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COLLEGE OF HEALTH SCIENCES SCHOOL OF PUBLIC HEALTH

**Assessment of Contraceptive Counseling Service Quality Gap Using Service Quality Model
at Public Health Centers in Addis Ababa, Ethiopia 2025: Clients Perspective**

By; Frezer Melelo (BSc in Public Health)

Thesis Submitted to the Graduate Program of Addis Ababa University, College of Health Sciences, School of Public Health in Partial Fulfillment for the Degree of Masters of Public Health in Health System Management and Health Policy.

June, 2025

Addis Ababa, Ethiopia



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Advisors: 1. Dr. Werissaw Haileselassie (MPH, PhD)

2. Mrs. Berhan Tassew (MPH)

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June, 2025

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Statement of the Author

By my signature below, I declare and affirm that this MPH thesis is my own original work. Any scholarly matter that is included in the thesis has been given recognition through appropriate citation. This thesis is submitted to the Department of Health System Management and Health Policy, School of Public Health, College of Health Sciences in Addis Ababa University for an open defense in the presence of external and internal examiners.

Name: Frezer Melelo

Date: June, 2025

Department: Health System Management and Health Policy

Signature: 

Addis Ababa University
College of Health Science
Department of Health System Management and Health Policy
Approval Sheet

I hereby certify that I have read and reviewed this thesis prepared by Frezer Melelo, on Assessment of Contraceptive Counseling Service Quality Gap Using Service Quality Model at Public Health Centers in Addis Ababa, Ethiopia 2025. I recommended that it should be submitted to the Department of Health system management and health policy.

1. Deribe Assefa (Phd)

External examiner signature.......... Date..... 17 September 2025

2. Ababi Zergaw (Phd)

Internal Evaluator signature *ababi zergaw*..... Date 9/16/2025.....

3. Werissaw H/Selassie(Phd)

Primary Advisor signature Date.....

4. Mrs. Berhan Tassew (Mph)

Co-advisor s ignature..... Date.....

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Abbreviations

FP	Family Planning
HSTP	Health sector transformation plan
LMICs	Low- and Middle-Income Countries
SSA	Sub Saharan Africa
SERVQUAL	Service Quality
SPSS	Statistical Package for Social Science
WHO	World Health Organization

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Abstract

Background:

For women to make informed decision about their sexual and reproductive health, quality contraceptive counseling is essential. The provision of equitable and quality health services to the population is one of the strategic directions of the second Health Sector Transformation Plan (HSTP-II) of Ethiopia with due emphasis on Family planning, reproductive and maternal health services. To improve quality effectively, it's important to first identify where the gaps are in terms of quality dimension, but there is limited study that assess contraceptive counseling service quality from the clients' perspective in terms of client's expectation and perception of the counseling service.

Objective: To assess the service quality gap between expectations and perception of clients for contraceptive counseling service and to identify associated socio-demographic characteristics at Public Health Centers in Addis Ababa, Ethiopia.

Methods: A facility-based cross-sectional study design was conducted using structured service quality tool among 279 participants from March 15 - April 26, 2025. Data was cleaned in excel and then exported to SPSS 25.0 for analysis. Descriptive statistics, Wilcoxon sign-rank test and Kruskal-Wallis test were used to compare the median score values of expectations and perception of each service quality dimension and across demographic groups respectively.

Result: 279 clients were agreed and participated in this study with response rate 97.89%. The overall service quality gap in contraceptive counseling service described by the median and Interquartile range is -2.23 (-2.7 to 1.7). The median score for expectation and perception is 4.27(3.86 to 4.55) and 1.98 (1.73 to 2.34), respectively. Age group >31-40, new service user and client who have college degree and above showed statistically significant higher expectation in one or more dimensions of the SERVQUAL.

Conclusions: Across all SERVQUAL dimensions, clients perceived quality of counseling services at public health centers was lower than expected, with the biggest discrepancies found in assurance and responsiveness dimensions. Therefore the finding point to the necessity of increased staff competency, clear communication, and timely attention to clients' emotional and psychological needs.

Key words: Service quality, contraceptive counseling, family planning, expectation, perception

1. Introduction

1.1. Background

The Institute of Medicine Committee in 2001 defined quality of care as the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge(1).Contraceptive counseling is defined as the exchange of information on contraceptive methods based on an assessment of the client's needs, preferences and lifestyle to support decision-making as per the client's intentions. This covers choosing, discontinuing, or changing a method of contraception(2–4).

According to 2023 World Health Organization (WHO) estimates, 257 million women of reproductive age have an unmet need for contraception. Reasons for this include: poor quality of available services, limited access to contraception, a limited choice of methods, a fear or experience of side-effects, cultural or religious opposition and gender-based barriers(5). In order to increase the uptake of modern contraceptive methods, the National Guideline for Family Planning Services in Ethiopia developed Minimum standards of Quality family planning service, which incorporate Quality and Evidence based Counseling as one service quality criteria(6).Enhancing the provision of equitable and quality comprehensive health services to the population is also one of the strategic directions of the second Health Sector Transformation Plan (HSTP-II) of Ethiopia with due emphasis on family planning, reproductive and maternal health services and programs. Despite that the plan for improving, the prevalence of modern contraceptive method is not met yet. Main problems for this were poor quality contraceptive advice and provider- and user-related problem(6,7).

The effectiveness and associated side effects of various contraceptive methods is often misunderstood by clients, leading to "misinformed choices." In various settings, the role of technology is increasingly emphasized to enhance access to accurate information, personalized method selection, and follow-up support. In Ethiopia, public health centers serve as the primary point of access for contraceptive services, yet disparities persist in the quality and comprehensiveness of counseling provided. These services often face challenges such as limited time for client interaction, inconsistent use of standardized counseling protocols, and inadequate linkage to broader maternal and child health programs(3,4).

Although it is crucial, the health system's overall and care continuum quality is not being assessed. In order to fill the gap, in addition to better routine health information system for monitoring implemented programs and strategies, new researches are required in different aspects of patient experiences including their expectation of service(7). Client perspectives have been highlighted as a key component in assessing the quality of services (8).

1.2 Statement of problem

In low- and middle-income countries (LMICs), one in three individuals reported negative experiences with their health system indicating poor quality of care and resulting in a loss of trust in the system(9). Although Ethiopia has made notable progress in expanding access to contraceptive services, the plan to reach modern contraceptive prevalence 55% in 2015 is not achieved yet and evidence shows that the quality of counseling remains inconsistent and often inadequate(10,11).

Poor quality of contraceptive counseling service in Ethiopia is manifested by low contraceptive uptake, reduced client satisfaction, high prevalence of contraceptive discontinuation and unintended pregnancy among women of reproductive age (12,13).

In order to have appropriate quality improvement strategies there need to have a drive of where the gap really exist in terms of different quality dimensions. Even though there are studies in Ethiopia that has focused on the quality of contraceptive counseling services, they are primarily focused on information receipt rather than the broader counseling experience and they did not assess the quality of counseling from the clients' perspective in terms of clients expectation and perception, particularly in our study area(14,15). Therefore, using the service quality model (SERVQUAL), this study aimed to assess the gap of contraceptive counseling services from the client's perspective in terms of their expectation and perception of counseling service provided.

1.3 Significance of the study

Improving quality of contraceptive counseling will help in addressing unmet need for contraceptive service and decreasing contraceptive discontinuation rate. Improving clients quality of counseling outcomes requires ideal counseling procedures such as better physical environment, healthy interpersonal interactions, respectful care giving, a sufficient supply of contraceptives, easy access, prompt service delivery, and frequent evaluation of clients' perceptions, and exceptions to contraceptive services(16). Therefore, in order to create the above environment, there need to have adequate information on quality status of the service and understanding of what the clients expects from the health care. Findings from this study will benefit the health facilities manager to understand their quality status of service delivery and help them improve and provide patient centered service. Second, for policymakers this study provides valuable information to make informed decision and develop appropriate strategies to address the identified gap.

