple 14, male,35 yrs old].

Some participants reported that passing through this journey had positively impacted their relationship with their partners. according to their saying infertility and its treatment journey strengthen the bond between couples which ranges from increased love for each other, empathy, support for each other, and discussion openly in everything.

“In fact, our inability to have a child makes me to take care of her and bring her closer.I will never do anything that offends her.”[couple 3, male,33yrs old].

Subtheme 2; Relationship With A Family

The majority of couples reported that their ties with their families have suffered as a result of their infertility. Most participants are under a lot of pressure from their families. Because of persistent, intrusive questions like, "Why don't you have a child?", "why don't you guys find a solution?" and "how is the treatment process going?", the idea of divorce is also suggested. This pressure and unnecessary advice from family members creat a gap and forced the couples to avoid family gathering events and to reduce their relation.some even cutoff their relationships and attend only funerals.

“my father told me that even if you don't divorce your wife, build a house in the rural land and marry another woman without your wife knowing”[couple 10, male,35yrs old].

“I reduced my relationship and avoid family events especially Christianity and birthdays” [couple 15, female,35yrs old].

Most of the participants choose to hide about their treatment from family because of high pressure that would result from ceaseless questions such as whether there is still hope in the treatment. Significantly, most couples have fear on what people might say if the treatment fails they also have concerns regarding the conception of society regarding the treatment so they keep it as a secret or tell for only some close people. A 30 yrs old female partner stated that she hides about the treatment cause she is afraid of criticism like *“she gave birth using technology not naturally.”*

“...people will say She went for treatment, she comes back empty-handed, and leaves her husband empty-handed ;she emptied the house.”[couple 10, female,30yrs old].

Few couples reported that they have a good relationship with their family, families support and encourage them in the treatment and they families don't interfere negatively in their life.

“The family helps us a lot with money; so far we are following the treatment with their help. They say that we are by your side in everything you need.”[couple 12, female,35yrs old].

Subtheme 3 Relationship With Friends, Colleagues, And Neighbours

Most couples indicated that infertility and its treatment have negatively impacted their relationships with their friends, colleagues, and neighbors. they put them under pressure by raising questions about having children and by suggesting the idea of divorce and going to another woman or man.

“When I meet friends after a long time, they will ask how many children have i had, and when I tell them the truth they will say "What have you been doing all this time".My co-workers also force me to go to another woman.”[couple 3, male,33yrs old].

Participants minimized their social interaction, avoided attending social events, and some even cut off their relationships with their friends. One female participant stated she has reduced her social interactions avoid events for not watching things that will hurt her mind, but as she said people even criticize her for not attending events like Christianity saying "you are doing this because that you will never have children and celebrate this event at your

home.” She said “As soon as you run away from one, they will come at you with another thing that will hurt you more” Similarly, another participant said;

Most of the participants hide about the treatment from their friends and colleagues. because of that, there will be disagreement with their colleagues in the workplace because when they leave their work to get the treatment they will be considered as a lazy person who hates to work.

“... womens in our office goes on pregnancy or maternity leave, and when I ask for a leave for some reason they tell me that "You are not either pregnant or give birth so you should just do your work." [couple 8, female,36 yrs old].

Some participants reported that they have good social interaction with their friends, colleagues, and neighbours *“My colleagues are good, they help me with ideas, but they don't go deep into my personal life, but when I consult them, they give me good advice.” [couple 13, male,28yrs old]*

Theme 3; Cultural Impacts

Couples were asked to describe how infertility is perceived in their culture and what cultural impact they face due to their infertility and the treatment they have been through. From participants response 11 codes were found and grouped into two subthemes: cultural perception toward infertility and cultural perception toward infertility treatment (table 2)

Subtheme 1; Cultural Perceptions toward infertility

According to the spouses, children are considered a goal of marriage in most culture. Marriage is regarded useless if no child is born. Infertility is regarded as a curse and a weakness, and the infertile individual is regarded as a sinner.

“...My siblings think them as a blessed one they thik of me as a cursed..they told me to go to our father and aunts taking sheep, honey, Gabi, clothes, then make them let go of the curse and get a blessing from them” [couple 10, male,35yrs old].

Furthermore, in most societies, infertility is regarded as a female-only issue, and the culture has granted a man the right to marry multiple women until he has a kid, which leaves women disappointed and desperate. *“ the focus is only on the woman in the culture. A guy has a right to get married three or four times and try his chance of having children.” [couple 10, female,30yrs old]*

In addition in different cultures infertile couples especially women face disrespect and painful words, just because they don't have children, people don't respect them and don't regard them as anything. woman stated that if there is no child in marriage people say

“This mule, barren who doesn't give birth, what are her husband waiting for? Why he doesn't divorce her and just live his own life.”[couple 8, female,36yrs old].

As the couples reported infertile couples are misjudged in society they are considered as an evil eye, selfish and irresponsible who can't do anything.

“when pregnant women come to me, they cover their bellies with A towel or their cloth. Because a woman who couldn't have a child is considered as an evil eye (ጡዳ)[couple 10, female,30yrs old].

“ people will think you as a selfish who hate having a child because you don't want to be busy with him.”[couple 11, female,35yrs old].

Some participants also stated that repeated wishes(ምርቃት) and prayers affect their emotions because they reminded them of the other parts of their life.

“We do have a religious event in the name of Saint Michael. They always brings up this issue every month.which makes me remembers the other part of my life and my mood will change instantly.”[couple 4, male,35yrs old].

Subtheme 2; Cultural Perception toward Infertility Treatment

As most couples reported, the society does not believe much in the medical treatment of infertility, and there are many myths and incorrect saying about the treatment.

“Peoples tell you not to go to treatment but to go to a monastery. They say that you are wasting your money when you refuse. They think that you are far from God.”[couple 15, female,35yrs old]

“If a person goes to treatment and gives birth, it is said that “it is from another man, it is from another woman, it is not their own.”[couple 10, male,35 yrs old].

Moreover, there are some cultural activities done in a society that hurt couples in this life.the purpose is to let the women give birth.but as the participants explain this cultural practice hurt their emotion a lot.

‘on the 7th day of birth, women in the village will eat porridge, at that time there is a culture of putting the tray on the woman who hasn't given birth yet. The meaning is that they wish that God will grant her one....’ [couple 8, female, 36yrs old].

The society also considers divorce as an option for infertile couples. As the female participant from a rural area indicated the only perceived solution in her area is divorce. She said that there is a thought that if they get divorced, they can have a child with someone else. In addition another male partner also said

‘If couples don't have children, they don't last a year in marriage, breaking up a family is considered as an option.’ [couple 10, male, 35yrs old].

Theme 4; Treatment Related Challenges

Couples were asked to describe the challenges they face during their fertility treatment. 16 codes were identified from participants response and grouped into three categories: which are Access to infertility treatment service, financial impacts of infertility, and Health Care Provider Factors (table 2)

Subtheme 1; Access to infertility treatment service

As most couples stated Due to the limited number of facilities which provide infertility treatment service, it is difficult to get the treatment. there is be a long-time appointment and there is a need of mediators like family or friends who work in the facility to get the service.

