

ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF MEDICINE

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

UROGYNECOLOGY AND PELVIC RECONSTRUCTIVE SURGERY UNIT

Title of Research:

Perspectives of Obstetricians and Gynecologists in Ethiopia Towards Female Sexual Dysfunction: A Cross-Sectional Study

Principal Investigator: Dr. Medina Barsenga

Advisors: Dr. Endalkachew Mekonen (Ass.Professor in OBS-GYN, Urogynecology, and Pelvic Reconstructive Surgery Subspecialists)

Dr. Salih Hassen (Ass. Professors in OB-GYN, Urogynecology, and Pelvic Reconstructive Surgery Subspecialists)

This thesis is submitted to the Department of Obstetrics and Gynecology, Unit of Urogynecology and pelvic reconstructive surgery, College of Health Sciences, Addis Ababa University, as partial fulfillment for the subspecialty training program in Urogynecology and Pelvic Reconstructive Surgery

February, 2026

Addis Ababa, Ethiopia



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Date: February 2026

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Declaration

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SUBSPECIALTY UNIT

I, Dr. Medina Barsenga, declare that this thesis:

"Perspectives of Obstetricians and Gynecologists in Ethiopia towards Female Sexual

Dysfunction " is my original work prepared as partial fulfillment for the subspecialty training in Urogynecology and Pelvic Reconstructive Surgery at Addis Ababa University. This study was conducted with the help and guidance of my advisors, Dr. Endalkachew Mekonen and Dr. Salih Hassen.

I confirm that I have tried to ensure the academic integrity of this thesis by avoiding plagiarism or duplication of previously published materials, except where properly cited and acknowledged. I also confirm that this research has never been submitted for any academic reason.

Principal Investigator

Dr. Medina Barsenga

Signature: _____ **Date:**_____

Advisors

Dr. Endalkachew Mekonen

Signature: _____ **Date:**_____

Dr. Salih Hassen

Signature: _____ **Date:**_____

Acknowledgment

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Table of Contents

Declaration iii

Acknowledgment iv

List Figures vii

List of Tables vii

Abbreviations and Acronyms viii

Abstract ix

1. Introduction 1

   1.1 Background 1

   1.2 Statement of the Problem 2

   1.3 Significance of the Study 2

2. Literature Review 3

   2.1 Definition and Clinical Classification of Female Sexual Dysfunction 3

   2.2 Global Perspectives on the Prevalence and Associated Factors of FSD 4

   2.3 Evidence from Other African Settings 4

   2.4 Prevalence and Associated Factors of Female Sexual Dysfunction in Ethiopia 5

   2.5 Role of Obstetricians and Gynecologists in Sexual Health Care 5

   2.6 Knowledge, Attitude, and Practice of Obstetrician and Gynecologist Regarding FSD 6

   2.7 Summary and Identified Research Gaps 7

   2.8 Conceptual frame work 7

3. Objective 9

   3.1 General Objective 9

   3.2 Specific Objectives 9

4. Methodology 10

   4.1 Study Design 10

   4.2 Source Population and Study Population 10

   4.3 Inclusion and Exclusion Criteria 10

      4.3.1 Inclusion Criteria: 10

      4.3.2 Exclusion Criteria: 10

   4.4 Sample Size Determination 10

   4.5 Data Collection Tools and Techniques 11

   4.6 Data Collection Procedure 12

4.7 Data Management and Confidentiality 13
4.8 Study Variables 13
4.9 Operational Definitions: 14
4.10 Data Analysis 15
4.11 Ethical Considerations 16
4.12 Dissemination of the Results 16
5. Result 17
5.1 Socio-demographic and Professional Characteristics of Participants 17
5.2 Knowledge of Female Sexual Dysfunction among Obstetricians and Gynecologists in Ethiopia 20
5.3 Attitude toward Female Sexual Dysfunction among OB-GYN 22
5.4 Clinical Practices Regarding Female Sexual Dysfunction 24
5.5 Perceived Barriers to the Management of Female Sexual Dysfunction 26
5.6 Factors Associated with Clinical Practice of Female Sexual Dysfunction 26
6. Discussion 30
7. Strengths and Limitations of the Study 33
7.1 Strengths 33
7.2 Limitations 33
8. Conclusion 34
9. Recommendations 35
REFERENCES 36
ANNEX I: INFORMATION SHEET 39
ANNEX II: CONSENT FORM 40

List Figures

Figure 1 Conceptual framework of factors associated with clinical practice regarding female sexual dysfunction among obstetricians and gynecologists in Ethiopia, 2025 8
Figure 2 Overall knowledge level regarding Female Sexual Dysfunction among Obstetricians and Gynecologists in Ethiopia, 2025 (n=245) 20
Figure 3 Overall attitude level toward female sexual dysfunction among obstetricians and gynecologists in Ethiopia, 2025 (n = 245). 22
Figure 4Overall clinical practice level regarding female sexual dysfunction among Obstetricians and Gynecologists in Ethiopia, 2025(n=245) 24

List of Tables

Table 1Socio-Demographics and Professional Characteristics of Participants among Obstetricians and Gynecologists in Ethiopia, 2025(n=245) 18

Table 2 Knowledge of female sexual dysfunction among obstetricians and gynecologists in Ethiopia, 2025 (n = 245) 21

Table 3 Attitude toward female sexual dysfunction among Obstetricians and Gynecologists in Ethiopia, 2025 (n=245) 23

Table 4 Clinical practices regarding Female Sexual Dysfunction among Obstetricians and Gynecologists in Ethiopia, 2025 (n=245) 25

Table 5 Perceived barriers to the Management of Female Sexual Dysfunction among Obstetricians and Gynecologists in Ethiopia, 2025 (n=245) 26

Table 6 Factors associated with the level of Clinical Practice of Female Sexual Dysfunction among Obstetricians and Gynecologists in Ethiopia, 2025 (n=245) 28

Abbreviations and Acronyms

AAU	Addis Ababa University
CI	Confidence Interval
CME	Continuing Medical Education
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition
DSM-IV-TR	Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition,Text Revision
DRPC	Department Research and Publication committee
FSD	Female Sexual Dysfunction
FSFI	Female sexual Function Index
KAP	Knowledge, Attitude, Practice
OB-GYN	Obstetrician and Gynecologist
SPSS	Statistical Package for Social Sciences
PI	Principal Investigator
URPS	Urogynecology and Pelvic Reconstructive Surgery
WHO	World Health Organization

Abstract

Background: Female sexual dysfunction (FSD) is a common yet often neglected health problem in Ethiopia. Although obstetricians and gynecologists are the primary providers of sexual and reproductive healthcare, their perspectives on FSD have not previously been assessed.

Objective: To assess the knowledge, attitudes, and clinical practices regarding female sexual dysfunction and to identify factors associated with clinical practice among obstetricians and gynecologists in Ethiopia in 2025.

Methods: An analytic, nationwide cross-sectional study was conducted among 245 obstetricians and gynecologists recruited through convenience sampling via professional networks and social media platforms. Data were collected using a structured, self-administered questionnaire. The data were summarized using frequencies and percentages, medians and interquartile ranges, and graphical presentations. To identify factors associated with good practice, binary logistic regression analysis was performed at $p < 0.05$, and results were reported using adjusted odds ratios (AORs) with 95% confidence intervals (CIs).

Results: Out of 245 participants, 40.8% demonstrated adequate knowledge and 41.2% had favorable attitudes, but only 10.2% exhibited good clinical practice, while 61.2% were categorized as having poor practice. Most specialists correctly identified core types of FSD, such as decreased sexual desire (96.3%), but fewer than half were aware of standardized assessment tools such as the Female Sexual Function Index (46.1%). The most prominent barriers reported were lack of formal training (79.6%), absence of clinical guidelines (64.5%), and cultural or religious factors (59.6%).

In multivariate analysis, factors significantly associated with good practice included more than 5 years of professional experience (AOR = 2.59, 95% CI: 1.25–5.37, $p = 0.010$), formal sexual and reproductive health (SRH) training specially on FSD (AOR = 10.01, 95% CI: 2.40–41.78, $p = 0.002$), adequate knowledge (AOR = 5.80, 95% CI: 3.01–11.19, $p < 0.0001$), and favorable attitude (AOR = 4.11, 95% CI: 2.14–7.87, $p < 0.0001$).

Conclusion: Ethiopian obstetricians and gynecologists demonstrate moderate knowledge and generally favorable attitudes toward female sexual dysfunction; however, clinical practice remains limited. The tenfold increase in good practice among trained providers, together with the high proportion of specialists identifying lack of training as a major barrier, highlights an

important opportunity for improvement through targeted training and supportive policies that strengthen clinicians' skills and translate willingness into effective clinical practice.
Keywords: Female sexual dysfunction, OB-GYN, Ethiopia, cross-sectional study, sexual health, provider perspectives.

1. Introduction

1.1 Background

Sexual health is recognized by the World Health Organization as an essential component of overall health and well-being, encompassing the physical, emotional, mental, and social dimensions of human life [1]. A sexual problem that causes personal distress and persists for at least six months is generally defined as sexual dysfunction [2]. Despite being an essential part of health, sexual health continues to receive limited clinical attention within standard healthcare services in many settings [3].