2. Literature review

2.1 Overview of Contraceptive Counseling Service Quality

The quality of contraceptive counseling varies significantly worldwide, impacting women's reproductive health decisions. Because of inadequate quality in contraceptive counseling and related issues, 29% of women in Sub-Saharan Africa face unplanned pregnancies, resulting in around 14 million unintended pregnancies annually.(17). According to research conducted in Pakistan and Uganda, higher quality service provision was associated with lower contraceptive discontinuation rates, emphasizing the need for improved counseling practices to enhance user retention(18). In Sierra Leone, over 37% of young women do not receive sufficient family planning counseling, with 17.1% receiving none at all(19).

A study conducted among adolescent girl and young women in Sub-Saharan African country shows that only 33.2% of adolescent girls and young women received quality contraceptive counseling, which show that most adolescent girls and young women in SSA do not receive quality contraceptive counseling and the lowest proportion is obtained in Ethiopia which was 21.6%(20).

According to a study, primary care services in Ethiopia are of low quality across all facilities. On average, during consultations, patients seeking family planning, prenatal care, or care for their suffering kid got less than half of the suggested clinical service(21).Study revealed that the pooled prevalence of long-acting contraceptive discontinuation was high in Ethiopia which is 36.94% and women's who didn't satisfied with services provided are 5 times more likely to discontinue the method than those who are satisfied. This could be attributed to women who were uninterested in method selection, privacy, secrecy, communication competency, and explanation from service providers, all of which have implication on quality of service provided(22).One study conducted in Dessie; Ethiopia indicates that only 36.5% of women received good quality counseling implying that the proportion of women receiving quality contraceptive service is low. Another study conducted in Southern Ethiopia, found low-quality contraceptive counseling and SERVQUAL score was -2.27 which signifies that clients expectation of service exceeded their perception of the counseling service provided(7).

2.2 Importance of Quality Contraceptive Counseling in Reproductive Health

Contraceptive counseling is important for reproductive health as it enhances the use and continuation of modern method(23).Delivering women and couples centered, high quality contraceptive counseling has been linked to higher contraceptive use and may help them better satisfy their reproductive

requirement(24).Quality contraceptive counseling is a way for achieving full method choice and quality care, and it's linked to subsequent rise in contraceptive continuation rate. One study in India showed that women receiving quality counseling are 4.14 times more likely to use modern method compared to those who didn't(24).Reducing unintended pregnancies is one health benefit of contraception in addition to reduction in maternal mortality ratio(25).Research highlighted that effective information exchange and interpersonal communication during counseling are linked to higher rates of contraceptive method acceptance and continuation, particularly among younger clients(26).

A longitudinal study that examined the association between family planning counseling and postpartum modern contraceptive uptake in Ethiopia revealed that providing family planning counseling during maternal and child health services were significantly associated with modern Contraceptive uptake by six week and six months. The increase in the uptake has direct effect in avoiding the risk of unintended and closely spaced pregnancy and the associated increased risk of adverse pregnancy consequences(23). Additionally, findings state that patient-centered strategies that give individual values and preferences priority result in increased satisfaction and adherence to the method they choose(27).

2.3 Overview of the SERVQUAL Model

Even though enhancing quality of care is agreed upon concept, there is no a single fixed framework and consensus that which element should be contained within the definition of quality(28). As defined by WHO, quality of care is the degree to which delivered health care service enhance preferred health outcome. However, quality of care is a complex and multidimensional topic that can be defined and assessed in a number of ways. Key aspects of service quality are two, which are technical and functional quality. The technical accuracy of the diagnosis and procedures is the primary criterion used to define technical quality in healthcare. Technical quality information is typically not accessible to the general public and is instead the domain of administrators and medical specialists. On the other hand, functional quality has to do with how healthcare services are provided. Accordingly, the SERVQUAL model is used to measure functional quality by accounting for the perceived quality of healthcare services, which has a comparatively bigger impact on patient behaviors (satisfaction, referrals, choice, and service usage)(29).

Since there is no single gold standard framework, different scholars uses different framework to assess different aspect of quality of care(30,31). One of widely used model is SERVQUAL model; it is an empiric model to measure service quality from client's perspective. It is used to do a gap analysis of client's expectation of service against client's perception of service. SERVQUAL consists of 44 questions which are

divided in two parts: the first part is expectation section contains five dimensions tangibility, Reliability, Responsiveness, Assurance, and Empathy and 22 clauses, and the second part is perception section, which also address five dimensions tangibility, Reliability, Responsiveness, Assurance, and Empathy and has 22 questions that is answered by using a five-point Likert-scale.

2.4 Factors Related to Service Quality Dimensions

Expectations, for the case of healthcare, refer to the anticipation or the belief about what is to be encountered in a consultation or in the healthcare system. Exploratory research conducted in Mexico stated that there is a significant variation in quality of counseling obtained among young women and older individual which was justified by their difference in expectation of service. Young client's expectations are higher than those of older clients in contrast young clients perception of service is lower than older individual because older individual had more contact to public health sector and had more experiences(29,32).

There is a great deal of variation among studies about the socio-demographic variables linked to the extent of the service quality difference. According to study conducted in South region and Addis Ababa on quality of contraceptive counseling, age, marital status, and number of children has significantly influence on counseling quality, but other study conducted at national level in Ethiopia indicates that age, marital status, and birth history, were not significant determinants of counseling quality rather education levels and urban residency are associated with better counseling quality, while rural areas often report lower satisfaction(7,14). In contrast studies in Kenya and Senegal show clients with lower education reporting higher quality of care, but overall quality of family planning counseling in Kenya is still sub-optimal that some women receive no form of counseling at service delivery point(33).According to longitudinal study conducted in two states of India, when seeking family planning services including contraceptive counseling, younger mothers were less likely than older mothers to obtain quality care(34).

2.5 Conceptual framework

The present study is guided by the SERVQUAL model, which is widely applied to assess service quality across various sectors, including healthcare. As shown in the conceptual framework (Figure 1), socio-demographic variables such as age, educational status, occupational status, marital status, number of live children, frequency of visit and type of contraceptive method may influence both expectations and perceptions of service quality. Both expectation and perception are measured across core SERVQUAL constructs such as tangibility, reliability, assurance, responsiveness and empathy. The central focus of this framework is the service quality gap, which is determined by the difference between clients' perceptions and their expectations. By integrating socio-demographic characteristics into the framework, this model allows examination of how client's background factors contribute to variations in service quality expectations and perceptions.