‘The number of facilities that provide the treatment service is small in number’ [couple 8, female, 36 yrs old]..

‘To get the treatment service, one needs a family member, a friend, or any other close person who can negotiate with the medical staff. Even Brokers interfere.’ [couple 1, male, 42yrs old].

Subtheme 2; Financial Impacts

Couples stated that they face both direct and indirect financial impacts: Direct financial impacts are the money spent or the sacrifice made to cover the cost of the treatment like for the investigation, for the medication as well as for the procedures done. and indirect financial impacts includes the cost required in the way of getting the treatment like bed cost, food cost, transportation cost for those who lives out of the city, and leaving work place .

Out of 15 couples most of them stated that the cost of fertility treatment is expensive, that they spend a lot of money, and they say the cost is unaffordable which doesn't consider the living standard and incomes of Ethiopians. They spend money ranging from 2000 to 500,000birr. They also borrowed from families and sell their property and used the saved money for any other purpose to get the treatment.

‘The treatment cost is so expensive So far I have spent up to 500,000 Birr excluding minor expenses. When I first started treatment, I sold my house. After that, I saved money for this purpose.’[couple 15, female,35yrs old].

‘It's too much, you will be economically crushed. ’[couple 14, female,35yrs old].

As the participant stated other than the cost of the treatment they also face indirect financial impacts like transportation costs, bed costs, and food costs. Some Participants stated that the treatment makes them beyond their capacity. Especially for those who come from rural areas they also leave their work to get the service, One male participant stated the indirect financial impact as

‘... When we come here, we use food, and there is transportation cost, for example, I had to be at work today ’[couple 14, male,30yrs old].

Subtheme 3; Health Care Provider Factors

Participants stated that even though there are a lot of care professionals who respect their profession and work hard, there are professionals who are careless and don't give enough information about the cases of the person and the available treatment options.

‘We were not told in detail about the treatment options and the probability of success they only told us that IVF should be tried.’[couple 14, male,35yrs old].

Moreover, as some participants indicated they are disappointed by inappropriate management of their cases. Some accompanied with only medication when they need to have surgery and two women participants had repeated surgery.

‘after her surgery they told us that they should perform the procedure again because there was still something left. How is the same procedure performed twice?’ [couple 10, male,36yrs old].

Theme 5; Coping Mechanisms

Couples were asked to describe how they handled the burdens of infertility or their coping mechanisms to pass through those burdens of infertility. 24 codes were identified from their responses and grouped into four categories: which are religious activities and faith, support from others, being self-compassionate, and shifting focus, (table 2)

Subtheme 1; Religious Activities

Going to religious places, Praying, reading the bible, get holy water were the commonly mentioned religious practices as a coping mechanisms for couples with infertility. Many couples said that once they know their condition besides getting the treatment, the only thing they could do was believe in God and be spiritually strong person.

“I use spiritual activities like prayers and get holy water.” [couple 7, female, 30yrs old]”

Subtheme 2; support from others

According to participants strong bond with their partner helped them to cope with their condition. Moreover, emotional support and advice from people who passed through infertility treatment and currently have a child also encourage them to cope with their condition.

“It's my husband's strength that keeps me from feeling it. We have love. he comforts me so much.” [couple 3, female, 27yrs old]. similarly another female partner stated

‘If I heard about people who have succeeded in such difficulties, I will quickly start meeting them. Then when I feel bad, they will comfort me well.’ [couple 10, female, 35 yrs old].

Subtheme 3; Being self-compassionate

Infertile couples are tempted to push aside their uncomfortable feelings and acknowledge their suffering. More significantly, they worked through their repressed suffering and made an effort to adopt a more optimistic perspective about infertility. They would think of giving birth as suffering. One female partner said;

“I sometimes wonder how long I will be able to spend with my child if I give birth after this age. Even if I have a child, I'll just keep them for seven or eight years since I assume I'll die at 45 and will leave nothing but sorrow and suffering.” [couple 5, female, 38yrs old].

In addition, putting oneself first and cut off unnecessary relationships that hurt emotions are also mentioned as a coping mechanism by one male partner. Others also state that nothing but the problem itself makes them strong, and they state that self-treatment is the ultimate solution.

"...It's the problem itself that made me stronger. There's nothing that I've changed because of my concern, so being strong is the non-optional solution." [couple 15, female].

Subtheme 4 Shifting Focus

Some Participants stated that they dealt with their infertility issues by emotionally avoiding anything that reminded them of their infertility. This distancing was done by keeping themselves busy with their work, reading, and going to bed early, hangout with their friends which kept them busy and temporarily distracted them away from their infertility issues.

"I have a reading room. I go in there and read the Bible and other magazines. In addition I go to bed early. As a university student, I eat dinner at 6:00." [couple 10, male, 35yrs old]

'... I just have some really good friends that I hang out with to forget my condition.' [couple 4, female, 33yrs old].