Female sexual dysfunction (FSD) is a multifactorial condition that includes disorders of sexual desire, arousal, orgasm, and pain, and it is influenced by a complex interaction of biological, psychological, relational, and sociocultural factors [4,5]. Worldwide, FSD has been shown to negatively affect women's quality of life, mental health, intimate relationships, and overall health status. Despite this, discussions about female sexual health are often limited by social stigma, cultural taboos, and low levels of awareness among both patients and healthcare practitioners [6,7].

These challenges are more common in low-income countries, where gaps in awareness, limited research activities, and restricted access to healthcare services continue to affect clinical practice related to sexual health [8–10]. In Ethiopia, despite the high prevalence of FSD reported in different regions [11,12], sexual health concerns are frequently overshadowed by other health priorities, and women's sexual well-being is not usually addressed as part of standard healthcare services.

Obstetricians and gynecologists are the primary healthcare providers for women worldwide and are the main professionals involved in addressing sexual health [13]. However, evidence from international studies shows that many obstetricians and gynecologists receive little or no formal education on sexual health during their training [14]. Limited training, personal discomfort when discussing sexual issues, time constraints during clinical visits, and widespread cultural barriers contribute to the under-recognition of female sexual dysfunction [6,7].

These challenges are even greater in sub-Saharan African countries, including Ethiopia, where healthcare systems face shortages of resources and sociocultural barriers [7,9]. To narrow this gap and improve the situation, strengthening the knowledge and clinical competence of

healthcare providers, particularly obstetricians and gynecologists, within the Ethiopian healthcare system is essential.

1.2 Statement of the Problem

Female sexual dysfunction (FSD) is a neglected condition that can affect many aspects of a woman's life, particularly in low-income settings such as Ethiopia. Evidence from previous studies shows that inadequate training and cultural barriers can affect clinical practice [6,7,14]. Obstetricians and gynecologists are the primary healthcare providers for women with reproductive and sexual health concerns.; however, little is known about their perspectives regarding female sexual dysfunction in Ethiopia.

Therefore, assessing obstetricians' and gynecologists' knowledge, attitudes, and practices regarding female sexual dysfunction is essential to identify existing gaps and to inform strategies aimed at improving the diagnosis and management of FSD in Ethiopia.

1.3 Significance of the Study

Female sexual dysfunction (FSD) is a neglected condition that can affect many aspects of a woman's life. This is particularly true in low-income settings such as Ethiopia, where cultural sensitivity around sexual health may limit open discussion and clinical assessment.

This study assesses the knowledge, attitudes, and clinical perspectives of obstetricians and gynecologists, the primary providers of female reproductive and sexual healthcare in Ethiopia. It identifies the challenges faced by these professionals when addressing sexual health concerns in clinical practice. Based on the findings, the study provides recommendations to improve the healthcare provided to women who need it most.

2. Literature Review

Female sexual dysfunction (FSD) is a neglected health problem that affects many women around the world. In this study, different literature sources are reviewed, with a focus on the classification of FSD, associated factors, evidence from other settings, and the role of obstetricians and gynecologists in clinical care.

2.1 Definition and Clinical Classification of Female Sexual Dysfunction

According to the World Health Organization, sexual health is defined as a state of physical, emotional, mental, and social well-being related to sexuality, rather than simply the absence of disease or dysfunction [1].

The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR) categorized female sexual dysfunction into four main groups: disorders of sexual desire, sexual arousal disorders, orgasmic disorders, and sexual pain disorders [15]. Following this, the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) introduced important changes to the previous classifications. DSM-5 specifies that symptoms must persist for at least six months and cause clinically significant distress in order to be considered a disorder [2]. In addition, sexual desire and arousal disorders were merged into Female Sexual Interest/Arousal Disorder, while pain-related conditions were grouped under Genito-Pelvic Pain/Penetration Disorder [2].

Although DSM-5 represents the most recent diagnostic framework, the earlier DSM-IV-TR classification continues to be widely used in research and clinical education. Many screening tools were also developed based on the DSM-IV framework. One widely known example is the Female Sexual Function Index (FSFI) [16]. The FSFI evaluates six domains of female sexual function: sexual desire, arousal, lubrication, orgasm, satisfaction, and pain.

For obstetricians and gynecologists, who serve as the main providers of reproductive and sexual healthcare, a clear understanding of the concept and different classifications of FSD is essential [3,14].

2.2 Global Perspectives on the Prevalence and Associated Factors of FSD

The prevalence of sexual dysfunction in the general population is high, affecting about 43% of women and 31% of men [17]. Research conducted in different parts of the world demonstrates that the prevalence and presentation of FSD vary widely depending on population characteristics.

A systematic review conducted by McCool-Myers et al. [18] found that psychological distress may contribute to approximately 41% of cases of female sexual dysfunction, while relationship difficulties are involved in nearly 60% of cases. In addition, hormonal changes, chronic illnesses, and psychosocial stressors have been identified as important contributors to sexual dysfunction, particularly during midlife [15,17].

When the Female Sexual Function Index (FSFI) was used to assess FSD, up to 53% of women reported arousal disorder, while 49% reported orgasm difficulties [16]. These findings demonstrate that FSD affects diverse populations and is shaped by complex biopsychosocial dynamics.

2.3 Evidence from Other African Settings

A systematic review and meta-analysis of studies conducted in Africa reported that the pooled prevalence of female sexual dysfunction was 52.1% (95% CI: 45.7%–58.4%). There are differences in disease burden across the continent: 39% in East Africa and 61% in West Africa. When different domains of sexual function were analyzed, the pooled prevalence was 76.2% for desire disorder, 59.7% for arousal disorder, 73.7% for lubrication problems, 73.1% for orgasmic disorder, 60.6% for sexual dissatisfaction, and 51.6% for pain or dyspareunia [9].

In Ghana, a cross-sectional study conducted in the Volta Region found that 48.3% of women had female sexual dysfunction. The affected women had moderate to severe symptoms, and health-seeking behavior depended on symptom severity, cultural beliefs, and access to healthcare services [19].

A comparative study from Kenya reported an overall prevalence of female sexual dysfunction of 38.7%. By contraceptive method, sexual dysfunction was more common among women using hormonal contraception (51.5%) compared with those using non-hormonal methods (29.6%), suggesting that hormonal factors and reproductive health interventions may affect female sexual function [20].

Among a sample of sexually active primary care patients with chronic illnesses in the North West Province of South Africa, about 91% reported symptoms of sexual dysfunction [21]. In another study from Guinea, 22.2% of women living with HIV had sexual dysfunction [22].

These African studies show that female sexual dysfunction is a common condition across the region, exacerbated by a combination of health-related, sociocultural, and health system factors.

2.4 Prevalence and Associated Factors of Female Sexual Dysfunction in Ethiopia

Female sexual dysfunction is a common but overlooked health problem among Ethiopian women. Various studies across different regions have shown high prevalence rates, depending on the population and assessment tools used [8,11,12].

In the Gurage Zone, female sexual dysfunction was identified in 32% of women, with psychosocial stress, pelvic floor problems, and partner-related factors identified as important associated conditions [8]. Similarly, research from Bahir Dar showed that more than half of married women reported symptoms consistent with FSD, frequently in association with chronic medical conditions and dissatisfaction with sexual relationships [11]. A study from the Kersa district in Eastern Ethiopia showed a prevalence rate of 47%, and pelvic floor disorders were significantly associated with FSD [12].

Evidence from specific patient populations in Ethiopia demonstrates that sexual dysfunction is common in chronic illnesses. Among HIV-positive women attending health facilities in South Gondar, 58.8% were found to have female sexual dysfunction [23]. Similarly, in a hospital-based study in Ethiopia, 78.6% of female patients with schizophrenia were reported to have sexual dysfunction [24]. These findings show that female sexual dysfunction is common among women with chronic medical and mental health conditions in Ethiopia.

Most existing studies have focused on prevalence and associated factors among women, while little attention has been given to how the health system and healthcare providers respond.

2.5 Role of Obstetricians and Gynecologists in Sexual Health Care

Obstetricians and gynecologists are the initial point of contact for women with sexual and reproductive health problems and play a significant role in the provision of women's healthcare [13,19]. Despite this, several studies have identified that many obstetricians and gynecologists

feel unprepared to address sexual health issues due to a lack of training [6,14]. This training gap is wider in low-resource settings [7,9].

In societies where sexual health is considered taboo, women are unlikely to raise the subject, making healthcare providers' active involvement essential [19]. However, in the absence of adequate knowledge, confidence, and availability of screening tools, providers may avoid these discussions or focus only on overt gynecological complaints, leaving underlying sexual problems unaddressed.

2.6 Knowledge, Attitude, and Practice of Obstetrician and Gynecologist Regarding FSD

Knowledge is the ability to identify disease, apply diagnostic criteria, and implement appropriate management options. While attitude reflects the willingness to engage in discussions, clinical practice reflects the actual care that patients receive in daily practice. This, in turn, depends on knowledge, attitude, and the level of confidence of the provider [25].