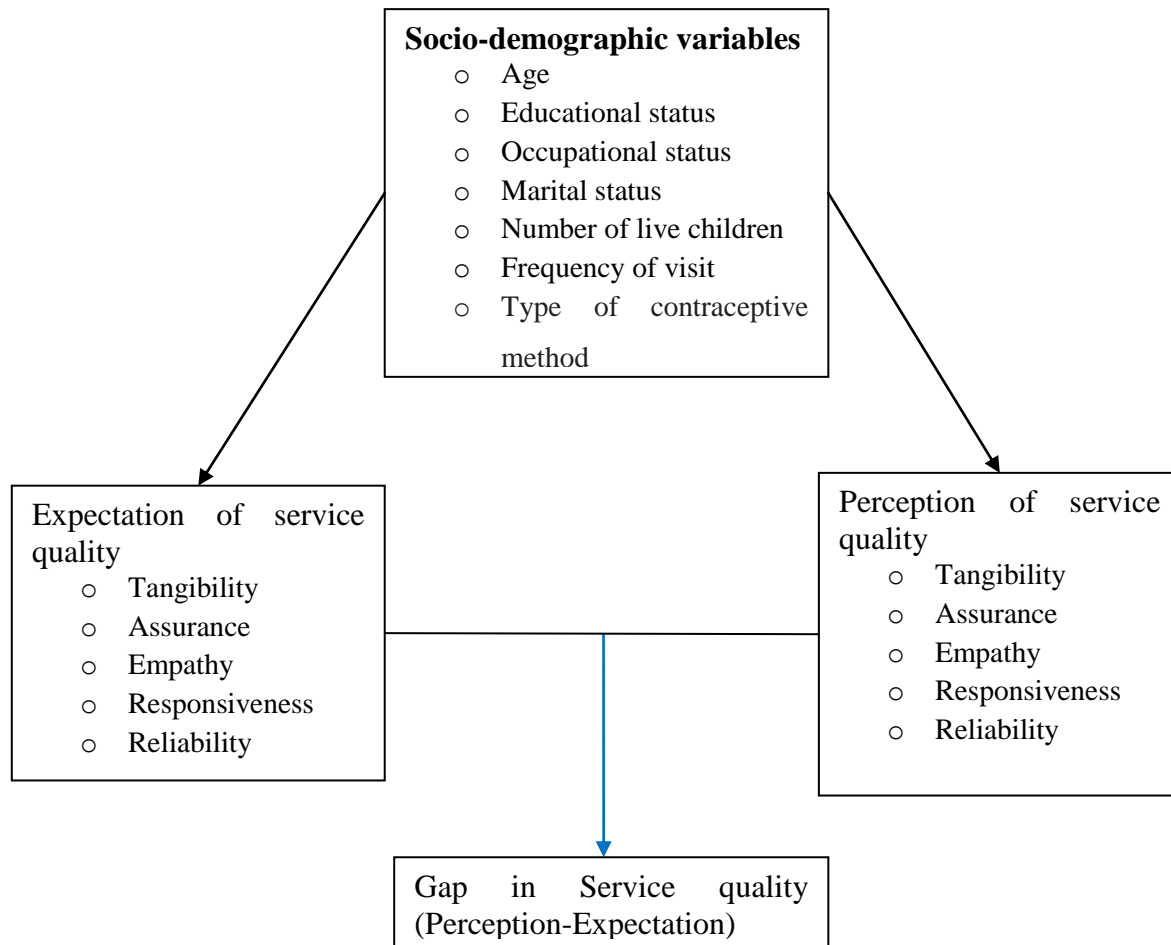


Figure : Conceptual Frame work adopted from SERVQUAL Model

3. Objectives

3.1 General Objective:

To assess service quality gap between expectations and perception of clients for contraceptive counseling service and to identify associated socio-demographic characteristics at Public Health Centers in Addis Ababa, Ethiopia/2025.

3.2 Specific Objectives;

- ✓ To measure clients expectations of contraceptive counseling service in each quality dimensions using SERVQUAL model in public health centers in Addis Ababa, Ethiopia 2025
- ✓ To measure clients perceptions of contraceptive counseling services in each quality dimensions using SERVQUAL model in public health centers in Addis Ababa, Ethiopia 2025
- ✓ To measure the service quality gap between client's expectation and perception of contraceptive counseling service in public health centers in Addis Ababa, Ethiopia 2025
- ✓ To identify associated socio-demographic factors to service gap score of contraceptive counseling services in public health centers in Addis Ababa, Ethiopia 2025

4. Methods

4.1 Study area and period

The study was conducted from March/2025 to April/2025 in public health centers of Addis Ababa. Addis Ababa is the capital city of Ethiopia and located at the geographical center of the country. The current total projected population size of Addis Ababa is around 3,859,999 out of these, female population accounted 52.8%. The city has a total of 13 public hospital (six general hospitals and seven compressive specialized hospitals) and 99 functional health centers. From 99 functional health centers which found in 11 sub cities of Addis Ababa, 30 health centers implemented Family planning Quality Standard. The study was conducted in eight (8) selected Health centers which are: Alem Bank HC (**Kolfe sub city**), Kolfe HC (**Addis Ketema sub city**), Ferency HC (**Yeka sub city**), Addisu Gebeya HC (**Gulele sub city**), Lideta HC (**Lideta Sub city**), Meri HC (**Lemi kura sub city**), Janmedia HC and Semen HC (**Arada Sub city**).

4.2 Study design

A facility-based quantitative cross-sectional study design was employed

4.3 Population of the study

Source Population: All women of reproductive age group in Addis Ababa

Study population: The study population was all randomly selected women of reproductive age group who attended FP clinics in selected health centers during the study period.

4.4 Eligibility Criteria

Inclusion Criteria: All females of reproductive age group (15-49years) having a visit for family Planning service at the time of data collection who is willing to participate in the study will be included.

Exclusion criteria: No exclusion criteria

4.5 Sample size Determination

The sample size was calculated using a single population proportion formula, by using the following assumptions: 95% confidence interval (CI), 5% error, and 21.5% population proportion of good quality counseling taken from the previous study(11).

Single population proportion formula:

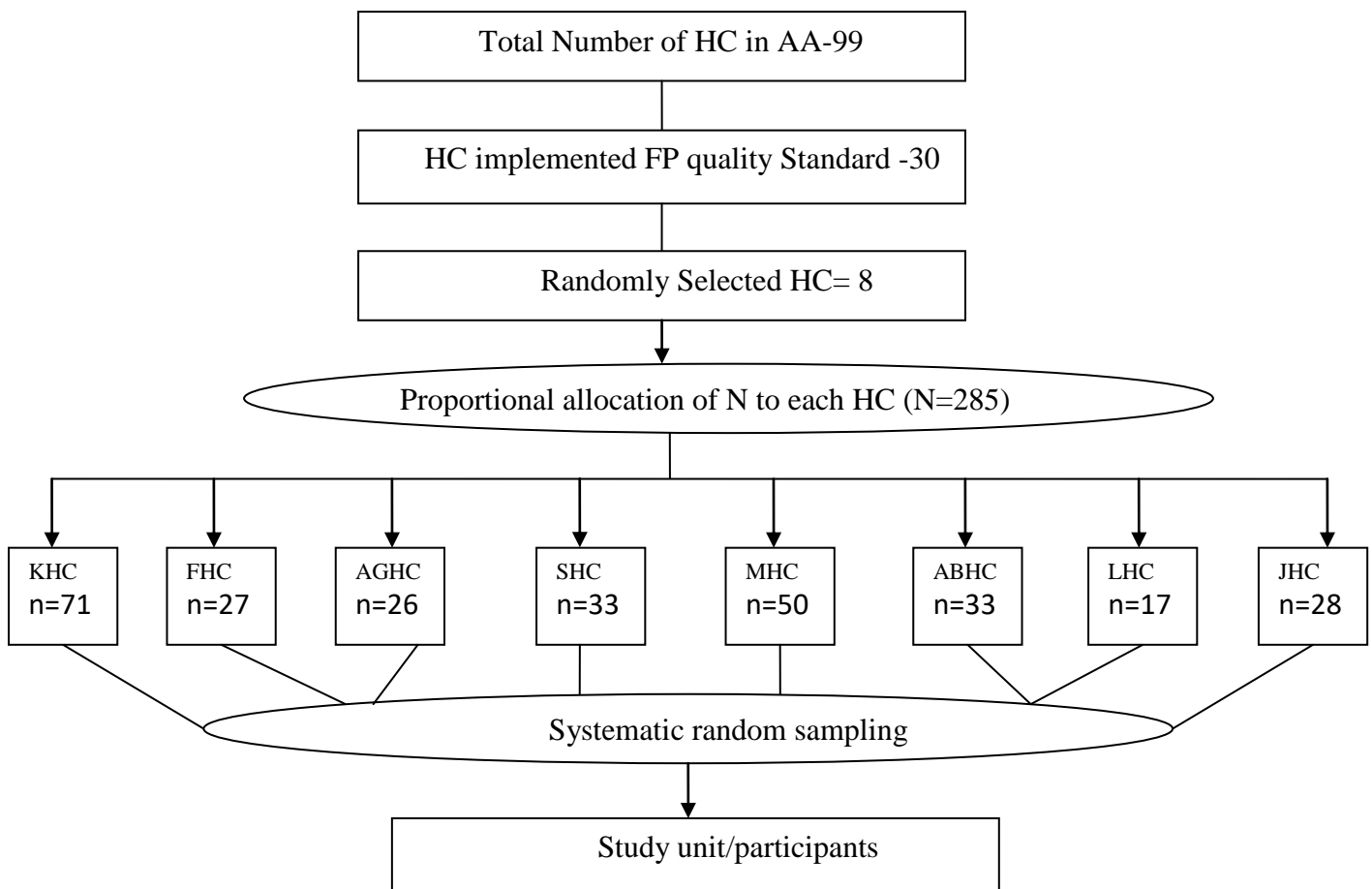
$$n = (Z_{\alpha/2})^2 P (1 - P) / d^2$$