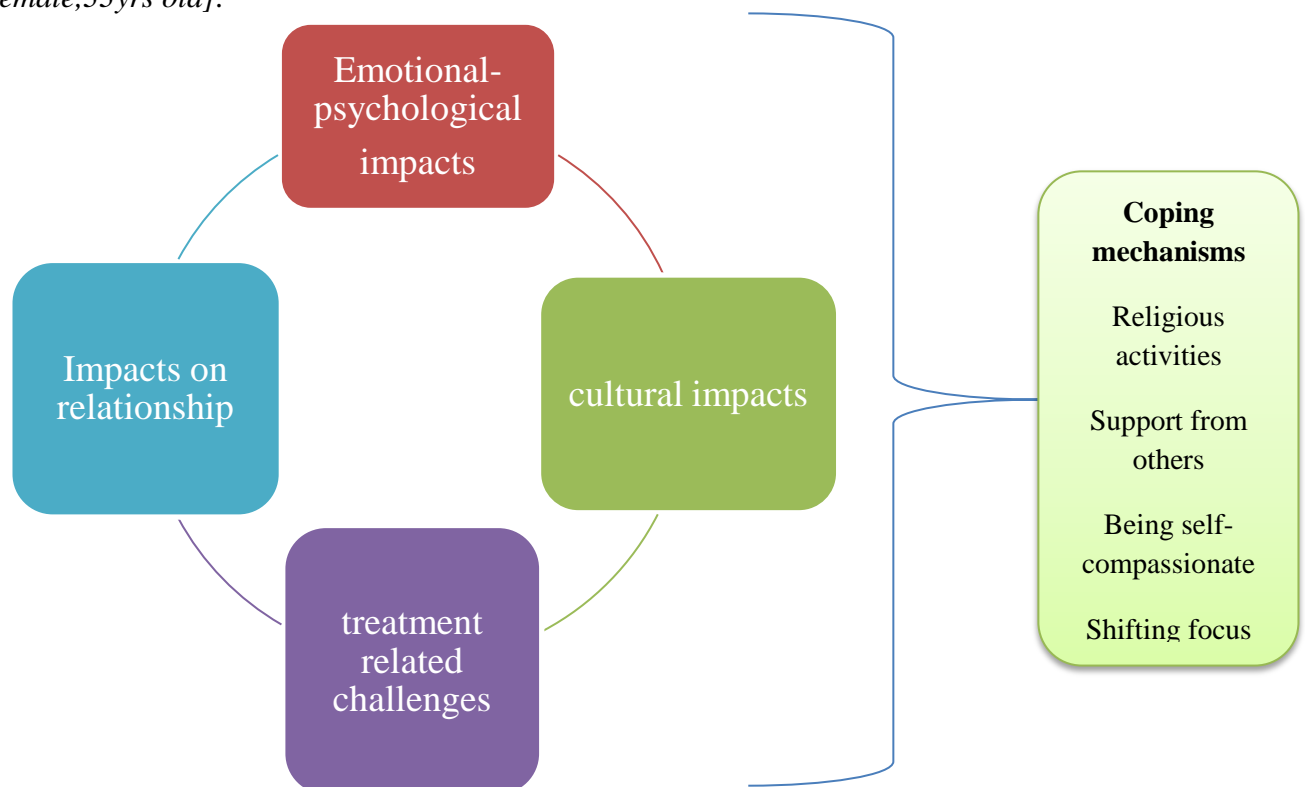


Figure 2 Figure of emerged themes on the lived experiences of infertility among couples who seek treatment at SPHMMC.

6. DISCUSSION

The study aims to explore the lived experiences of infertility among couples who seek treatment at SPHMMC Centre for fertility and reproductive medicine. The finding of this study can guide healthcare providers in planning and developing holistic care that addresses the psychological, socio-cultural, and financial challenges of infertile individuals/couples.

The study identified the couple's lived experiences of infertility in five organized themes: which are the Emotional-psychological impacts, impacts of infertility on relationships, cultural impacts of infertility, treatment-related challenges, and coping mechanisms.

The emotional-psychological impacts are identified from two categories. One is related to the initial emotional reaction of infertile couples to their or their partner's diagnosis of infertility. Based on this study finding most participants expect a child from marriage so the main initial emotional reaction to the diagnosis of infertility was sadness, shock, anger, and despair. This finding is consistent with the previous survey conducted in 9 countries (45). Participants also suffered from psychological distress like depression, anxiety, stress and jealousy which is also similar with most previous studies (30). The reason for the similarity of the finding might be the nature of the condition which means that Infertility is an unexpected life transition and being childless is an undesirable social role in the majority of societies.

Out of 11 female factors of infertility, most of the women feel guilty and blame themselves for their inability to achieve pregnancy and for making their significant others childless. This is consistent with the study conducted among Iranian women (6).

Although both male and female partners were under emotional and psychological impacts female partners were more affected by the condition. Other studies supported this finding, suggesting that women experienced infertility with greater distress regardless of whether they or their spouse were responsible for the reproductive impairment (46). This could be a result of increased socio-cultural pressure they face from their families, friends, and even colleagues at work as confirmed during the interviews.

Findings on the emotion and behaviour of infertile couples help to guide care providers to focus on the psychological aspects of a person when they disclose bad news such as this and to counsel individuals to expect the unexpected.

Ethiopian communities, like those in other African nations, viewed having children as a moral duty to one's family and society. The community considers couples without children to be a disgrace (47). Consequently, having children is seen as a need rather than a choice in many cultures (30).

As expected, the majority of the couples in the study suffered marital distress like decreased love, disagreement, decreased libido, the problem of having sexual intercourse and having a child with another woman. And also infertility and its treatment negatively impacted their relations with families and friends which make them avoid family and social events and cut off their relations, which resulted from the disagreement created by constant intrusive questions, pressure, and unnecessary advice suggested. Which is contrary to the results of a previous study (48). This contradiction may arise from the fact that, unlike the West, we don't have a stronger concept of family in which spouses do not discuss problems and deal with it together and also there is high degree of family interference in our society.

In addition, due of pressure and concern over what others may say, most couples decide not to tell their relatives and friends about their fertility treatments. Other studies also support this finding (30, 49). However, few couples claimed that infertility therapy had improved their marital relationship and that fertility treatment had deepened their bond and given them some hope. This finding is similar to previous studies (50, 51).

Infertility is a disease of both male and female which caused by a range of abnormalities in reproductive and endocrine system (52). But According to the study finding, The Society believes that the cause of infertility is gendered. Without any medical diagnosis, women are frequently thought to have fertility issues. And society refers infertile women as "mules" (Beqlo). In addition fertility is considered as a blessing and infertility is considered as a curse in most cultures. which is in line with the studies conducted in Gambia and India (39, 53).

This data suggests that the society needs to be educated about infertility and its treatments. This knowledge could help people comprehend the difficulties faced by infertile couples seeking treatment in Ethiopia. Consequently, social pressure will be decreased, and couples will get back in touch with their family and friends, who might be able to offer them social support.

According to WHO Most nations still struggle with the availability, accessibility, and quality of interventions to address infertility, especially in low- and middle-income nations (4). The

study finding also indicates that infertility treatment cost is expensive for most couples. Most couples borrowed money, sold their properties, and use the money they saved for another purpose which make them financially inferior. This result is consistent with findings from other African and non-African nations that indicate infertility therapy, especially ARTs, as being unaffordable and only accessible to the wealthy (30, 38, 50).

Infertility diagnosis and treatment are frequently not prioritised in national population and development policies, and public health finance is rarely used for reproductive health programmes (4). The current study finding also confirms this. As most participants stated, Due to the small number of treatment facilities in the country, it is difficult to access the treatment service unless they have mediator who can negotiate with the facility. Thus, giving more attention to the case, building more facilities that provide the service, and also providing governmental support for infertility treatment may lessen the financial burden.

Moreover, even in nations that are actively addressing the needs of those with infertility, a shortage of skilled workers, the appropriate tools, and infrastructure pose significant obstacles. The study finding also suggest that participants are disappointed with the negligence of health care providers that they didn't have detailed information about their case, as well as the treatment process. In addition some participant had a repeated surgery and wrong management options due to a lack of expertise. This finding is consistent with the study conducted in Turkey (54). This important finding could assist medical providers in offering patients undergoing infertility therapy evidence-based care.

The study found that religious practises like Bible reading, prayer and the use of holy water helped infertile couples deal with the hardship of infertility. Ethiopian society is very religious (55). This explains why practising religion and having faith were mentioned as the main coping techniques. Several other studies have also concluded that religious faith plays a significant role in facilitating coping with the impacts of infertility (29, 30). Given the high level of religiosity in Ethiopia. The finding demonstrates the need for healthcare professionals to respect and be attentive to the spirituality and religion of their patients.