Most Ethiopian studies have reported the prevalence and associated factors of FSD among women [8,11,12,23,24]; however, there is no evidence on how healthcare providers, particularly obstetricians and gynecologists, perceive and manage this condition.

A study from India identified significant gaps in knowledge and clinical practice regarding FSD [26]. A survey from Germany reported that many obstetricians and gynecologists recognize the importance of sexual health, but most feel inadequately trained to diagnose and manage female sexual dysfunction in routine practice [14]. Similarly, Indian clinical practice guidelines state that sexual dysfunction is commonly under-recognized and poorly managed in routine care due to limited training and the lack of clinical tools [17].

In Finland, 72% of obstetricians and gynecologists reported good competence in discussing sexual problems but poor competence in treating them, indicating a gap between communication skills and patient management. In addition, 95% indicated that their education in sexual medicine during medical school was insufficient, and 83% reported inadequate training during residency [27]. Similarly, a cross-sectional study conducted in China showed that 80.17% of obstetricians and gynecologists reported having received no formal training in female sexual health during medical school, and 76.27% reported no training since entering clinical practice [28].

2.7 Summary and Identified Research Gaps

Despite the high prevalence of FSD throughout the world, it remains a neglected condition, especially in developing countries like Ethiopia [7,10]. Most studies in Ethiopia have focused on prevalence and associated factors among women.

Considering the limited focus on female sexual dysfunction (FSD) in routine clinical care and medical training, this study aims to evaluate how obstetricians and gynecologists in Ethiopia approach the diagnosis and management of FSD, identify the challenges they encounter, and explore potential areas for improvement in patient-centered sexual health services.

2.8 Conceptual frame work

Based on the reviewed literature, a conceptual framework was developed to illustrate the relationship between sociodemographic factors, professional characteristics, knowledge, and attitudes, and their influence on clinical practice related to female sexual dysfunction.

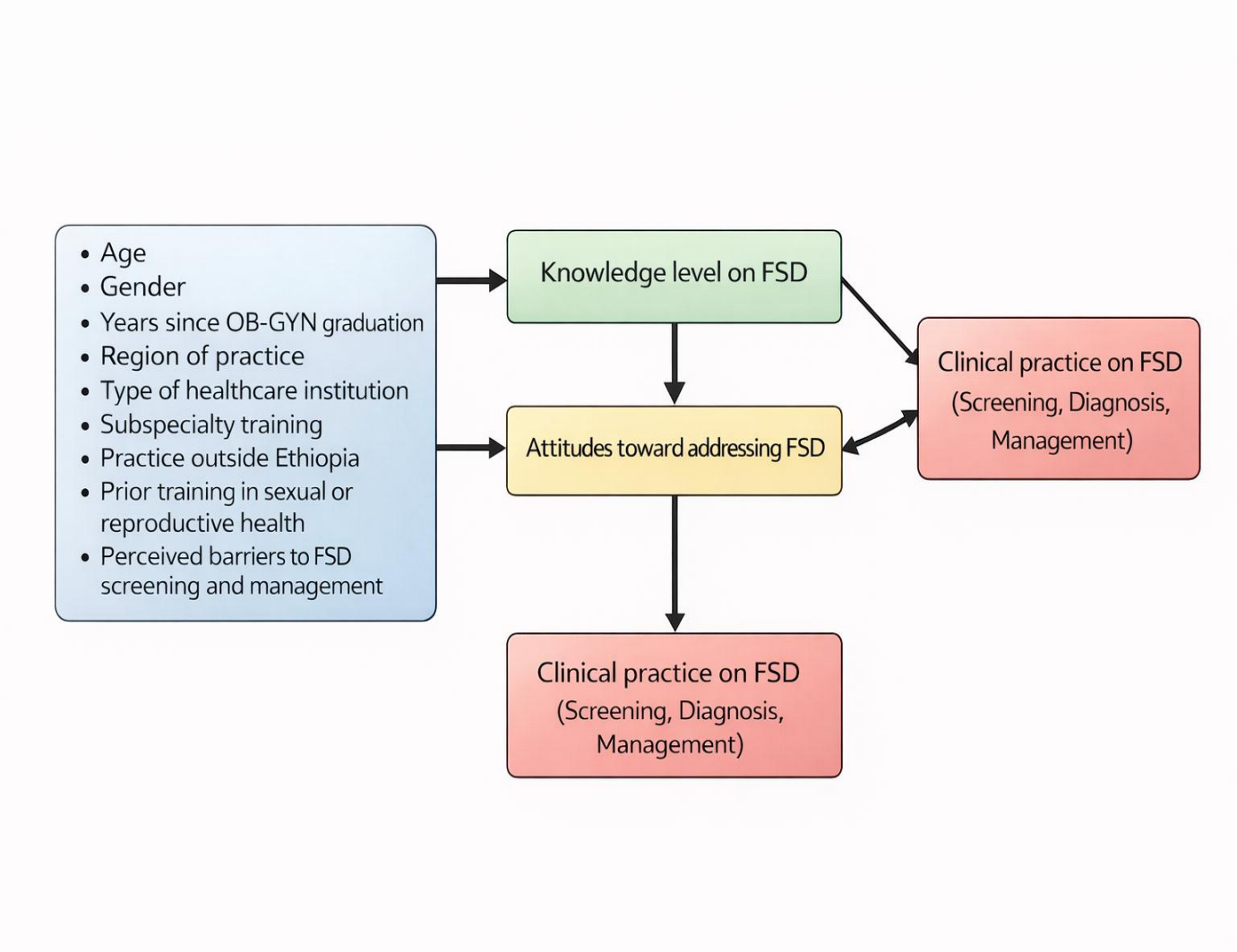


Figure 1 Conceptual framework of factors associated with clinical practice regarding female sexual dysfunction among obstetricians and gynecologists in Ethiopia, 2025

3. Objective

3.1 General Objective

To assess the perspectives of obstetricians and gynecologists in Ethiopia toward female sexual dysfunction and to identify factors associated with their clinical practice.

3.2 Specific Objectives

To assess the level of knowledge of obstetricians and gynecologists regarding female sexual dysfunction.

To examine the attitudes of obstetricians and gynecologists toward the assessment and management of female sexual dysfunction.

To describe the current clinical practices of obstetricians and gynecologists in screening, diagnosing, and managing female sexual dysfunction.

To identify perceived barriers to discussing and managing female sexual dysfunction in routine clinical care.

To identify factors associated with good clinical practice regarding female sexual dysfunction among obstetricians and gynecologists.

4. Methodology

This was a nationwide study involving obstetricians and gynecologists in Ethiopia across different settings. Data collection took place between October 10 and December 31, 2025.

4.1 Study Design

A quantitative cross-sectional study was done on the perspective of Obstetrician and Gynecologists in Ethiopia towards female sexual dysfunction.

4.2 Source Population and Study Population

The source population consisted of all obstetricians and gynecologists in Ethiopia actively working in Ethiopia during the study period.

The study population included obstetricians and gynecologists who were accessible or identified through the Ethiopian Society of Obstetricians and Gynecologists (ESOG) platforms and who met the eligibility criteria during the study period.

4.3 Inclusion and Exclusion Criteria

4.3.1 Inclusion Criteria:

All obstetricians and gynecologists who consented to participate and were identified through ESOG platforms.

4.3.2 Exclusion Criteria:

Obstetricians and gynecologists who did not consent to participate during the study period, or questionnaires with significant missing data (>10%) in the KAP sections.

4.4 Sample Size Determination

As no prior study has estimated the proportion of Ethiopian obstetricians and gynecologists with relevant knowledge and practices related to FSD, a conservative assumption of 50% was used to maximize the sample size.

$n = Z^2 \times p \times (1 - p) / d^2$

Where:

n = required sample size

Z = Z-score for 95% confidence level = 1.96

p = assumed proportion = 0.5

d = margin of error = 0.05

Calculation:

$n = (1.96)^2 \times 0.5 \times 0.5 / (0.05)^2 \sim 384.16$

Applying a finite population correction for the estimated 700 ESOG members at the time of starting the research , the adjusted sample size was calculated as:

$n_adj = n / (1 + (n - 1) / N) = 384 / (1 + 383 / 700) \approx 248$

After adding a 10% non-response rate, the final sample size was 273.

4.5 Data Collection Tools and Techniques

Data were collected using a structured, self-administered questionnaire developed after reviewing literatures on female sexual dysfunction (FSD), sexual health, and clinical practice among obstetricians and gynecologists. The questionnaire was developed using internationally accepted definitions and diagnostic criteria's, such as the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR and DSM-5) (2,15) and the World Health Organization's notion of sexual health (1). In addition, validated instruments and prior studies especially the Female Sexual Function Index (FSFI) and surveys assessing physicians' perspectives and practices regarding FSD were used to inform item selection and content coverage (14, 26–28). the findings of earlier studies and validated instruments were included.