- Z is standard normal distribution with CI of 95% =1.96
- P= 21.5% (0.215)
- d= tolerable marginal error 0.05

The calculated sample size for the study was 259.2. Considering 10% non-response rate, the total required sample for the study was 285.

4.6 Sampling technique and procedure

Addis Ababa had 99 health centers, from which 30 health centers selected purposively because they implemented the minimum family planning quality standard developed by Ministry of Health (35). From those 30 health centers 8 health centers was selected randomly by taking 25% of total sampling health centers (health centers that had implemented family planning quality standard). The final sample size 285 was proportionally allocated to the health centers by considering their monthly client flows. At every K^{th} interval ($K=N/n$ where N is total number of clients who will visit the family planning clinic during the study period, we used 3-month average of clients during the same period in the past year, n is proportionally allocated sample size for the specific health center). Finally, the participants were selected from each health centers through systematic random sampling every 10^{th} client. The K value for this study was 10. Each participant was interviewed two times, first when they enter to family planning clinic to obtain counseling service and second when they leave after getting the service.



AA- Addis Ababa	AGHC- Addisu Gebeya HC	KHC- Kolfe HC
HC- Health Center	ABHC- Alembank HC	LHC- Ledeta HC-
FP- Family Planning	FHC- Ferencayi HC	MHC- Meri HC
N-Sample Size	JHC- Janmeda HC-	SHC- Semen HC
n- Number of proportionally allocated sample size		

Figure : Diagrammatic presentation of sampling procedure

4.7 Study variables

4.7.1 Dependent Variable:

Gap in Service quality

4.7.2 Independent Variable: socio-demographic characteristics such as age, marital status, occupation, educational status, number of children alive, frequency of visit and type of contraceptive method for which counseling services received.

4.8 Data collection tool and procedures

The data was collected through face-to-face interviews using structured questioner which has two parts. The first part contains demographic characteristics of respondent. The second part was the adapted standard SERVQUAL questioner which has five dimensions to assess: tangibility, responsiveness, assurance, reliability and empathy which are used to measure expectations and perceptions of patients in each of them and to analyze the gap between patients expectation and perception in contraceptive counseling service(36).The SERVQUAL tool comprises 44 questions divided into two sections, 22 questions are to assess expectation and 22 for perception. Dimensions of tangibility, assurance and responsiveness each have four (4) questions and dimensions of reliability and empathy each have five (5) questions which were answered by using a 5-point Likert-scale evaluation. The questionnaires was completed in two ways, first to assess the study participants' expectations; the SERVQUAL questionnaire were completed by interviewing the participants before receiving services at the time of entry to the contraceptive counseling service room. And then exit interview was conducted to complete second part of SERVQUAL questionnaire which assess the participants' perception of the contraceptive counseling service provided. The data was collected by four individual who have Bachelor of Degree in health, after they received training by the principal investigator on how the data collection should be done.

4.9 Operational Definitions

Each question had five options, rated from 1 (strongly disagree) to 5 (strongly agree). The counseling service quality-gap score for each dimension was calculated by subtracting the expectancy score from the perception score for that dimension. In each dimension, the question's score was summed and its total was divided by the number of questions in that dimension(7,37).

Average gap score for tangible items (TA): $(TA1+ TA2+TA3+TA4) / 4$

Average gap score for reliability items (RL): $(RL1+ RL2+ RL3+ RL4+RL5)/5$

Average gap score for assurance items (AS): $AS1+ AS2+ AS3 + AS4 / 4$

Average gap score for responsiveness items (RN): $RN1 R+ + N2 RN3 R+ N4 / 4$

Average gap score for empathy items (EM); $EM1 + EM2+EM3+EM4+EM5 5/$

Overall counseling service quality (OSQ): $TA + RL+ R+ AS+EM /5$

Tangibility dimension item 1 (TA1) is calculated by subtracting the client expectation on tangibility dimension item 1 (TA1E) from client perception on item 1 (TA1P), which is written as $TA1=TA1P - TA1E$. The same is true for the rest.

Level of service quality gap: the difference between the sum of patient perceptions (P) and expectations (E) in each service quality dimension divided by 22 (level of service quality gap) = $\sum (P-E)/22$

Positive gap: if client's perception score of service exceeds their expectation score.

Negative gap: if client's expectation score of service exceeds perception score.

4.10 Data Quality Assurance

The questionnaire was prepared in English and translated to Amharic. In order to check the coherence and clarity a pretest of the questionnaire was conducted at Kotebe health center on 5% of the sample size which is (14 clients who get contraceptive counseling service) before the actual data collection began. During data collection on daily basis the data was checked for completeness and consistency.

4.11 Data Processing and Analysis

The data was first checked for completeness and consistency and exported to excel, after clearing in excel it was exported to SPSS V.25 for processing and analysis. Internal consistency was checked and the Cronbach's alpha was 0.97 for expectation items and 0.938 for perception items. Descriptive statistics such as frequency, percentage, median and interquartile range, were used to analyze the socio-demographic characteristics of the client. A normality test was applied to determine the type of statistical analysis using the Kolmogorov–Smirnov test and histogram. Kolmogorov–Smirnov revealed that the p value of the data was 0.000, indicating that $p < 0.05$ and similarly the histogram showed that the data were skewed to the right. Both methods showed that the data were not normal. Therefore, the nonparametric tests were used to analyze the data even though the initially planned analysis was a paired sample t-test, one-way analysis of variance (ANOVA) and a post-hoc test. Therefore, the study used non-parametric tests like: Median and Interquartile range determine the overall level of the gap in service quality, paired Wilcoxon test to determine if there is a statistically significant difference between the median of perception and expectation. The Kruskal-Wallis test was used to assess if patients with different socio-demographic characteristic attributed differing amounts of importance to the service quality dimensions. Significance was accepted for p values less than 0.05 for both tests.