Coping was also positively influenced by being self-compassionate and shifting their focus and emotionally distancing themselves from the infertility struggles. This distancing was done by keeping themselves busy with work, reading and going to bed early which is consistent with other countries studies (29, 30).

The findings also emphasise the pivotal importance of social support from their partner and from individuals who passed through infertility treatment for reducing burden. Participants stated that they feel less stressed after discussing and receiving advice from those who passed through this burden and currently have children. This is In line with previous study in Africa (30). The finding suggests that giving couples opportunities to share their experiences by creating social support networks could be highly beneficial to lessen the burden of infertility.

It's amazing to note that none of the couples in the research had adopted or reared a kid. comparable to the Kenyan study (30). This finding underlined the necessity for health care providers to provide an extensive counselling program for infertile couples that offers alternative ways of starting a family, such as adoption.

7. STRENGTHS AND LIMITATIONS

Strength

The main strength of this study is that it is a qualitative study that incorporates the perspectives of both men and women impacted by infertility. Although a few studies on the subject of infertility have been done recently, they frequently solely looked at the experiences of women.

The other strength of this study is due to the fact that almost all of the couples in this study are from different regions of the nation and have diverse backgrounds, the finding can give a general overview of the socio-cultural acceptance of infertility and its treatment in the society.

The results of the qualitative interviews provided contextualized and in-depth understandings of the impacts of infertility, and its coping mechanisms.

Limitation

Since the study is conducted among couples who seek fertility treatment; somehow Participants may be more willing to incur social risks to solve fertility difficulties, may have more supportive partners, and may be less influenced. So to properly comprehend the wider consequences of infertility, more study is required on infertile couples experience at the community level.

8. CONCLUSION AND RECOMMENDATION

8.1. Conclusion

This study explored the lived experiences of couples seeking infertility treatment. It was found that infertility and its treatment affects psychological, socio-cultural and financial aspects of couples with infertility. And couples use different coping mechanisms to navigate those impacts of infertility, including religious activities, being self-compassionate, receiving support from others and shifting focus. The study finding suggests that incorporating psychosocial interventions in fertility treatment are necessary. It is also obvious that healthcare professionals should offer both informational and emotional support, including regular access to counselling and support groups, in order to help these couples get through treatment challenges. Additionally, it is evident from the couple's viewpoint that easily available and affordable infertility treatment would significantly lessen the burden.

8.2. Recommendation

To Ministry of health (MOH)

Ministry of health is recommended to establish infertility treatment centers in different regions of the country and there should be financial support for infertile couples including ensuring access to the insurance coverage so they can access the treatment service easily,

The MOH is also recommended to work on the awareness creation on infertility and the treatment in order to clear the wrong perceptions.

To Health Institution:

Infertility treatment centers are recommended to have a special unit that provide support services, such as counselling for infertile couples. The unit should be staffed with medical specialists with expertise in fertility issues. With the goal of offering psychosocial assistance to infertile couples

To Health care providers

Healthcare providers are recommended to be compassionate and sympathetic, and should provide emotional support, counselling and detail information about the case and the treatment process.

To infertile couples

Infertile couples are recommended to create self-help groups so they may come together and address their issues successfully by lending one other a helpful hand.

To Researchers

Future researchers are recommended to explore the lived experience' of infertility at the community among couples who are not under treatment and among those who terminated the treatment to understand the impacts of infertility in detail.

9. REFERENCES

1. Zoe R. Causes of infertility in women at reproductive age. *Health science journal*. 2009;3(2):0-.
2. Abebe MS, Afework M, Abaynew Y. Primary and secondary infertility in Africa: systematic review with meta-analysis. *Fertility Research and Practice*. 2020;6(1):1-11.
3. Fidler AT, Bernstein J. Infertility: from a personal to a public health problem. *Public Health Reports*. 1999;114(6):494.
4. Organization WH. WHO fact sheet on infertility. *Global Reproductive Health*. 2021;6(1):e52.
5. Akalewold M, Yohannes GW, Abdo ZA, Hailu Y, Negesse A. Magnitude of infertility and associated factors among women attending selected public hospitals in Addis Ababa, Ethiopia: a cross-sectional study. *BMC Women's Health*. 2022;22(1):1-11.
6. Hasanpoor ASB, Simbar M, Vedadhir A. The emotional-psychological consequences of infertility among infertile women seeking treatment: Results of a qualitative study. 2014.
7. Anokye R, Acheampong E, Mprah WK, Ope JO, Barivure TN. Psychosocial effects of infertility among couples attending St. Michael's Hospital, Jachie-Pramso in the Ashanti Region of Ghana. *BMC Research Notes*. 2017;10(1):1-5.
8. Sharma S, Mittal S, Aggarwal P. Management of infertility in low resource countries. *BJOG: An International Journal of Obstetrics & Gynaecology*. 2009;116:77-83.
9. Deribe K, Anberbir A, Regassa G, Belachew T, Biadgilign S. Infertility perceived causes and experiences in rural South West Ethiopia. *Ethiop J Health Sci*. 2007;17(2).
10. Adilo TM, Wordofa HM. Prevalence of fertility desire and its associated factors among 15-to 49-year-old people living with HIV/AIDS in Addis Ababa, Ethiopia: a cross-sectional study design. *Hiv/aids (Auckland, NZ)*. 2017;9:167.
11. Masoumi SZ, Poorolajal J, Keramat A, Moosavi SA. Prevalence of depression among infertile couples in Iran: a meta-analysis study. *Iranian journal of public health*. 2013;42(5):458.
12. McIntosh CA, Finkle JL. The Cairo conference on population and development: A new paradigm? *Population and development review*. 1995:223-60.
13. Wichman CL, Ehlers SL, Wichman SE, Weaver AL, Coddington C. Comparison of multiple psychological distress measures between men and women preparing for in vitro fertilization. *Fertility and sterility*. 2011;95(2):717-21.
14. Greil AL, Slauson-Blevins K, McQuillan J. The experience of infertility: a review of recent literature. *Sociology of health & illness*. 2010;32(1):140-62.
15. Mosweeney L. *Love and life billings method of natural family planing*. Nigeria: Gordimer Publisher. 1995.
16. Tsevat DG, Wiesenfeld HC, Parks C, Peipert JF. Sexually transmitted diseases and infertility. *American journal of obstetrics and gynecology*. 2017;216(1):1-9.
17. Sun H, Gong T-T, Jiang Y-T, Zhang S, Zhao Y-H, Wu Q-J. Global, regional, and national prevalence and disability-adjusted life-years for infertility in 195 countries and territories, 1990–2017: results from a global burden of disease study, 2017. *Aging (Albany NY)*. 2019;11(23):10952.
18. Jonaidy E, Sadodin SN, Mokhber N, Shakeri M. Comparing the marital satisfaction in infertile and fertile women referred to the public clinics in Mashhad in 2006-07. *Iranian Journal of Obstetrics, Gynecology and Infertility*. 2009;12(1):7-16.
19. Meskelu J, Berhane Y. Experiences of women with infertility and their treatment seeking practices: a qualitative study. *Ethiopian Journal of Reproductive Health*. 2018;10(4).
20. Pásztor N, Hegyi BE, Dombi E, Németh G. Psychological distress and coping mechanisms in infertile couples. *The Open Psychology Journal*. 2019;12(1).
21. Boivin J, Griffiths E, Venetis CA. Emotional distress in infertile women and failure of assisted reproductive technologies: meta-analysis of prospective psychosocial studies. *BmJ*. 2011;342.