The final questionaries were organized using a knowledge–Attitude–Practice (KAP) framework, which is commonly applied in health research, and was further informed by a modified Bloom's taxonomy approach for KAP assessment (25). The questionnaire consisted of five sections: (1) socio-demographic and professional characteristics, (2) knowledge related to female sexual dysfunction, (3) attitudes toward sexual health, (4) clinical practice related to FSD, and (5) perceived barriers and training needs.

The content of the knowledge and practice sections was constructed by using clinical guidelines and prior studies conducted among obstetricians and gynecologists and other healthcare providers（5, 13, 14, 17, 26）. Evidence from Ethiopian and African studies on FSD was also reviewed to ensure contextual relevance (8,10–12,21–24).

The questionnaire was structured using a Knowledge–Attitude–Practice framework guided by a modified Bloom's taxonomy (25). The knowledge domain assessed understanding of the classification, diagnosis, assessment, and management of FSD based on DSM-IV-TR and DSM-5 frameworks, the FSFI, and clinical guidelines and reviews (5,15–17). The attitude domain captured clinicians' perceptions, comfort level, and perceived training needs, which have been shown to influence sexual health care in previous studies (3,6,7,13,14,26–28). The practice domain evaluated routine clinical behaviors related to screening, diagnosis, management, documentation, and use of assessment tools, in line with earlier surveys among obstetricians and gynecologists (3,14,26–28) .Questions on barriers were included to reflect obstacles reported in earlier studies at the level of providers, the health system, and patients [6,7,14,26–28]. The questionnaire was then examined by professional and tested on a small group to adjust the language, improve clarity, and confirm that the items were appropriate for the local context before being used in the main study.

4.6 Data Collection Procedure

Obstetricians and gynecologists practicing in Ethiopia who had access to the Ethiopian Society of Obstetricians and Gynecologists (ESOG) communication platforms were invited to participate during the study period. Any specialist willing to take part was eligible, and to improve representativeness, the questionnaire was made available in both electronic and printed formats. The online version was circulated through ESOG communication channels, while hard copies were distributed in selected health facilities. Recruitment remained open until the data collection period ended.

Before completing the questionnaire participants were informed about the study purpose ,aim, and their rights.Written consent was obtained from those who filled out the paper version. For the online survey, submission of the completed form was taken as confirmation of consent.

No identifying information was collected , paper questionnaires were securely stored after collection, and electronic responses were saved in a password-protected database accessible only to the research team. At the end of the data collection period , 245 fully completed questionnaires were obtained and used for analysis.

4.7 Data Management and Confidentiality

Data collected from both the online and paper questionnaires were entered into an electronic database for analysis. Before analysis, the data were checked for completeness and consistency and no personal identifiers were used for analysis and reporting. All electronic documents were put on password-protected computers, and access was limited to the principal investigator and authorized members of the research team.

4.8 Study Variables

Dependent Variables:

Knowledge level regarding female sexual dysfunction (FSD)

Attitude toward addressing female sexual dysfunction

Clinical practice related to the screening and management of female sexual dysfunction

Independent Variables:

Age

Gender

Years since graduation (or clinical experience in OB-GYN specialty)

Geographic location (region of practice)

Type of healthcare institution (public or private)

Subspecialty training status

Previous Practice outside Ethiopia

Prior training in sexual and reproductive health

Perceived Barriers to FSD Practice:

Lack of training

Time constraints

Provider discomfort

Cultural or religious factors

Patient-related barriers

Lack of tools or clinical guidelines

Limited referral options

4.9 Operational Definitions:

Female Sexual Dysfunction (FSD):

For the purpose of this study, female sexual dysfunction was defined as the presence of ongoing problems related to sexual desire, arousal, orgasm, or pain during sexual activity, which persist for six months or longer and are associated with personal distress for the affected woman [2,15].

Perspective of Obstetricians and Gynecologists toward Female Sexual Dysfunction

In this study, perspective refers to the measurable level of knowledge, attitudes, and clinical practices of obstetricians and gynecologists regarding the screening, diagnosis, and management of female sexual dysfunction, as assessed using a structured Knowledge–Attitude–Practice (KAP) questionnaire informed by previous studies evaluating physicians' competence and practice in sexual health care [14,26–28].

Knowledge Level:

Knowledge level refers to how well the specialist is informed about female sexual dysfunction, including its different forms, methods of diagnosis, and available treatment options. This was evaluated using 18 questions developed for the questionnaire. Each correct response was assigned one point, resulting in a maximum possible score of 18. The total scores were then grouped into categories based on Bloom's cut-off points [25].

Adequate Knowledge: Score of 80–100% (14.4–18 points).

Moderately Adequate Knowledge: Score of 60–79% (10.8–14.3 points).

Inadequate Knowledge: Score of < 60% (< 10.8 points).

Attitude Level:

Attitude level refers to the specialist's beliefs and agreement regarding the importance of FSD in clinical care. This was measured using 6 items on a 5-point Likert scale, ranging from Strongly Disagree (1) to Strongly Agree (5), with a maximum total score of 30. Classification was based on Bloom's cut-off points [25]:

Favorable Attitude: Score of 80–100% (24–30 points).

Moderately Favorable Attitude: Score of 60–79% (18–23.9 points).

Unfavorable Attitude: Score of < 60% (< 18 points).

Practice Level:

Practice level refers to reported clinical behaviors regarding the screening, diagnosis, and management of FSD. This was assessed using 9 items with variable weighting (most weighted as 1, while two items were weighted 4 and one item was weighted 3), resulting in a maximum total score of 17. Classification was based on Bloom's cut-off points [25]:

Good Practice: Score of 80–100% (13.6–17 points).

Moderate Practice: Score of 60–79% (10.2–13.5 points).

Poor Practice: Score of < 60% (< 10.2 points).

4.10 Data Analysis

After the questionnaires were collected, the data were reviewed, coded, and entered into SPSS (version 26.0) for analysis. The main characteristics of the participants were described using counts and percentages for categorical variables. For variables such as age, the results were presented using the median and interquartile range (IQR) because the distribution was not normal, as indicated by the Kolmogorov–Smirnov test ($p < 0.0001$).

To assess the relationship between professional background, knowledge level, attitude level, and clinical practice related to female sexual dysfunction, binary logistic regression analysis was performed. For this analysis, some variables that were initially grouped into three categories were combined into two categories. This was done to avoid very small numbers in some groups and to obtain more stable estimates of the odds ratios.

First, each independent variable was examined separately using bivariate (crude) analysis. Factors that demonstrated some level of association in the bivariate analysis ($p < 0.25$) were entered into the multivariate logistic regression model to control for possible confounding. The final results were expressed as adjusted odds ratios (AORs) with 95% confidence intervals. Associations were considered statistically significant when the p-value was less than 0.05, and model fit was assessed using the Hosmer–Lemeshow test.

4.11 Ethical Considerations

Approval to conduct the study was granted by the Research and Publication Committee of the Department of Obstetrics and Gynecology at the College of Health Sciences, Addis Ababa University. Following this approval, the research was carried out in compliance with ethical principles governing studies involving human participants.

Prior to participation, respondents were clearly informed about the study's purpose and what would be required to complete the questionnaire. Before data collection began, participants were provided with information about the purpose, benefits, and risks of the study.

Individuals who completed the paper-based version provided written consent before beginning the survey. For those using the online Google Form, an information and consent statement appeared on the opening page, and completing and submitting the form was considered consent to participate. In all cases, participants were reminded that participation was entirely voluntary and that they were free to decline or withdraw at any time without consequence.

4.12 Dissemination of the Results

Following completion of the analysis, the study findings will be compiled and presented to the Department of Obstetrics and Gynecology, College of Health Sciences, Addis Ababa University, as part of the academic requirements. The results will also be shared with the Ethiopian Society of Obstetricians and Gynecologists (ESOG) to support professional discussion and improve clinical practice. Finally, the findings will be prepared as a research article for submission to a peer-reviewed journal.

Where appropriate, a summary of the findings will be shared with interested participants and relevant training institutions. The results are expected to contribute to the improvement of undergraduate and postgraduate residency training programs, continuing medical education activities, and future curriculum development related to sexual and reproductive health and the management of female sexual dysfunction from the perspective of healthcare providers.

5. Result

5.1 Socio-demographic and Professional Characteristics of Participants

A total of 245 obstetricians and gynecologists participated in this study. The median age of the participants was 35 years (IQR: 32–38 years), ranging from 30 to 61 years. Nearly half of the participants (49.8%, n = 122) were under 35 years, while only 18.8% (n = 46) were 40 years of age or older. In terms of gender distribution, the majority were male (83.7%, n = 205), with females accounting for 16.3% (n = 40).

Regarding experience, nearly one-third of the participants (31.8%, n = 78) were recent graduates from 2024–2025, while 36.3% (n = 89) had been in practice for more than 5 years. The majority of participants practiced in public or academic facilities (72.7%, n = 178), while 27.3% (n = 67) practiced in private or NGO-based settings.

Participants were drawn from almost all regions of Ethiopia. The largest proportions were from Addis Ababa (38.4%, n = 94) and the Amhara region (24.1%, n = 59).