4.12 Ethical Considerations

Separate ethical approval was obtained from Research Ethics Committee of School of Public Health, Addis Ababa University and Addis Ababa Health Bureau. After obtaining ethical approval and support letter from Addis Ababa health Bureau, the letter was submitted to the respective sub cities where the health centers found. And the final support letter obtained from sub cities were submitted to respective selected health centers and we got permission for data collection. Informed verbal consent was obtained from all participants during data collection. Questionnaire completed by participants remained anonymous and the right to withdraw from the research process at any point in time was respected.

4.13 Dissemination of Results

First it will be submitted to Addis Ababa University, College of Health Science, and School of Public Health for partial fulfillment of Masters Degree. The result will also disseminate to Addis Ababa Health Bureau as well as to health centers where the research were conducted and to Federal Ministry of Health as well. All effort will be made to publish it in national and internationally accepted journals.

5. Result

5.1 Socio-Demographic Characteristics of Participants

Out of 285 women in reproductive age group attending the FP clinics included in the study, 279 agreed and participated, which made the response rate 97.89%. More than half (55.9%) of respondents were between age group of 15-30. The median age of the respondents was 27 years, with an IQR of 24–33 years. Out of all participants, 115 (41.2%) has educational status of college and above and with regard to occupational status the majority of the participants, 94 (33.7%) were housewives. In this study, almost half of participants 141 (50.5%) had one to three children and 233(83.3%) were married. The study found that most respondents 182(65.23%) were counseled about implant followed by inject able 166(59.5). Lastly, 181(64.9%) respondents said they were repeat users (Table1).

Table : Socio-demographic characteristics of study participants in public health centers, Addis Ababa, Ethiopia 2025 (n=279).

Socio-demographic Variables		Frequency	Percent (%)
Age	15-30	158	56.6
	31-40	103	36.9
	41-50	18	6.5
Educational Status	Unable to read &write	37	13.3
	Elementary	61	21.9
	Secondary	66	23.7
	College and above	115	41.2
Occupational status	Employee	82	29.4
	Housewife	94	33.7
	Merchant	56	20.1
	Other	47	16.8
Number of children alive	None	43	15.4
	1-3	141	50.5
	>3	95	34.1
Marital Status	Single	32	11.5
	Married	233	83.5
	Other	14	5
Method type for which counseling obtained	IUCD	53	19
	Implant	182	65.23
	Inject able/Depo-Provera	166	59.5
	Pills	96	34.41
	Emergency Contraceptive Method	24	8.6
Frequency of visit	New	98	35.1
	Repeat	181	64.9

5.2 The Level of Gap in Contraceptive Counseling Service Quality and Its Dimensions

The overall gap in contraceptive counseling service quality explained by the median and Interquartile range is -2.23 (-2.7 to 1.7). The overall median score for expectation and perception is 4.27(3.86 to 4.55) and 1.98 (1.73 to 2.34), respectively. The highest counseling service quality gap was observed in the dimension of assurance and responsiveness with a median gap score of -2.5(-3 to -1.75) and -2.5 (-3.25 to -1.75) respectively, while the smallest gap was related to empathy dimension with a median gap score of -2(-2.8 to -1.4). The result indicated that the highest expectations for the quality of contraceptive counseling were in terms of tangibility with median and interquartile range value of 4.5(4 to 4.75), and the lowest expectation was in empathy dimension 4.2(3.7 to 4.6) (Table 2).

Table : The median expectation and perception of contraceptive counseling service quality dimensions at public health centers Addis Ababa, Ethiopia, 2025 (n=279).

Dimensions	Expectation Score Median (IQR)	Perception Score Median (IQR)	Gap Score Median(IQR)	Test result from Wilcoxon Signed rank test		
				P	Z	Rank
Tangibility	4.5 (4-4.75)	2.25 (1.75-3)	-2.25(-3 to -1.25)	0.00	-11.35	4
Reliability	4.24 (3.8-4.6)	2 (1.6-2.4)	-2.4 (-3 to -1.4)	0.00	-11.98	3
Assurance	4.25 (4-4.75)	1.75 (1.25-2.25)	-2.5 (-3 to -1.75)	0.00	-12.14	2
Responsiveness	4.25 (3.75-4.75)	1.75 (1.25-2)	-2.5 (-3.25 to -1.75)	0.00	-12.19	1
Empathy	4.2 (3.7-4.6)	2.2 (1.6- 2.6)	-2 (-2.8 to -1.4)	0.00	-11.11	5
Overall score	4.27(3.86-4.55)	1.98 (1.73-2.34)	-2.23 (-2.77 to -1.7)	0.00	-11.68	

With regard to perception, the highest perception of the quality of contraceptive advice was observed in the dimension of tangibility with median and IR value 2.25 (1.75 to 3), followed by empathy (median value (IQR) = 2.2 (1.6 to 2.6)) and the lowest perception was in dimension of Assurance and responsiveness with mediana and IR value (1.75(1.25 to 2.25)) and (1.75(1.25 to 2)) respectively (Table2).

The paired Wilcoxon test results indicated a significant difference between expectation and perception scores across all dimensions of counseling service quality.

5.3 Socio-Demographic Factors Associated With Service Quality Dimensions

Based on the Kruskal-Wallis test result, there is significant variation between groups of some demographic factors in terms service quality dimensions gap score. Clients whose age group >31-40 had statistically significant highest expectations and a more negative gap in the dimension of assurance ($p < 0.016$) compared with other age groups. Regarding educational status, clients with a college degree and above had the highest expectations in tangibility and reliability dimensions, with a statistically significant p-value of 0.042 and 0.004 respectively. The other socio demographic factor with significant Kruskal Wallis test result is frequency of visit, which showed significant result in reliability dimension (p-value- 0.011). Occupational status, number of children alive, types of contraceptive method and marital status of client did not show any significant relationship with the contraceptive counseling service quality dimensions.

Table : Kruskal Wallis test result and median value of service quality dimension scores in socio-demographic characteristics of respondents at Public Health Centers in Addis Ababa, 2025.