22. Nasim S, Bilal S, Qureshi M. Psycho-social aspects of infertility-a review of current trends. *The Professional Medical Journal*. 2019;26(09):1537-41.
23. Hasanpoor-Azghdy SB, Simbar M, Vedadhir A. The social consequences of infertility among Iranian women: a qualitative study. *International journal of fertility & sterility*. 2015;8(4):409.
24. Campbell DA. An update on the United Nations millennium development goals. *Journal of Obstetric, Gynecologic & Neonatal Nursing*. 2017;46(3):e48-e55.
25. Fontenot MC. A phenomenological study of couples who pursue infertility and the impact on their lives. 2008.
26. Mustafa M, Sharifa A, Hadi J, Illzam E, Aliya S. Male and female infertility: causes, and management. *IOSR Journal of Dental and Medical Sciences*. 2019;18:27-32.
27. Obaidat HM, Hamlan AM, Callister LC. Missing motherhood: Jordanian women's experiences with infertility. *Advances in Psychiatry*. 2014;2014.
28. Cabral JCC, de Almeida RMM. From social status to emotions: Asymmetric contests predict emotional responses to victory and defeat. *Emotion*. 2022;22(4):769.
29. Tiu MM, Hong JY, Cheng VS, Kam CY, Ng BT. Lived experience of infertility among Hong Kong Chinese women. *International journal of qualitative studies on health and well-being*. 2018;13(1):1554023.
30. Njogu A, Njogu J, Mutisya A, Luo Y. Experiences of infertile women pursuing treatment in Kenya: a qualitative study. *BMC Women's Health*. 2022;22(1):1-17.
31. Culley L, Hudson N, Lohan M. Where are all the men? The marginalization of men in social scientific research on infertility. *Reproductive biomedicine online*. 2013;27(3):225-35.
32. Shirani F, Henwood K. Taking one day at a time: Temporal experiences in the context of unexpected life course transitions. *Time & Society*. 2011;20(1):49-68.
33. Herrera F. "Men Always Adopt" infertility and reproduction from a male perspective. *Journal of Family Issues*. 2013;34(8):1059-80.
34. Johansson M, Hellström A-L, Berg M. Severe male infertility after failed ICSI treatment-a phenomenological study of men's experiences. *Reproductive health*. 2011;8(1):1-7.
35. Imeson M, McMurray A. Couples' experiences of infertility: a phenomenological study. *Journal of advanced nursing*. 1996;24(5):1014-22.
36. Nieuwenhuis SL, Theobald S, Liu X, Odukogbe A-TA. The impact of infertility on infertile men and women in Ibadan, Oyo State, Nigeria: a qualitative study. *African Journal of Reproductive Health*. 2009;13(3):85-98.
37. Bergart AM. The experience of women in unsuccessful infertility treatment: what do patients need when medical intervention fails? *Social Work in Health Care*. 2000;30(4):45-69.
38. Hasanpoor-Azghady SB, Simbar M, Vedadhir AA, Azin SA, Amiri-Farahani L. The social construction of infertility among Iranian infertile women: a qualitative study. *Journal of reproduction & infertility*. 2019;20(3):178.
39. Dierickx S, Rahbari L, Longman C, Jaiteh F, Coene G. 'I am always crying on the inside': a qualitative study on the implications of infertility on women's lives in urban Gambia. *Reproductive health*. 2018;15:1-11.
40. Hanna E, Gough B. The impact of infertility on men's work and finances: Findings from a qualitative questionnaire study. *Gender, Work & Organization*. 2020;27(4):581-91.
41. Pottinger AM, Nelson K, McKenzie C. Stressful events and coping with infertility: factors determining pregnancy outcome among IVF couples in Jamaica. *Journal of Reproductive and Infant Psychology*. 2016;34(1):3-14.
42. Gerrity DA. A biopsychosocial theory of infertility. *The Family Journal*. 2001;9(2):151-8.
43. Grossoehme DH. Overview of qualitative research. *Journal of health care chaplaincy*. 2014;20(3):109-22.
44. Polit D, Beck C, Hungler B. Examining sampling plans. *Essentials of Nursing Research Methods, appraisal and utilization sixth ed Philadelphia: Lippincott Williams & Wilkins*. 2006:258-84.

45. Boivin J, Oguz M, Duong M, Cooper O, Filipenko D, Markert M, et al. Emotional reactions to infertility diagnosis: thematic and natural language processing analyses of the 1000 Dreams survey. *Reproductive BioMedicine Online*. 2023;46(2):399-409.
46. Omu FE, Omu AE. Emotional reaction to diagnosis of infertility in Kuwait and successful clients' perception of nurses' role during treatment. *BMC nursing*. 2010;9(1):1-10.
47. Kimani V, Olenja J. Infertility: Cultural dimensions and impact on women in selected communities in Kenya. *African Anthropologist*. 2001;8(2):200-14.
48. Morse CA, Van Hall EV. Psychosocial aspects of infertility: a review of current concepts. *Journal of Psychosomatic Obstetrics & Gynecology*. 1987;6(3):157-64.
49. Murage A, Muteshi MC, Githae F. Assisted reproduction services provision in a developing country: time to act? *Fertility and sterility*. 2011;96(4):966-8.
50. Hiadzi RA, Woodward B, Akrong GB. Ethical issues surrounding the use of assisted reproductive technologies in Ghana: An analysis of the experiences of clients and service providers. *Heliyon*. 2023;9(2).
51. Ying L-Y, Wu LH, Loke AY. The experience of Chinese couples undergoing in vitro fertilization treatment: perception of the treatment process and partner support. *PLoS one*. 2015;10(10):e0139691.
52. Organization WH. WHO fact sheet on infertility. *LWW*; 2021. p. e52.
53. Meera Guntupalli A, Chenchelgudem P. Perceptions, causes and consequences of infertility among the Chenchu tribe of India. *Journal of Reproductive and Infant Psychology*. 2004;22(4):249-59.
54. Öztürk R, Herbell K, Morton J, Bloom T. "The worst time of my life": Treatment-related stress and unmet needs of women living with infertility. *Journal of community psychology*. 2021;49(5):1121-33.
55. Population EOot, Commission HC. Summary and statistical report of the 2007 Population and Housing Census: population size by age and sex: Federal Democratic Republic of Ethiopia, Population Census Commission; 2008.