The vast majority of respondents were general obstetricians and gynecologists (84.1%, n = 206). Among the participants, 15.9% (n = 39) had pursued or were pursuing subspecialty training. The most common fields were Maternal–Fetal Medicine (5.7%, n = 14) and Urogynecology and Reconstructive Pelvic Surgery (4.1%, n = 10). International clinical exposure was limited, with only 4.9% (n = 12) of specialists having practiced outside Ethiopia, primarily in Somaliland, Germany, and Rwanda.

In terms of sexual and reproductive health (SRH) training, only 9.4% (n = 23) of obstetricians and gynecologists reported receiving formal training on female sexual dysfunction (FSD) at some point during their practice, which was sponsored by their respective institutions (Table 1).

Table1 Socio-Demographics and Professional Characteristics of Participants among Obstetricians and Gynecologists in Ethiopia, 2025(n=245)

Variable	**Category**	**Frequency (n=245)**	**Percentage (%)**
Age Group	< 35 years	122	49.8
	35–39 years	77	31.4
	≥ 40 years	46	18.8
Gender	Male	205	83.7
	Female	40	16.3
Years-since Graduation	1–2 years	78	31.8
	3–5 years	78	31.8
	> 5 years	89	36.3
Region of Practice	Addis Ababa	94	38.4
	Amhara	59	24.1
	Oromia	24	9.8
	South Ethiopia	22	9.0
	Harari	15	6.1
	Somali	12	4.9
	Sidama	7	2.9
	Central Ethiopia	4	1.6
	Dire Dawa	3	1.2
	Benishangul-Gumuz	2	0.8
	Tigray	2	0.8
	others	1	0.4
Facility Type	Public / Academic	178	72.7
	Private / NGO	67	27.3
Subspecialty Status	General OB-GYN	206	84.1
	Subspecialist / Fellow	39	15.9

Specific Subspecialty	Maternal-Fetal Medicine (MFM)	14	5.7
	Urogynecology & Pelvic Surgery	10	4.1
	Gynecologic Oncology	7	2.9
	Reproductive Endocrinology & Infertility (REI)	6	2.4
	Family Planning & Reproductive Health	2	0.8
International Practice	No	233	95.1
	Yes	12	4.9
Formal FSD Training	No	222	90.6
	Yes	23	9.4

5.2 Knowledge of Female Sexual Dysfunction among Obstetricians and Gynecologists in Ethiopia

Regarding the overall knowledge of the participants, 127 (51.8%, 95% CI: 46.1–59.2%) were found to have moderately adequate knowledge (60–79.9%), while 100 (40.8%, 95% CI: 34.7–46.5%) demonstrated adequate knowledge (≥80%). The remaining 18 participants (7.3%, 95% CI: 4.1–11.0%) had inadequate knowledge levels (<60%) (Figure 2).

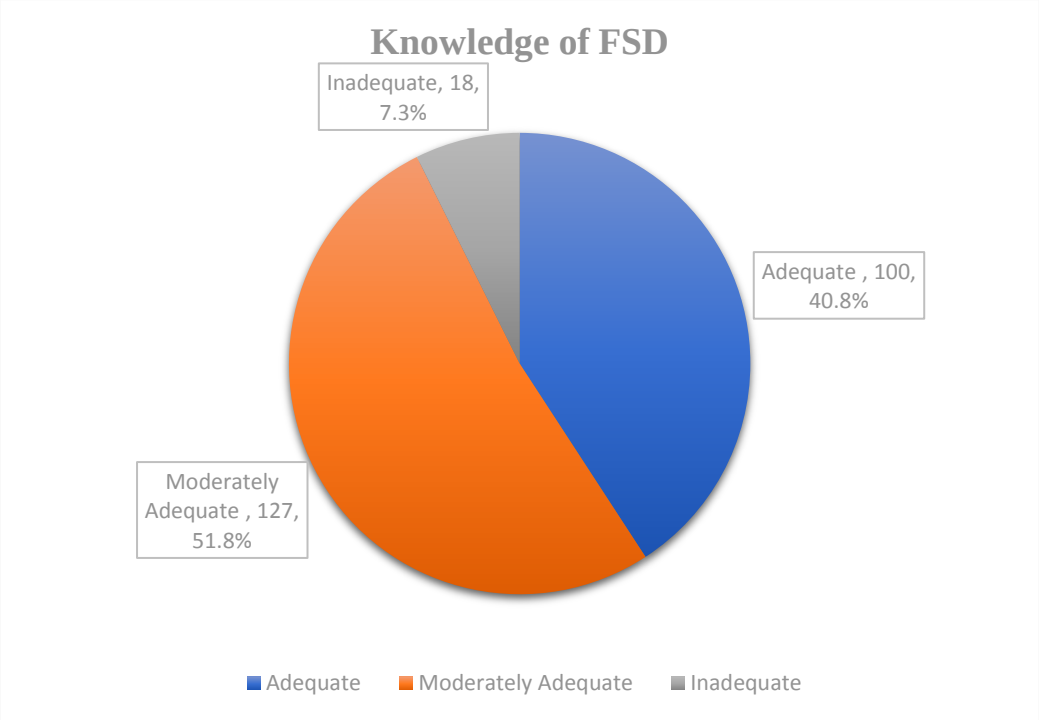


Figure 2 Overall knowledge level regarding Female Sexual Dysfunction among Obstetricians and Gynecologists in Ethiopia, 2025 (n=245)

In terms of recognizing FSD types, decreased sexual desire was the most frequently recognized type (96.3%, n = 236), followed by orgasmic disorder (94.7%, n = 232) and pain or difficulty during intercourse (93.9%, n = 230).

The pattern of responses regarding diagnostic parameters and assessment tools showed a notable decline compared with the identification of FSD types. Only 122 (49.8%) participants correctly reported that symptoms should persist for six months for a formal diagnosis of FSD. Awareness of standardized tools was also low: 113 (46.1%) had heard of the Female Sexual Function Index

(FSFI), and 111 (45.3%) reported knowing how to use it for assessment. Recognition of DSM-5 criteria was reported by 118 (48.2%) of the specialists, while 93 (38.0%) identified clinical interview alone as a tool for FSD assessment.

Across the domain of investigations, participants demonstrated strong recognition of several evaluative components. Psychosexual assessment was identified by 228 (93.1%) of the specialists, followed by hormone profiling (208, 84.9%) and pelvic ultrasound (194, 79.2%). STI screening was the least recognized investigation, identified by 185 (75.5%) of respondents.

In the domain of treatment options, there was high recognition across all listed categories. Lifestyle modification was the most recognized treatment (231, 94.3%), followed by psychological therapy (227, 92.7%). Lubricants (218, 89.0%) and hormonal therapy (212, 86.5%) were also identified as available management options (Table 2).

Table 2 Knowledge of female sexual dysfunction among obstetricians and gynecologists in Ethiopia, 2025 (n = 245)

Knowledge Variable/Question Item	**Yes (%)**	**No (%)**
I. Identification of FSD Types		
Decreased sexual desire	236 (96.3%)	9 (3.7%)
Arousal difficulties	229 (93.5%)	16 (6.5%)
Orgasmic disorder	232 (94.7%)	13 (5.3%)
Pain/difficulty during intercourse	230 (93.9%)	15 (6.1%)
Urinary incontinence	190 (77.6%)	55 (22.4%)
II. Diagnostic Parameters		
Correct Duration (6 months)	122 (49.8%)	123 (50.2%)
III. Assessment Tools		
Awareness of FSFI	113 (46.1%)	132 (53.9%)
Knowledge of using FSFI for assessment	111 (45.3%)	134 (54.7%)
Knowledge of DSM-5 criteria	118 (48.2%)	127 (51.8%)
Clinical interview only	93 (38.0%)	152 (62.0%)

IV. Recognized Investigations		
Psychosexual assessment	228 (93.1%)	17 (6.9%)
Hormone profile	208 (84.9%)	37 (15.1%)
Pelvic ultrasound	194 (79.2%)	51 (20.8%)
STI screening	185 (75.5%)	60 (24.5%)
V. Identified Treatment Options		
Lifestyle modification	231 (94.3%)	14 (5.7%)
Psychological therapy	227 (92.7%)	18 (7.3%)
Lubricants	218 (89.0%)	27 (11.0%)
Hormonal therapy	212 (86.5%)	33 (13.5%)

5.3 Attitude toward Female Sexual Dysfunction among OB-GYN

The overall attitude scores of the specialists showed that 139 (56.7%, 95% CI: 51.4–63.3%) had a moderately favorable attitude, while 101 (41.2%, 95% CI: 34.4–47.6%) had a favorable attitude. Only a small proportion, 5 (2.0%, 95% CI: 0.4–4.4%), demonstrated an unfavorable attitude toward the management of FSD (Figure 3).