Variables	Tangibility	Reliability	Assurance	Responsiveness	Empathy
Age					
15-30	-2.25(-3 to -1)	-2.1(-3 to -1.2)	-2.25(-3 to -1.5)	-2.5(-3.25 to -1.6)	-2(-2.8 to -1)
31-40	--2.25(-2.7to 2.25	-2.4(-3 to -2.4)	-2.75(-3.25 to -2)	-2.5(-3 to -2)	-2(-2.8 to -1.6)
41-50	-1.87(-2.3to-1.25)	-1.6(-2.85 to -1.35)	-2.25(-2.75 to -1.5)	-2.75 (-2.87 to -1.9)	-1.9(-2.2 to -1.55)
P-value	0.44	0.10	0.047	0.98	0.52
Educational Status					
Unable to R&W	-1.75(-2.3 to -0.87)	-1.8(-2.4 to -1.2)	-2.25(-3 to -1.12)	-2.25(-2.87 to -1.6)	-1.8(-2.4 to -1)
Elementary	-2.25(-2.75 to -1.5)	-2(-2.8 to -1.4)	-2.5(-3 to -1.5)	-2.5(-3 to -1.5)	-2(-2.6 to -1.4)
Secondary	-2.37(-2.8 to -1.5)	-2.4 (-2.8 to -1.4)	-2.37(-3 to -2)	-2.75 (-3 to -2)	-2.2(-2.8 to -1.6)
College and above	-2.25(-3 to -1.25)	-2.6 (-3.2 to -1.6)	-2.5 (-3.25 to -1.75)	-2.75 (-3.25 to -1.75)	-2 (-3 to -1.2)
P-value	0.042	0.004	0.252	0.13	0.097
Occupational status					
Employee	-2.12(-3 to -1.25)	-2.4(-3 to -1.4)	-2.5(-3 to -1.75)	-2.37(-3.25 to -1.50)	-2.1(-2.8 to -1.15)
Housewife	-2.25(-3 to -1.68)	-2.4(-3 to -1.6)	-2.5(-3.25 to -1.75)	-2.75(-3 to -1.75)	-2.2(-2.8 to -1.4)
Merchants	-1.87(-2.5 to -1)	-2(-2.8 to -1.2)	-2.12(-2.9 to -1.3)	-2.5(-3 to -2)	-1.8(-2.35 to -1.4)
Others	-2.25(-3 to -1.5)	-2.2(-2.8 to -1.4)	-2.75(-3 to -2)	-2.75(-3.25 to -1.5)	-2.2(-2.8 to -1.2)
P-value	0.151	0.437	0.166	0.988	0.35
Number of child alive					
None	-2(-2.75 to -1.25)	-2.2(-2.8 to -1.4)	-2.5(-3.25 to -1.75)	-2.5 (-3 to -0.8)	-1.6 (-2.6 to -0.8)
1-3	-2.25(-3 to -1.5)	-2.4(-3 to -1.4)	-2.5 (-3.12 to -1.75)	-2.75(-3.25 to -1.75)	-2.2(-2.8 to -1.4)
>3	-2.25(-3 to -1.25)	-2.4(-2.8 to -1.4)	-2.5 (-3 to -1.5)	-2.25(-3.25 to -1.75)	-2 (-2.6 to -21.4)
P-value	0.5	0.628	0.7	0.672	0.173
Marital status					
Single	-2(-2.5 to -1.25)	-2(-2.75 to -1.4)	-2.5(-3.18 to -1.8)	-2.5(-2.9 to -1.5)	-1.9(-2.4 to -1.05)
Married	-2.25(-3 to -1.5)	-2.4(-3 to -1.5)	-2.5(-3.25 to -1.75)	-2.75(-3.2 to -1.75)	-2.2(-2.8 to -1.4)
Others	-1.4(-2.56 to -0.93)	-1.7(-2.25to -1.2)	-2.25(-2.5 to -1.18)	-2.12(-3 to -1.6)	-1.5 (-2.05 to -1.2)
p-value	0.28	0.277	0.76	0.31	0.13
Frequency of visit					
New	-2.25(-3 to -1.5)	-2.5(-3.2 to -1.6)	-2.75(-3.23 to -1.93)	-2.75 (-3.25 to -1.75)	-2.1 (-2.8 to -1.4)
Repeated	-2.25(-2.75to -1.25)	-2.2(-2.8 to -1.4)	-2.25(-3 to -1.5)	-2.5 (-3 to -1.75)	-2 (-2.6 to -1.4)
p-Value	0.172	0.011	0.11	0.32	0.41

6. Discussion

This study assessed the quality of contraceptive counseling services by measuring the gap between client's expectations and their perceptions of the counseling service received, using the SERVQUAL tool. The tool evaluates five key dimensions of service quality; tangibility, reliability, assurance, responsiveness and empathy.

The findings of this study indicate that the overall gap of contraceptive counseling service at public health centers is (-2.2 (-2.75 to -1.68)). This negative finding of service quality gap shows that client's expectation significantly exceeds their perceptions of the service delivered(38). The finding is comparable to the result from study in Southern Ethiopia, with a negative overall service quality gap of contraceptive counseling services (SERVQUAL -2.27), which signals unmet client expectations(7). While the negative gap is similar to the study from Southern Ethiopia, the smaller gap in this study suggests relatively better service quality. This may be due to the health centers in this study received training on the Ministry of Health's family planning quality standards, which likely helped improve service delivery.

Similar study conducted in Sanandaj, Iran, reported an overall SERVQUAL gap of -1.37 in family planning services, reflecting similar service delivery challenges across contexts(39). The similar negative gaps in overall service quality could be due to rising client expectations in reproductive healthcare. With growing awareness from health education, media, and community outreach, people are more informed to demand better care.

From the five service quality dimensions, the largest gap was observed in the dimension of assurance 2.5(-3 to -1.75) and responsiveness -2.5 (-3.25 to -1.75). The result agrees with the study conducted in Nigeria, Ghana and Saudi Arabia where the service quality dimensions of assurance and responsiveness scored the highest gap scores(40–42).

The probable reason for the highest gap in assurance dimension might be the knowledge asymmetry between the client and provider makes the provider to act in way that is not in the client's best interest(38,43). For responsiveness the reason could be explained by, that responsive service would be compromised by low staffing number in a developing healthcare system like Ethiopia and Ghana. Health workers are under stress and are unable to offer timely service due to the low health worker to population ratio(35).

The smallest gap was related to empathy dimension with a median gap score of -2(-2.8 to -1.4). Even if it is the smallest, the score is still negative showing expectation is higher than perception and it's in line with other studies(7,44,45). Empathy is that client deserves individual attention; staff members must be considerate and friendly to clients; they have to listen to clients' demands; and the healthcare facility has to be conscious of its clients' interests. In contrast to this study, cross-sectional studies from Poland and Ghana found a positive value in empathy dimension(46,47). This variation might be due to the difference in socio-demographic characteristic and methodology used.

This study showed a statistically significant difference in perception and expectation of all counseling service quality dimensions. That means there was a discrepancy between the client's expectations and perception of the contraceptive counseling service. Consistent with this study, findings from various other studies have also demonstrated a gap between the mean scores of clients' perceptions and expectations across all dimensions of service quality. (7,37–39,47).

The study demonstrates an association between age and gap in service quality. Clients whose age group >31 had statistically significant highest expectations and a more negative gap in the dimension of assurance. This could be explained by that an increase in women's age may lead to greater experience with reproductive health services, making them more aware of potential quality gaps in contraceptive counseling. The finding is in line with study conducted in Iran, that reported older women had scored a more negative gap in the quality of care compared with younger one(38).

The findings indicate that clients with a college education or higher reported negative gap scores in the tangibility and reliability dimensions. It can be interpreted that as clients attain higher levels of education, they become more informed and develop clearer expectations regarding the standards and services of the healthcare. And the finding agree with study conducted in Ethiopia and Iran (37,38). In contrast study conducted in Iran reported no significant relationship between quality gap and demographic characteristics(39).

This study found a significant variation in reliability dimension of service quality with regard to frequency of visit, where first time users reported higher expectations compared to repeated user .Compared to first-time clients, repeat user may be able to create more realistic judgments of the responsive quality when they are familiar with the health service, which could make them have reduced expectation. The finding is consistent with study conducted in Iran(38).However study conducted in Addis Ababa showed no significant relation

between frequency of visit and service quality gap. The difference might be due the difference in socio-demographic characteristics and the facility level where the study was conducted(37).

7. Strengths and Limitations of the Study

Strength of the study

The strengths of the study include the use of standard tool (SERVQUAL) to assess contraceptive counseling service quality allow comparisons with other studies and settings. The study is among the very few to assess contraceptive counseling service quality in urban setting using a dimension based measurement approach. The sampling technique used across the health centers and the participants strengthened the representativeness of the study.

Limitation of the study

The study assessed only the functional aspect of contraceptive counseling service quality and the technical aspect was not assessed: to get more reliable results; it is would be better to include the technical aspect also. Second, since the employed study design is cross sectional, it provides only a one-time snapshot, which may not reflect changes over time or long-term trends. Third, although the tool used is standardized and valid, it cannot capture all dimensions of service quality on its own. Therefore, it is recommended to complement it with qualitative studies.