ANNEXES

Annex-I. Information sheet for Participants in the Research Study

Title of the Research Project: lived experiences of infertility among couples who seek treatment at Saint Paul hospital millennium medical college center for fertility and reproductive medicine, Addis Ababa, Ethiopia, 2023G.c

Name of Principal Investigator: Haymanot Zewde

Name of the Organization: Addis Ababa University College of health sciences school of nursing and midwifery department of midwifery.

Name of the Sponsor: Addis Ababa University College of health science

Introduction

This information sheet and consent form is prepared with the aim to explore the lived experiences of infertility among couples who seek treatment at Saint Paul hospital

millennium medical college center for fertility and reproductive medicine, Addis Ababa, Ethiopia, 2023G.c.

Purpose of the Research Project: This study aims to explore lived experiences of infertility among couples who seek treatment at Saint Paul hospital millennium medical college center for fertility and reproductive medicine, Addis Ababa, Ethiopia, 2023G.c with focusing on sociocultural and financial aspects.

Procedure: Couples that met the inclusion requirements are included in this study. If you are willing to participate in the study, you have been chosen as one of the participants, and we kindly extend our invitation to you. .

We would be so grateful if you would agree to join, but we need you to understand the purpose of the study and demonstrate your acceptance. Finally, we respectfully ask that you respond to the interview questions honestly.

Benefits, Risks, and /or Discomfort

You might find it uncomfortable to describe your pain and feelings when taking part in this study., however, your participation is crucial to study the lived experiences of infertility. Participating in this study carries no risk and offers no immediate advantages.

Right to Refusal or Withdraw

You have a complete right to decline taking part in this study. Additionally, you have full permission to leave this study whenever you like. And you are welcome to get in touch with me at any time if you have any questions.

Name: Haymanot Zewde

Phone No: 251919758415

E-mail: haymizewde18@gmail.com

Annexes II: English version of a semi-structured questionnaire

A semi-structured questionnaire prepared to explore the lived experiences of infertility among couples who seek treatment at Saint Paul hospital millennium medical college center for fertility and reproductive medicine, Addis Ababa, Ethiopia, 2023 G.C.

Dear

Hello, my name is **Haymanot Zewde** I am studying master's degree in maternity and reproductive health nursing at Addis Ababa University College of health sciences. I am interested in studying lived experiences of infertility among couples who seek treatment at Saint Paul hospital millennium medical college center for fertility and reproductive medicine, Addis Ababa. This semi-structured questionnaire is designed for academic purposes and will be approved by Addis Ababa University, College of health sciences, School of nursing and midwifery, in partial fulfillment of a master's degree in maternity and reproductive health nursing. I'm hoping that by responding to these questions, you will help me. No one will be able to access any of your responses. I promise to keep all of your information secret. The right to withdraw from the study at any time will be available to anyone who is unwilling to take part. The respondents' answers will be kept private and confidential by being recorded in a different location where no one can see them. I therefore need an open and sincere response from you. The study's findings should be a valuable contribution to intervention and policy programmes.

I thank you in advance for taking the time to answer my questions.

Would you be willing to participate in the study?

1. Yes
2. No

If yes, proceed to the next page.

If not, please stop here.

Name of Researcher: Haymanot Zewde

Address: Addis Ababa University College of health science

Phone No: +251919758415

E-mail: haymizewde18@gmail.com

Consent form

I, the undersigned, have been informed that this study is going to be conducted to explore lived experiences of infertility among couples who seek treatment at Saint Paul hospital millennium medical college center for fertility and reproductive medicine, Addis Ababa. I am informed that the information I give will be kept confidential, and only used for this study. I

am also conscious that I have the right not to respond to any question without my interest.
Hence, I agree to participate in the research voluntarily.

Signature_____ Date_____

Part I: The Socio-demographic and personal characteristics of the participants

1. How old are you? ----- (Age in years).

2. Gender? A. Male B. Female

3. What is your level of education?

A. Illiterate

B Elementary school

C. Preparatory school

D. College/university graduate

E. Other

4. What is your Occupation?

A. Housewife (Jobless)

B. Employee

C. Private Job

D. Other

5. Where is the place of your residence?

A. Rural

B. Urban

6. Duration of marriage?

7. What is the type of infertility you/or your partner was diagnosed with?

A. Primary

B. Secondary

8. For how long you and your partner have been stayed infertile?

9. How long does you or your partner have stayed on infertility treatment?

10. What is the Type of infertility Treatment you or your partner have been through so far?

Part II: Semi-structured in-depth interview guide (for both partners)

The main semi-structured questions that will be posed to the participants are the following:

1. What were your expectations when you and your partner decided to conceive a child naturally?

Probing question

a. Have you ever thought that you wouldn't be able to have a child?

2. What was your initial reaction when you or your partner was diagnosed with infertility?

Probing questions:

a. How did you feel when you hear that you/your partner are infertile?

b. What happens to your thoughts? Your feelings? Your behavior? (Clarify the questions based on answers)

3. Does the diagnosis reveal which side causes infertility, your side or your partner's?
4. What are your feelings concerning being the contributing factor to the infertility diagnosis?
(Will be asked for the contributing factor)
5. How do infertility and its treatment journey affect your social relations?

Probing questions

- a) How does infertility affect the relationships you have with your partners?
 - b) How does infertility affect the relationships you have with your family, in-laws, and relatives
 - c) How does infertility affect the relationships you have with other community members like friends and colleagues?
6. How does infertility perceived in your culture?
 - a) What cultural impact did you face for being infertile?
 - b) What cultural impact did you face for passing through this treatment journey?
 7. How would you describe infertility treatment?
 - a) What kind of problems did you go through to get the treatment?
 - b) How would you describe the medical process you went through or are going through?
 8. How does infertility treatment affect you financially?
 - a) What direct financial impact did you face due to infertility treatment? (Related to the treatment cost)
 - b) What indirect financial impact did you face due to infertility treatment?
 9. How does passing through this sociocultural and financial impact affected you psychologically?

Probing questions

- a) What do you feel inside for passing through this burden because of your inability to have a child?
- b) How do you explain your internal feeling regarding the situation?

10. What are your coping strategies after you faced those burdens due to infertility?

Probing questions:

a) What do you personally do to reduce the impacts that infertility imposes on you?