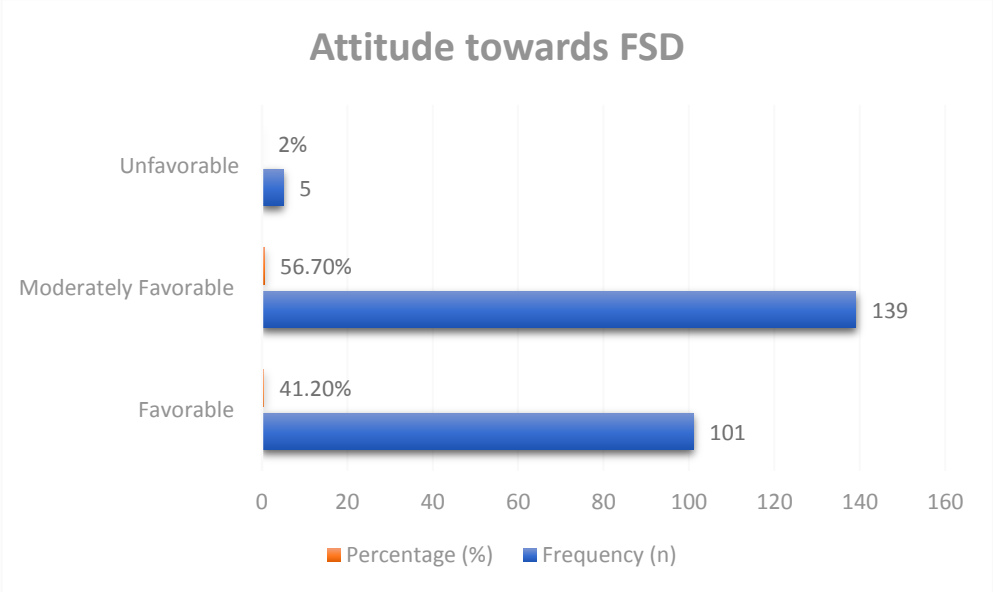


Figure 3 Overall attitude level toward female sexual dysfunction among obstetricians and gynecologists in Ethiopia, 2025 (n = 245).

In the detailed analysis of individual items, a strong positive pattern emerged regarding the importance of FSD in clinical practice. A total of 187 (76.3%) participants strongly agreed that sexual health should be routinely addressed in gynecologic care, with an additional 48 (19.6%) agreeing. Similarly, interest in professional training focused on FSD was high: 165 (67.3%) strongly agreed and 72 (29.4%) agreed, while only 2 (0.8%) expressed disagreement.

In contrast, a pattern of low confidence was observed, with only 23 (9.4%) of the specialists strongly agreeing that they were adequately trained to manage FSD, while 88 (35.9%) disagreed and 26 (10.6%) strongly disagreed. Comfort levels in initiating conversations were higher, with 107 (43.7%) strongly agreeing and 105 (42.9%) agreeing that they were comfortable starting these discussions.

The results also showed a strong pattern regarding perceived external barriers. There was widespread agreement on the effect of cultural norms, with 116 (47.3%) strongly agreeing and 111 (45.3%) agreeing that Ethiopian cultural norms make it difficult to discuss sexual health.

Furthermore, a significant proportion of participants expressed skepticism regarding patient receptivity; 141 (57.5%) disagreed, and 34 (13.9%) strongly disagreed that patients are usually open to discussing sexual concerns (Table 3).

Table 3 Attitude toward female sexual dysfunction among Obstetricians and Gynecologists in Ethiopia, 2025 (n=245)

Attitude Variable	**SD (%)**	**D (%)**	**N (%)**	**A (%)**	**SA (%)**
Sexual health should be routinely addressed	0 (0.0)	3 (1.2)	7 (2.9)	48 (19.6)	187 (76.3)
I am comfortable initiating conversations	1 (0.4)	8 (3.3)	24 (9.8)	105 (42.9)	107 (43.7)
I feel adequately trained to manage FSD	26 (10.6)	88 (35.9)	55 (22.4)	53 (21.6)	23 (9.4)
Cultural norms in Ethiopia make it hard	2 (0.8)	6 (2.4)	10 (4.1)	111 (45.3)	116 (47.3)
Patients are usually open to discussing	34 (13.9)	141 (57.5)	32 (13.1)	25 (10.2)	13 (5.3)
I would attend trainings if focused on FSD	0 (0.0)	2 (0.8)	6 (2.4)	72 (29.4)	165 (67.3)

N. **B:** SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree

5.4 Clinical Practices Regarding Female Sexual Dysfunction

The overall practice scores of the participants showed that 150 (61.2%, 95% CI: 53.9–67.8%) of the obstetricians and gynecologists had poor practice. On the other hand, 70 (28.6%, 95% CI: 22.0–34.7%) had moderate practice (60–79.9%), and 25 (10.2%, 95% CI: 6.9–14.3%) had good clinical practice (≥80%) (Figure 4).

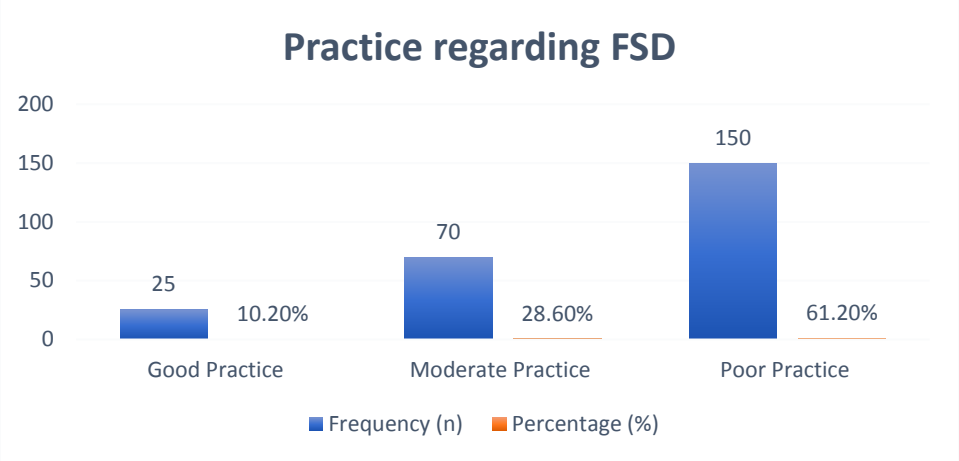


Figure 4 Overall clinical practice level regarding female sexual dysfunction among Obstetricians and Gynecologists in Ethiopia, 2025(n=245)

The detailed results showed that proactive inquiry into sexual health is not a routine part of most consultations. Only 15 (6.1%) of the specialists reported "always" asking their patients about sexual health, while the majority (54.7%) reported doing so only "sometimes."

Regarding clinical practice, 150 (61.2%) of the specialists reported diagnosing at least one case of FSD in the preceding 12 months. Despite this relatively high diagnosis rate, diagnostic confidence was moderate, with 113 (46.1%) reporting moderate confidence and only 49 (20.0%) reporting high confidence.

In terms of documentation and the use of standardized tools, a significant gap in clinical practice was identified. Only 51 (20.8%) of the specialists reported that they always document sexual health issues in patient records, while nearly one-fifth (19.6%) reported never documenting these issues. Furthermore, the use of objective assessment tools was very limited, with 232 (94.7%) of the specialists reporting that they do not use any checklist or screening tool for FSD.

Among those who addressed FSD, counseling was the most common intervention, reported by 224 (91.4%) of respondents. Medications were used by 168 (68.6%), and referral to other professionals was reported by 148 (60.4%). However, continuity of care was less consistent, as only 131 (53.5%) of the specialists reported arranging follow-up appointments for patients with sexual dysfunction concerns (Table 4).

Table 4 Clinical practices regarding Female Sexual Dysfunction among Obstetricians and Gynecologists in Ethiopia, 2025 (n=245)

Variable	**Category**	**Frequency (n=245)**	**Percentage (%)**
Frequency of Inquiry	Always	15	6.1
	Often	55	22.4
	Sometimes	134	54.7
	Rarely	39	15.9
	Never	2	0.8
Diagnosed FSD in last 12 months	Yes	150	61.2
	No	95	38.8
Diagnostic Confidence	Very Confident	49	20.0
	Moderately Confident	113	46.1
	Slightly Confident	66	26.9
	Not Confident	17	6.9
Management: Counseling	Yes	224	91.4
	No	21	8.6
Management: Medication	Yes	168	68.6
	No	77	31.4
Management: Referral	Yes	148	60.4
	No	97	39.6
Management: Follow-up	Yes	131	53.5
	No	114	46.5
Documentation Frequency	Always	51	20.8
	Sometimes	146	59.6
	Never	48	19.6
Use of Screening Tool/Checklist	Yes	13	5.3
	No	232	94.7

5.5 Perceived Barriers to the Management of Female Sexual Dysfunction

Participants were asked about the perceived barriers to addressing FSD in their clinical work, and the most prominent barrier identified was a lack of formal training, reported by 195 (79.6%). The lack of standardized clinical tools and guidelines was reported by 158 (64.5%).

More than half of the participants, 146 (59.6%), identified cultural and religious factors as a major barrier, while 127 (51.8%) cited perceived patient embarrassment as a reason for not addressing sexual health concerns. System-related factors, such as a lack of referral options and time constraints, were reported by 87 (35.5%) and 74 (30.2%) of the specialists, respectively. Despite the sensitive nature of the topic, only 68 (27.8%) of the participants reported personal discomfort when discussing sexual health with their patients (Table 5).