8. Conclusions

The findings revealed a negative overall service quality gap according to the SERVQUAL assessment, suggesting that there is potential to enhance the quality of counseling services from the client's viewpoint. The largest negative gaps were noted in the areas of assurance and responsiveness. These insights underscore the importance for decision-makers and facility managers to concentrate on improving interpersonal communication, fostering trust with clients, and addressing their needs.

9. Recommendations

Health facility managers should focus on providing regular training and supportive supervision to improve providers' competence and interpersonal skills, which helps to understand and meet clients' expectation. Establishing a feedback mechanism for continuous quality monitoring will also help managers identify gaps and implement timely corrective measures.

In order to address the highest gap assurance and responsiveness, the Ministry of Health should improve human resource capacity through focused recruitment, training, and retention strategies. Incorporating accountability instruments like client satisfaction surveys along with performance audits is also recommended in order to foster a culture of quality and ensures that contraceptive counseling services fulfill clients' rights and expectations.

Policies also have to emphasize the regular evaluation of service quality from the viewpoint of clients via feedback systems and satisfaction surveys. A more responsive and accountable contraceptive counseling service will result from incorporating client experiences. And also it helps to guarantee that service enhancements are based on real needs and perceptions of clients.

Further research should be conducted on a broader range of healthcare facilities rather than limiting the focus to health centers alone. Incorporating qualitative methods to have deeper insights into clients' experiences, perceptions, and the contextual factors influencing service quality should also considered.

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11. Annex

Annex 1: Participants Information Sheet (English Version)

Addis Ababa University, School of public health

Informed Consent Form (to be taken by data collectors)

Greetings, My Name is-----

Today, I am here to collect data from clients who obtain contraceptive counseling service by using questionnaires. The purpose of this study is to collect data from clients to study “Analysis of service quality gap of contraceptive counseling service using Service quality model at Public health centers in Addis Ababa, Esthiopia 2024” for partial fulfillment of master’s degree by Miss Frezer from Addis Ababa University, College of health science department of health system management and policy. The result of this study will help to provide information that would be useful for management and service quality improvement on contraceptive counseling in primary health care level and further used in the formulation of better training strategies.

I would like to assure you that, the information that you provide is strictly confidential and will be used only for the research purpose. Your name will not be written on the questionnaire and you do not have to answer any question if you do not want to take part. You have right to stop filling this questionnaire at any time and I will respect what so ever your decision will be. But the information that you provide will greatly help to achieve the objective of this study.

Taking the information, you got from the above into account; I would greatly appreciate your cooperation in responding to this questionnaire. For further inquiries or concerns, you can contact the principal investigator of the study on mobile number +251965518952 or send your suggestions by email to: frezermelo@gmail.com.

Are you willing to participate in this study? 1. Yes

2. No

Thank you for your willingness to participate in this study.

Name of data collector_____ Sign.____ Date_____

Name of Supervisor_____ Sign.____ Date_____

Annex 2: English version questioner

Part one; Socio-demographic question

No	Question	Response
Part 1: Socio-demographic Characteristics		
101	Age	1. 15–30 2. 31–40 3. 41–50
102	Educational status	1. Unable to read and write 2. Elementary 3. Secondary 4. College and above
103	Occupational status	1. Employee 2. Housewife 3. Merchant 4. Others
104	Number of children alive	1. None 2. 1–3 3. >3
105	Marital status	1. Single 2. Married 3. widowed 4. Divorced
106	Type of contraceptive method for which you received counseling services	1. Intrauterine contraceptive Device 2. Implant 3. Inject able 4. Pills 5. Emergency Contraceptive Method
107	Frequency of visit	1. New 2. Repeated

Part- 2: Questions for measurement of clients expectations of contraceptive counseling service

1=Strongly Disagree, 2=Disagree, 3 = Average, 4=Agree, 5= Strongly Agree

No		Quality dimensions and questions	Response				
		Tangibility(T)					
201	T1	Location of contraceptive counseling room should be convenient	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
202	T2	Staff should Use of visual materials (sample of FP method, flip charts, leaflet) while counseling clients	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
203	T3	Counseling room should be clean	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
204	T4	During counseling, counselor needs to be well-dressed and appear neat	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
		Reliability (RL)					
205	RL1	When providers promise to do something by a certain time, they should do it	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree

206	RL2	Counselor should provide services at the time they promise to do so	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
207	RL3	Provider should help clients to make informed decisions	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
208	RL4	Counselor should provide an appointment card and inform a client when they should return for follow-up	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
209	RL5	Counselor should counsel their client right the first time	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
		Assurance					
210	A1	Counselor should create a sense of confidence in me and eradicate my fear of potential side effect	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
211	A2	I should feel safe and relaxed when dealing with a counselor	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
212	A3	Health care providers should treat a me in a very polite and friendly	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree

		manner					
213	A4	Counselor should provide adequate information on the method that I requested	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
		Responsiveness					
214	RS1	Counselor should announce the exact time of serving for the clients	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
215	RS2	Counselor should greet clients and provide prompt counseling service	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
216	RS3	Counselor should be always willing to help me on my method of choice	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
217	RS4	Counselor should always be ready to respond to my requests	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
		Empathy					
218	E1	Counselor should offer individual attention to me	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
219	E2	Counselor should help me to identify methods that is	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree

		suitable to my special FP needs					
220	E3	Counselor should provide information to address the clients' best interests	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
221	E4	Counselor should ask clients about their plans to have children	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
222	E5	Working hour of the provider should be suitable for the clients	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree

Part- 3: Questions for measurement of clients' perception of contraceptive counseling service

1=Strongly Disagree, 2=Disagree, 3 = Average, 4=Agree, 5= Strongly Agree

No		Quality dimension	Response				
		Tangibility	1	2	3	4	5
301	T1	Location of contraceptive counseling room was convenient	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
302	T2	contraceptive counseling provider used visual materials (sample of FP method, flip charts, leaflet) while counseling	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
303	T3	The contraceptive counseling room was clean	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
304	T4	counselor was well-dressed and neat	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
		Reliability (RL)					
305	R L1	contraceptive counseling provider did what they promised to do	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
306	R L2	Counseling service is provided on time	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
307	R L3	Contraceptive counseling provider	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree

		helped me to make informed decisions			e		
308	R L4	The Contraceptive counseling service provider provided me with an appointment card and informed me when should I return for follow-up	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
309	R L5	Counselor provided the counseling service right in the first time	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
		Assurance					
310	A1	The contraceptive counselor made me feel confident and allayed my fears about side effects	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
311	A2	I felt safe and relaxed when dealing with my counselor	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
312	A3	The Contraceptive counseling service provider treated me in a very polite and friendly manner	1.Strongly disagreed	2. Disagree	3. Average	4. Agree	5.Strongly agree

313	A4	The contraceptive counseling service provider gave me enough information about the method I requested	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
		Responsiveness					
314	RS 1	The contraceptive counseling service provider informed me of the exact time when he/she serves me	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
315	RS 2	Contraceptive counseling service provider greeted me and gave me prompt counseling service	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
316	RS 3	Counselor was willing to help me on my method of choice	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree
317	RS 4	Counselor was ready to respond to my requests	1.Strongly disagree	2. Disagree	3. Average	4. Agree	5.Strongly agree