11. Is there anything more you would like to add or share?

Annex III: በጥናቱ ለሚሳተፉ የስምምነት ዉል እና አጠቃላይ መረጃ

የጥናቱ ርዕስ ጉዳይ: በአዲስ አበባ ከተማ በሚገኝ ቅዱስ ጳውሎስ ሆስፒታል የመከንኑት እና ስነ-ተዋልዶ ጤና ማዕከል ዉስጥ ለመከንኑት ህክምና የሚመጡ ጥንዶች በመከንኑት ህይወታቸው ያሳለፉትን ወይም የገጠማቸውን ነገር ለመዳሰስ የቀረበ ጥናት ነው።

ጥናቱን የሚያካሂደዉ ግለሰብ ስም: ሐይማኖት ዘውዴ

የተቋሙ ስም: አዲስ አበባ ዩኒቨርሲቲ ጤና ሳይንስ ኮሌጅ

የስፖንሰሩ ስም: አዲስ አበባ ዩኒቨርሲቲ ጤና ሳይንስ ኮሌጅ

መግቢያ: ይህ የመረጃ ዝርዝር እና የስምምነት ቅፅ በአዲስ አበባ ከተማ በሚገኝ ቅዱስ ጳውሎስ ሆስፒታል የመከንኑት እና ስነ-ተዋልዶ ጤና ማዕከል ዉስጥ ለመከንኑት ህክምና የሚመጡ ጥንዶች በመከንኑት ህይወታቸው ያሳለፉትን ወይም የገጠማቸውን ነገር ለመዳሰስ የቀረበ ጥናት ነው።

የጥናቱ አላማ: የዚህ ጥናት ዋና አላማ በአዲስ አበባ ከተማ በሚገኝ ቅዱስ ጳውሎስ ሆስፒታል የመከንኑት እና ስነ-ተዋልዶ ጤና ማዕከል ውስጥ ለመከንኑት ህክምና የሚመጡ ጥንዶች በመከንኑት ህይወታቸው ያሳለፉትን ወይም የገጠማቸውን ነገር ይዳስሳል። የዚህ ጥናት ውጤት በ መከንኑት ውስጥ ያሉ ጥንዶች ስለሚገጥማቸው እና ስለሚያሳልፍባቸው የህይወት አጋጣሚዎች/ችግሮች መረጃ ይሰጣል።ይህም ችግሮቹን ለመፍታታ አስፈላጊው እርምጃ እንዲወሰድ ያግዛል።

የጥናቱ ሂደት: በጥናቱ ውስጥ ለመሳተፍ የተካተቱትን መመዘኛዎች ያሟሉ ባለትዳሮች በጥናቱ ይካተታሉ። እርስዎም በዚህ ጥናት ለመሳተፍ በታላቅ አክብሮት ተጋብዘዋል። ለመሳተፍ ፍቃደኛ ከሆኑ፤እኛ በጣም ደስተኞች ነን እናም የዚህን ጥናት አላማ በትክክል ተረድተው ስምምነትዎን እንዲያሳዩ እንፈልጋለን።በመጨረሻም በቃለ መጠይቁ ትክክለኛ ምላሽዎን እንዲሰጡ በአክብሮት እንጠይቃለን።

ጥቅማጥቅም፤ጉዳት እና/ወይም የማይመች ነገር:

በዚህ ጥናት በመሳተፍዎ ጥሩ የማይባለውን የህይወት አጋጣሚዎን በማውራትዎ ምችት ላይሰማዎ ይችላል።ሆኖም ግን የእርስዎ ተሳትፎ መከንኑት ውስጥ ያሉ ጥንዶች ስለሚገጥማቸው እና ስለሚያሳልፍባቸው የህይወት አጋጣሚዎች/ችግሮች ለማጥናት እና አስፈላጊውን የመፍትሄ እርምጃ እዲወሰድ ያግዛል።

በዚህ ጥናት በመሳተፍዎ ምንም አይነት ጉዳት ወይም ቀጥተኛ ጥቅም አይኖረዎም።

ማበረታቻ/ለማበረታቻ ክፍያዎች: በዚህ ጥናት ለመሳተፍ ማበረታቻ ወይም ክፍያ አይኖረዎም።

ሚስጥራዊነት: ከእርሶዎ የተሰበሰበው መረጃ በኮምፒውተር ውስጥ ስምዎ ሳይኖር በሚስጥር ይቀመጣል።

የመቃወም ወይም የመተዉ መብት: በዚህ ጥናት ውስጥ ያለመሳተፍ ሙሉ መብት አለዎት በተጨማሪም ጥናቱን ሳያጠናቅቁ በፈለጉት ሰዓት የመተዉ መብትዎ የተጠበቀ ነዉ።

ማግኘት የሚችሉት ሰዉ: ይህ ጥናት አዲስ አበባ ዩኒቨርሲቲ ጤና ሳይንስ ኮሌጅ በተቋማት ግምገማ በርድ እዲፀድቅ ተደርግዋል።ማናቸውም ጥያቄ ሲኖረዎት በማንኛውም ጊዜ ማነጋገር ይችላሉ በተጨማሪም ማንኛውንም መረጃ በፈለጉት ጊዜ ማግኘት ይችላሉ።

ስም: ሐይማኖት ዘውዴ

ስልክ ቁጥር: +251919758415

ኢ-ሜይል: haymizewde18@gmail.com

Annex IV የአማረኛ ቃለ-መጠይቅ

በአዲስ አበባ ከተማ በሚገኝ ቅዱስ ጳውሎስ ሆስፒታል የመከንኑት እና ስነ-ተዋልዶ ጤና ማዕከል ዉስጥ ለመከንኑት ህክምና የሚመጡ ጥንዶች በመከንኑት ህይወታቸው ያሳለፉትን ወይም የገጠማቸውን ነገር ለመዳሰስ የተዘጋጀ ጥናት ነው። ::

ዉድ የጥናቱ ተሳታፊዎች!

ጤና ይስጥልኝ፣ስሜ ሐይማኖት ዘውዴ ይባላል። በአሁኑ ወቅት በአዲስ አበባ ዩኒቨርሲቲ በሚድዋይፍሪ ትምህርት ክፍል የሁለተኛ ዲግሪ ትምህርቱን እየተከታተልኩ እገኛለሁ። የሁለተኛ ዲግሪዬን ለመጨረስ ይረዳኝ ዘንድ በአዲስ አበባ ከተማ በሚገኝ ቅዱስ ጳውሎስ ሆስፒታል የመከንኑት እና ስነ-ተዋልዶ ጤና ማዕከል ዉስጥ ለመከንኑት ህክምና የሚመጡ ጥንዶች በመከንኑት ህይወታቸው ያሳለፉትን ወይም የገጠማቸው የህይወት አጋጣሚዎች በሚለዉ ርዕሰ ጉዳይ ላይ ጥናት እያደረኩ እገኛለሁ። ጥናቱ አዲስ አበባ ዩኒቨርሲቲ ጤና ሳይንስ ትምህርት ቤት በነርሲንግ እና ሚድዋይፍሪ ትምህርት ክፍል የጸደቀ ነዉ። ስለሆነም ከላይ የተዘረዘሩት የጥናቱ ዓላማዎች ይሳኩ ዘንድ በእርስዎ በኩል በእውነታ ላይ የተመሠረተና ትክክለኛ የሆነ መረጃ እንዲሰጡኝ እየጠየኩ ለቃለ መጠይቁ የሚሠጡኝ መልስ ግላዊ እና ስምዎን ያላካተተ በመሆኑ በከፍተኛ ሚስጥራዊነት የሚጠበቅ ይሆናል። ከዚህም በተጨማሪ በጥናቱ ላይ የሚሳተፉት በፍቃደኝነት ስለሆነ ካልተመችዎ ቃለመጠይቁን

ክፍል 1. መሠረታዊና ማህበራዊ ጥያቄዎች

1. ዕድሜዎ ስንት ነዉ? _____(በዓመት)

2. ጾታ

U. ወንድ ለ. ሴት

3. የትምህርት ደረጃዎ ምን ይመስላል?