Table 5 Perceived barriers to the Management of Female Sexual Dysfunction among Obstetricians and Gynecologists in Ethiopia, 2025 (n=245)

Perceived Barrier	**Frequency (n=245)**	**Percentage (%)**
Lack of formal training/knowledge	195	79.6
Lack of standardized tools and guidelines	158	64.5
Cultural and religious factors	146	59.6
Perceived patient embarrassment	127	51.8
Lack of referral options (specialized clinics)	87	35.5
Time constraints during consultations	74	30.2
Personal discomfort with the topic	68	27.8

5.6 Factors Associated with Clinical Practice of Female Sexual Dysfunction

The association of socio-demographic characteristics, professional background, and overall knowledge and attitude scores with the level of clinical practice was assessed using a binary

logistic regression model. For the purpose of regression analysis, the practice variable was dichotomized into poor practice and good practice (including moderate and good categories).

From the bivariate analysis, age group, gender, experience, subspecialty, experience outside Ethiopia, formal training in SRH, knowledge level, and attitude level were all found to be significant at a p-value < 0.25.

A multivariate analysis was then performed using these variables. The adequacy of the final model was assessed using the Hosmer–Lemeshow test, which showed a good fit (p = 0.778). After controlling for potential confounders, experience, formal training in SRH, knowledge level, and attitude level were found to be significantly associated with clinical practice.

Specialists with more than 5 years of experience had 2.59 times higher odds of good clinical practice compared to those with 5 years or less of experience (AOR: 2.59, 95% CI: 1.25–5.37, p = 0.010). In addition, formal training related to female sexual dysfunction was significantly associated with clinical practice. The odds of having good clinical practice among specialists who had received formal training in SRH were ten times higher than those of specialists who had not received such training (AOR: 10.01, 95% CI: 2.40–41.78, p = 0.002).

Furthermore, knowledge and attitude levels were significantly associated with clinical practice. Specialists with adequate knowledge had 5.80 times higher odds of good clinical practice compared to those with inadequate knowledge (AOR: 5.80, 95% CI: 3.01–11.19, p < 0.0001). Similarly, specialists with a favorable attitude had 4.11 times higher odds of good clinical practice compared to those with a less favorable attitude (AOR: 4.11, 95% CI: 2.14–7.87, p < 0.0001).

On the other hand, no significant association with clinical practice was observed for age group, gender, subspecialty, or practice experience outside Ethiopia in the multivariate model, despite some of these variables showing significance in the crude analysis (Table 6).

Table 6 Factors associated with the level of Clinical Practice of Female Sexual Dysfunction among Obstetricians and Gynecologists in Ethiopia, 2025 (n=245)

Variable	Practice		COR (95% CI)	p-value	AOR (95% CI)	p-value
	Poor (n=150)	Good (n=95)				
Age (in years)						
< 35 years	80	42	1		1	
>= 35 years	70	53	1.44 (0.86, 2.42)	0.165	1.26 (0.61, 2.59)	0.534
Sex						
Male	122	83	1		1	
Female	28	12	0.63 (0.30, 1.31)	0.216	0.81 (0.33, 1.99)	0.649
Experience						
<= 5 years	110	46	1		1	
>5 years	40	49	**2.93 (1.71, 5.03)**	**<0.0001**	**2.59 (1.25, 5.37)**	**0.010***
Subspeciality						
No	130	76	1		1	
Yes	20	19	1.63 (0.82, 3.24)	0.167	0.82 (0.34, 1.98)	0.663
Practiced outside Ethiopia						
No	147	86	1		1	
Yes	3	9	5.13 (1.35, 19.46)	0.016	2.78 (0.63, 12.30)	0.177
Formal SRH Training specially FSD						
No	147	75	1		1	
Yes	3	20	**13.07 (3.76, 45.38)**		**10.01 (2.40, 41.78)**	**0.002***
Knowledge						
Inadequate	113	32	1		1	
Adequate	37	63	**6.01 (3.42, 10.58)**	**<0.0001**	**5.80 (3.01, 11.19)**	**<0.0001***
Attitude						
Less favorable	109	35	1		1	
Favorable	41	60	**4.56 (2.63, 7.90)**	**<0.0001**	**4.11 (2.14, 7.87)**	**<0.0001 ***

N.B: * Statistically Significant at P<0.05, AOR (Adjusted Odds Ratio), COR (Crude Odds Ratio)

For the purpose of logistic regression analysis, the outcome variable (clinical practice) was dichotomized into ‘poor practice’ and ‘good practice’ (including moderate and good). Knowledge was dichotomized into ‘inadequate’ and ‘adequate’ (including moderate and adequate), and attitude into ‘less favorable’ and ‘favorable’ (including moderate and favorable). ‘Poor practice’, ‘inadequate knowledge’, and ‘less favorable attitude’ were used as reference categories.

6. Discussion

Female sexual dysfunction is a multifactorial condition influenced by biological, psychological, interpersonal, and sociocultural factors [4]. Although it is widely recognized as an important component of women's health, it often remains under-recognized and under-addressed in routine clinical practice [4,5]. Obstetricians and gynecologists are the primary healthcare providers responsible for managing women's reproductive and sexual health concerns; therefore, their knowledge, attitudes, and clinical practices play a key role in identifying and managing female sexual dysfunction [13]. This study is the first nationwide study to assess the knowledge, attitude, and clinical practice of Ethiopian obstetricians and gynecologists toward female sexual dysfunction.

The findings of this study showed that most Ethiopian obstetricians and gynecologists demonstrated moderate to adequate knowledge of female sexual dysfunction and were able to correctly identify common types, including decreased sexual desire, orgasmic disorder, and pain during intercourse. However, their knowledge related to standardized diagnostic criteria and structured assessment tools was limited. Less than half of the respondents were aware of key diagnostic criteria, such as the six-month symptom duration, or of structured screening tools like the Female Sexual Function Index [16]. This finding suggests that clinicians may recognize symptoms of sexual dysfunction but lack familiarity with formal diagnostic frameworks and standardized assessment instruments.

Similar results have been reported in other studies, where obstetricians and gynecologists were generally aware of female sexual dysfunction but reported limited training in the use of validated screening tools and structured diagnostic approaches [14]. Likewise, studies conducted in India and China have demonstrated that physicians frequently recognize symptoms of sexual dysfunction but report inadequate knowledge of standardized clinical assessment tools [26,28]. Although a majority of participants reported diagnosing at least one case of female sexual dysfunction in the preceding year, the use of standardized screening tools was extremely low, and documentation of sexual health issues was inconsistent. These findings indicate a significant gap between clinicians' awareness of female sexual dysfunction and their routine clinical practice.

This gap between knowledge, attitudes, and actual clinical practice has also been documented in several international studies. For example, research conducted among obstetricians and gynecologists in Germany and India reported that many clinicians rarely initiate conversations about sexual health during routine consultations, despite recognizing its importance [14,26]. Similarly, a survey conducted in China demonstrated that while clinicians were aware of sexual dysfunction as a clinical issue, most did not routinely screen for it in clinical practice [28]. These findings suggest that multiple barriers may prevent clinicians from translating their knowledge into routine practice.

The present study identified lack of formal training specially on FSD and the absence of standardized tools and guidelines as major challenges in addressing female sexual dysfunction in clinical practice. In addition, cultural and religious factors also play an important role in limiting discussions of sexual health. These findings suggest that both sociocultural factors and limited professional preparation may make it difficult for clinicians to openly discuss sexual health issues with their patients. Similar barriers have been reported in other studies, where cultural norms and stigma surrounding sexuality make conversations about sexual concerns uncomfortable in clinical settings [7,9]. Providing clinicians with appropriate training and communication skills may help them feel more confident when addressing these sensitive topics. Improving professional training and strengthening clinical support systems may therefore enhance the recognition and management of female sexual dysfunction and contribute to improved women's sexual and reproductive health outcomes [13,14].

After adjusting for confounders on multivariate analysis, the study identified a strong association between formal training and clinical practice. Specialists who had received training in sexual and reproductive health were significantly more likely to demonstrate good clinical practice related to female sexual dysfunction. The odds of good practice were approximately ten times higher among specialists who had received formal training compared to those who had not. Similar associations have been reported in previous studies, which show that physicians who receive structured education in sexual medicine are more likely to screen for sexual dysfunction, discuss sexual health with patients, and provide appropriate counseling or treatment [14,26]. These findings highlight the importance of integrating sexual health training into undergraduate

medical curricula, residency training programs, and continuing professional development activities [6,17].

In addition to training, this study found that professional experience, knowledge level, and attitude level were significantly associated with clinical practice. Specialists with more than five years of professional experience were more likely to demonstrate good clinical practice than less experienced clinicians. This may be explained by increased clinical exposure over time, which helps clinicians develop greater confidence and practical skills when managing sensitive health issues such as sexual dysfunction. Similarly, specialists with higher levels of knowledge and more favorable attitudes toward female sexual dysfunction were more likely to report better clinical practice [14,26]. Comparable findings have been reported in other settings. A study from Germany found that obstetricians and gynecologists with greater knowledge and training in sexual medicine were more likely to feel competent in discussing sexual health with patients [14]. Likewise, a study conducted in India reported that clinicians who had received more education and training related to female sexual dysfunction demonstrated better clinical practices in screening and management [26]. Overall, these findings suggest that strengthening professional education and clinical training may play a key role in improving routine clinical practice related to female sexual dysfunction.