U. አንደኛ ደረጃ ት/ት

ለ. የመሠናዶ ት/ት

ሐ. የኮሌጅ/የዩኒቨርሲቲ ምሩቅ

መ. ሌላ

4. የስራ ሁኔታዎ ምን ይመስላል?

U. ስራ የማይሠራ(ለሴት የቤት እመቤት)

ለ. ተቀጣሪ ስራተኛ

ሐ. የግል ስራ

መ. ሌላ

5. የመኖሪያ አድራሻዎ የት ነው?

U. ከተማ

ለ. ገጠር

6. ከትዳር አጋርዎ ጋር ለምን ያህል ጊዜ በትዳር ቆዩ? _____(በዓመት)

7. እናንተ የገጠማችሁ የመካንነት አይነት የቱ ነው?

U. የመጀመሪያ ደረጃ

ለ. ሁለተኛ ደረጃ

8. እርስዎ እና አጋርዎ ለምን ያህል ጊዜ መካን ሆነው ቆዩ? _____(በዓመት)

9. እርስዎ ወይም የትዳር ዳደኛዎ የመካንነት ሕክምና ላይ ለምን ያህል ጊዜ ቆዩ?

10. እርስዎ ወይም የትዳር ዳደኛዎ እስካሁን ድረስ ያለፉበት የመሃንነት ሕክምና ምን ዓይነት ናቸው?

ክፍል 2: በክፍል የተዋቀረ ጥልቀት ያለው የቃለ መጠይቅ መመሪያ

ከዚህ በመቀጠል ለሚከተሉት በክፍል ለተዋቀሩ ዋና ዋና ጥያቄዎች እና ሌሎች በስራቸው ላሉ የማብራሪያ ጥያቄዎች ምላሽ ይሰጡኛል።

1. እርስዎ እና አጋርዎ በተፈጥሮ ልጅ ለመውለድ ሲወስኑ ምን ነበር የጠበቁት?

ጥልቀት ያላቸው የማብራሪያ ጥያቄዎች:

U. ልጅ መውለድ እንደማትችል አስበህ ታውቃለህ?

2. እርስዎ ወይም የትዳር አጋርዎ መካን እንደሆኑ በሰሙ ጊዜ ያሳዩት ስሜት ምን ይመስላል?

ጥልቀት ያላቸው የማብራሪያ ጥያቄዎች:

U. እርስዎ ወይም የትዳር አጋርዎ መካን እንደሆኑ በሰሙ ጊዜ ምን አይነት ስሜት ተሰማዎ?

ለ. በሀሳብዎ፣ በስሜትዎ እንዲሁም በባህሪዎ ላይ ምን አይነት ለውጥ ተከሰተ

3. የመካንነት ምርመራ ውጤቱ የትኛው አጋር መካን እንደሆነ ያሳያል? አርስዎ ወይስ የትዳር አጋርዎ ?

- 4. በእርስዎ መካኒክ ምክንያት ልጅ መውለድ ባለመቻልዎ ምን ይሠማዎታል? (መካን ለሆነው የትዳር አጋር ይጠየቃል)
- 5. ልጅ መውለድ አለመቻልዎ እና እየተከታተሉ ያሉት የህክምና ሒደት ማህበራዊ ግንኙነት ላይ ምን አይነት አሉታዊ ተጽዕኖ ፈጥረዋል?

ጥልቀት ያላቸው የማብራሪያ ጥያቄዎች:

U. ልጅ መውለድ አለመቻልዎ እና ያሳለፉት እንዲሁም እያለፉበት ያሉት የህክምና ሒደት ከትዳር አጋርዎ ጋር ያልዎት ግንኙነት ላይ ምን አይነት ተጽዕኖ ፈጠረብዎ (አሉታዊ ወይስ አዎንታዊ)?

A. ልጅ መውለድ አለመቻልዎ እና ያሳለፉት እንዲሁም እያለፉበት ያሉት የህክምና ሒደት ከቤተሰብዎ፣ ከአማችዎ እንዲሁም ከዘመድ አዝማድዎ ጋር ያልዎት ግንኙነት ላይ ምን አይነት ተጽዕኖ ፈጠረብዎ?

A. ልጅ መውለድ አለመቻልዎ እና ያሳለፉት እንዲሁም እያለፉበት ያሉት የህክምና ሒደት ከጓደኛዎ፣ ከስራ ባልደረባዎ ወይም ሌላ የቅርብዎ ከሆነ ሠው ጋር ያልዎት ግንኙነት ላይ የፈጠረብዎ ተጽዕኖ ምን ይመስላል?

6. መካኒክ በባህላችን እንዴት ይታያል?

U. መካኒክን እርስዎ ከሚኖሩበት ባህል ጋር በተገናኘ ምን አይነት ተጽእኖ አሳድሮብዎታል?

A. ያሳለፉት እና እያሳለፉ ያሉት የመካኒክ ህክምና ሒደት እርስዎ ከሚኖሩበት ባህል ጋር በተገናኘ ምን አይነት ተጽእኖ አሳድሮብዎታል?

7. የመካኒክ ህክምናን እንዴት ይገልጹታል?

U. ህክምናውን ለማግኘት ምን አይነት ችግሮችን አሳልፈዋል?

A. ያለፉበትን ወይም እያለፉበት ያሉትን የህክምና ሒደት እንዴት ይገልጹታል?

8. ልጅ ለመውለድ ያሳለፉት እንዲሁም እያለፉበት ያሉት የህክምና ሒደት ምን አይነት ኢኮኖሚያዊ ተጽዕኖ ፈጠረብዎ?

U. በመካኒክ ህክምና ምክንያት ምን ቀጥተኛ ኢኮኖሚያዊ ተፅዕኖ አጋጥሞዎታል? (ከህክምናው ወጪ ጋር የተያያዘ)

A. በመካኒክ ህክምና ምክንያት ምን ቀጥተኛ ያልሆነ ኢኮኖሚያዊ ተፅዕኖ አጋጥሞዎታል?

Name of Major Advisor

Signature

Date

2. Kerebih Abere (M.Sc.)

Name of CO advisor

Signature

Date