7. Strengths and Limitations of the Study

7.1 Strengths

- Obstetricians and gynecologists from several regions of Ethiopia participated in the study, allowing representation from different parts of the country.
- The study examined knowledge, attitudes, and practices separately using a KAP framework based on self-reported data from participants.
- Barriers to clinical practice were reported directly by participants, allowing the study to relate perceived limitations to observed patterns in knowledge and practice.
- Clear and previously established cut-off criteria were used to categorize levels of knowledge, attitude, and practice. This allowed the findings to be interpreted in a structured way and compared with similar studies.

7.2 Limitations

- The analysis is based on self-reported information, which may be affected by response bias, given the sensitive nature of the topic.
- The use of convenience sampling through professional networks and social media platforms may limit the generalizability of the findings, as participants who were more accessible or more interested in the topic may have been more likely to respond.
- The sample included only obstetricians and gynecologists; therefore, the findings do not reflect the practices of other health professionals involved in women's care. In addition, the assessment of barriers was limited to providers' perspectives, and patients' views were not captured.

8. Conclusion

This is the first nationwide study to assess the perspectives of obstetricians and gynecologists in Ethiopia toward female sexual dysfunction. The findings of this study showed that most obstetricians and gynecologists have moderate knowledge and generally favorable attitudes toward addressing female sexual dysfunction. Most participants were able to recognize the common types of female sexual dysfunction, but their knowledge of standardized diagnostic criteria and structured assessment tools, such as the Female Sexual Function Index, was limited.

In routine clinical practice, only a small percentage of specialists reported a high level of confidence in dealing with female sexual dysfunction. The major barrier identified by participants was the lack of training, followed by the absence of tools and guidelines. As a result, only a small proportion of Ethiopian obstetricians and gynecologists feel adequately trained to manage female sexual dysfunction in clinical practice. However, most participants indicated that they would be willing to participate if training were made available.

This study also showed that professional experience, adequate knowledge, and favorable attitudes were all significantly associated with better clinical practice. Among these factors, formal training in sexual and reproductive health, particularly training focused on female sexual dysfunction, appeared to be the most important modifiable factor associated with improved clinical practice.

In summary, while Ethiopian obstetricians and gynecologists recognize the importance of female sexual dysfunction, a substantial gap remains between awareness and routine clinical practice, which requires urgent attention.

9. Recommendations

- As the main professional organization representing obstetricians and gynecologists in Ethiopia, the Ethiopian Society of Obstetricians and Gynecologists (ESOG) should give greater attention to female sexual dysfunction at conferences, workshops, and continuing medical education events, as it is a neglected condition with a high prevalence. These platforms provide an important opportunity for clinicians to improve their practical skills in recognizing and addressing women's sexual health concerns
- Medical schools and OB-GYN residency programs should strengthen sexual medicine education by emphasizing practical training. This approach will help future clinicians confidently assess female sexual dysfunction and apply structured tools in clinical practice.
- The Ministry of Health of Ethiopia should give greater attention to the assessment and management of female sexual dysfunction in national reproductive health programs and professional training initiatives.
- Future research should include the experiences and perspectives of women and other healthcare providers to deepen understanding of the identification and management of female sexual dysfunction and to assess the outcomes of intervention strategies across healthcare settings.

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ANNEX I: INFORMATION SHEET

Title: Perspectives of Obstetricians and Gynecologists in Ethiopia Toward Female Sexual Dysfunction

Principal Investigator: Dr. Medina Barsenga

Institution: Addis Ababa University, College of Health Sciences

Purpose of the Study

You are invited to participate in a study that aims to explore the knowledge, attitudes, clinical practices, and perceived barriers of OB-GYNs in Ethiopia regarding Female Sexual Dysfunction (FSD). The purpose is to generate information that may improve reproductive healthcare training and service delivery.

Procedures

If you agree to participate, you will be asked to complete a structured questionnaire. The questionnaire takes approximately 20–30 minutes. Your name or any information that may identify you are not included. Your responses will be anonymous and confidential. All the addresses that are used to contact participants, both of those who responded or not, will be destroyed after the data collection & entry is over. You will be reminded twice, either by e-mail or mobile, a week after the questionnaire is mailed (or send) to you. Responding to the questionnaire will be considered as that you are 'voluntary consenting'. You can decline from participation either by expressing your 'non-participation' by e-mail or mobile call or by not responding even after the reminder contacts.

Voluntary Participation and Right to Withdraw

Your participation is entirely voluntary. You can decline to respond to any specific question or a number of them or avoid participation in the study at any time without any consequences. Declining in participation may limit the generalization of the findings. If you participate in the study by responding to the questionnaire and mail or hand over the completed questionnaire to the PI (or data collector), it is understood that you are participating voluntary. If you do not do so after the second e-mail or mobile contact, we will understand that you are declining from participation.

Risks and Benefits

There is minimal risk associated with participation. Going through the information sheet, completing the questionnaire and the communication may take some of your precious time. While you may not directly benefit from participation, your input will contribute to evidence that may improve patient care and OB-GYN training in Ethiopia.

Confidentiality

All data will be kept strictly confidential. No names or personal identifiers will be collected. Results will only be reported in aggregate form and used for academic purposes.

Contact Information

If you have any questions about this study, please contact:

Dr. Medina Barsenga

Email: medinabarsenga15@gmail.com

Phone: +251 911 090035

ANNEX II: CONSENT FORM

Consent Statement

I have read and understood the information provided above. I voluntarily agree to participate in this study.

Participant's Signature: _____

Date: _____

ANNEX III: Questionnaire: Knowledge, Attitude, and Practice (KAP) of OB-GYNs Toward Female Sexual Dysfunction (FSD)

Section 1: Demographic Information

Age: _____

Gender: ☐ Male ☐ Female

Year of graduation OBS-GYN Specialty: _____

Region of current practice: _____

Type of facility: ☐ Public ☐ Private ☐ NGO ☐ Academic

Subspecialty (if any): _____

Have you practiced outside Ethiopia? ☐ Yes ☐ No

If yes, specify country and duration: _____

Have you received formal training in sexual or reproductive health (specifically on FSD)?

☐ Yes ☐ No

If your answer for number 8 yes, where was it?

Section 2: Knowledge on FSD

Which of the following are types of Female Sexual Dysfunction? (Select all that apply)

☐ Decreased sexual desire

☐ Arousal difficulties

☐ Orgasmic disorder

☐ Pain during intercourse

☐ Urinary incontinence

How long must symptoms persist to diagnose FSD?

☐ 2 weeks ☐ 1 month ☐ 3 months ☐ 6 months ☐ Not sure

Have you heard of the Female Sexual Function Index (FSFI)? ☐ Yes ☐ No

Which tools do you know/use to assess FSD? (Check all that apply)

☐ FSFI

☐ DSM-V criteria

☐ Clinical interview only

☐ None

Which investigations do you consider when evaluating FSD? (Select all that apply)

☐ Pelvic ultrasound

☐ Hormone profile

☐ Psychosexual assessment

☐ STI screening

☐ Other: _____

Which treatment options do you recognize for FSD? (Select all that apply)

☐ Lifestyle modification

☐ Psychological therapy

☐ Hormonal therapy

☐ Lubricants

☐ None

☐ Other: _____

Section 3: Attitudes Toward FSD

(Indicate your agreement level for each statement)

Sexual health should be routinely addressed in gynecologic care.

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

I am comfortable initiating conversations about sexual function.

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

I feel adequately trained to manage FSD.

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

Cultural norms in Ethiopia make it hard to discuss sexual health.

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

Patients are usually open to discussing sexual concerns.

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

I would attend trainings if focused on FSD.

☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

Section 4: Clinical Practices Regarding FSD

How often do you ask patients about their sexual health?

☐ Always ☐ Often ☐ Sometimes ☐ Rarely ☐ Never

Have you diagnosed any patient with FSD in the last 12 months?

☐ Yes ☐ No

How confident are you in diagnosing FSD?

☐ Very Confident ☐ Moderately Confident ☐ Slightly Confident ☐ Not Confident

Which of the following do you use when managing FSD? (Select all that apply)

☐ Counseling

☐ Medications

☐ Referral (e.g., psychiatry, physiotherapy)

☐ Follow-up appointments

☐ I do not address FSD

Do you document FSD or sexual health issues in patient records?

☐ Always ☐ Sometimes ☐ Never

Do you use a checklist or screening tool for FSD?

☐ Yes ☐ No

If yes, specify: _____

Section 5: Perceived Barriers

Which of the following limit your ability to address FSD in your clinical work? (Check all that apply):

☐ Lack of training

☐ Time constraints

☐ Discomfort with the topic

☐ Cultural or religious factors

☐ Patient embarrassment

☐ Lack of tools or guidelines

☐ Lack of referral options

☐ Other: _____