		Empathy					
318	E1	I was given individual attention by the contraceptive counseling service provider	1.Strongly disagreed	2. Disagree	3. Average	4. Agree	5.Strongly agree
319	E2	The contraceptive counseling service provider helped me identify methods that were suitable for my special family planning needs	1.Strongly disagreed	2. Disagree	3. Average	4. Agree	5.Strongly agree
320	E3	The contraceptive counseling service provider provided me with information to meet my needs	1.Strongly disagreed	2. Disagree	3. Average	4. Agree	5.Strongly agree
321	E4	contraceptive counseling service provider asked me about my plan to have children	1.Strongly disagreed	2. Disagree	3. Average	4. Agree	5.Strongly agree
322	E5	Working hour of the contraceptive counseling service provider is suitable for me	1.Strongly disagreed	2. Disagree	3. Average	4. Agree	5.Strongly agree

Annex 3: Amharic version Information sheet

አዲስ አበባ ዩኒቨርሲቲ

የጤና ሳይንስ ኮሌጅ፡ የሕብረተሰብ ጤና ትምህርት ቤት

በሚረጃ የተደገፈ የስምምነት ቅጽ (በሚረጃ ሰብሳቢዎች የሚሙሰድ)

ጤና ይስጥልኝ! ስሜ----- እባላለሁ።

ጤና ይስጥልኝ! የሚጠቀሙት ከአዲስ አበባ ዩኒቨርሲቲ የጤና ሳይንስ ኮሌጅ በ ወ/ሪ ፍሬዘር ማላሎ ለሚደረገው የአገልግሎት ጥራት ሞዴልን በማጠቀም የወሊድ ማላላክያ የምክር አገልግሎት ጥራት ክፍተት ትንተና የሚሰራበት ፅሁፍ በአዲስ አበባ በሚገኙ የምንግስት ጤና ጣቢያዎች የእርግዝና ማላላክያ ምክር አገልግሎት ተጠቃሚዎችን ስለ አገልግሎት ጥራት ፣ ማጠቃለያን በማጠቀም ሚረጃ ለሚሙሰድ ነው። የዚህ ጥናት ወጠት በሚረጃ ደረጃ የጤና አጠባበቅ የወሊድ ማላላክያ ምክር የአገልግሎት ጥራትን ለማሻሻል ይረዳል እንዲሁም የተሻሉ የሥልጠና ስልቶችን ለመደፍ ጠቃሚዎች ሚረጃዎችን ይሰጣል። እርሶ የሚጠቅሙ ሚረጃ ጥብቅ ሚስጥራዊ እና ለምርምር ዓላማ ብቻ የሚሙሰዱ ሲሆን፤ ስምዎ በማጠቃለያ ላይ አይጻፍም እናም ለመሳተፍ ካልፈለጉ ማንኛውንም ጥያቄ ማላላክ የለብዎትም ወይም ይህንን ማጠቃለያ በማንኛውም ጊዜ ማላላክ ለማቆም መብት አለዎት እና ውሳኔዎ የሚሆነውን አክብራለሁ። ነገር ግን ያቀረቡት ሚረጃ የዚህን ጥናት አላማ ማሳካት በእጅጉ ይረዳል።

ከላይ ያገኙትን ሚረጃ ከግምት ውስጥ በማስገባት ለዚህ ማጠቃለያ ምላሽ ለመስጠት ስለተባበሩን በጣም አመክንዮ አለሁ። በቃለ ማጠቃለያ ሂደት ለእርስዎ ግልጽ ያልሆኑ ማንኛውንም ጥያቄዎች እንዲብራራልዎ ማጠቃለያ ቅጽዎች ላይ። ለተጨማሪ ማንኛውም ጥያቄዎች ወይም ስጋቶች የጥናቱን ዋና ተሞራሚ ፍሬዘር ማላሎን በሞካይል ስልክ ቁጥር +251965518952 ማኅጋገር ወይም ሃሳብዎን በኢሜል፡ frezermelelo@gmail.com ብለው ማላክ ይችላሉ።

በዚህ ጥናት ለመሳተፍ ፈቃደኛ ነሽ? 1. አዎ

2. አይ

በዚህ ጥናት ላይ ለመሳተፍ ፈቃደኛ ስለሆናችሁ እና ማሳገጥ ለን።

የሚረጃ ሰብሳቢዎ ስም _____ ፊርማ፡ _____ ቀን _____

የሱፐርቪዥዎ ስም _____ ይፈርማ፡ _____ ቀን _____

Annex 4: Amharic version of questioner

ክፍል 1: መረጃ ተሰባስቦ የተሰጠው ማረጋገጫ

ተ.ቁ	ጥያቄዎች	ምላሽ
101	ዕድሜ	1. 15–30 2. 31–40 3. 41–50
102	የትምህርት ደረጃ	1. ማንበብ እና መጻፍ እና መጻፍ ችሎታ 2. የመጀመሪያ ደረጃ 3. ሁለተኛ ደረጃ 4. ኮሌጅ እና ከዚያ በላይ
103	የስራ ሁኔታ	1. ሰራተኛ 2. የቤት እርምጃ 3. ነጋዴ 4. ሌላ
104	በህይወት ያሉ ልጆች ብዛት	1. ምንም 2. 1–3 3. >3
105	የጋብቻ ሁኔታ	1. ያለገባች 2. ያገባች 3. ባልዋዩ ሞት ባት 4. የተፋታች
106	የመከላከያ አገልግሎት ያገኙበት የእርግዝና መከላከያ አይነት	1. በመሀጠስ ውስጥ የመቆየት ወላይክ መከላከያ መሰረድ 2. በክንድስር የመቆየት የእርግዝና መከላከያ 3. በመረፊያ ማሰብ የእርግዝና መከላከያ 4. የእርግዝና መከላከያ እንክብካቤ 5. ድንገተኛ የእርግዝና መከላከያ መከላከያ ዘዴ
107	የጉብኝት አይነት	1. አዲስ 2. ድጋሚ

ክፍል-2፡ የደንበኞች የእርግዝና መከላከያ የምክር አገልግሎት የሚጠበቁትን ለመላካት ጥያቄዎች

1. በጣም አልስመምም 2. አልስመምም 3. አመክኝ 4. እስመምላው 5. በጣም እስመምላው

ተ.ቁ	የጥራት ልኬቶች እና ጥያቄዎች		ምላሽ				
		ተጨማሪ					
2011	T	የምክር ክፍል በታላቅ ሚዛን አለበት	1. በጣም አልስመምም	2. አልስመምም	3. አመክኝ	4. እስመምላው	5. በጣም እስመምላው
2022	T	ሰራተኞቻቸው ደንበኞችን በሚመለከቱ ጉዳዮች ላይ ታቁሳቁሶችን (የኤፍፒዘዲና ማፍ፣ ገበታዎችን፣ በራሪ ወረቀት) ማጠቀም ሊገባቸው	1. በጣም አልስመምም	2. አልስመምም	3. አመክኝ	4. እስመምላው	5. በጣም እስመምላው
2033	T	የምክር ክፍልን ደህረ ሚዛን አለበት	1. በጣም አልስመምም	2. አልስመምም	3. አመክኝ	4. እስመምላው	5. በጣም እስመምላው
2044	T	በምክር ክፍል ወቅት አመክሮ ወጥሮ አለባቸው እናንዳንድ ደህረ ሚዛን አለበት	1. በጣም አልስመምም	2. አልስመምም	3. አመክኝ	4. እስመምላው	5. በጣም እስመምላው
		አስተማማኝነት					
2051	R	የምክር አገልግሎት ሰጪዎች አንድን ነገር በተወሰነ ጊዜ ለመከላከል ስራ ላይ ማድረግ ሊገባቸው	1. በጣም አልስመምም	2. አልስመምም	3. አመክኝ	4. እስመምላው	5. በጣም እስመምላው

1 3	4	ትክለበት	በጣም አልስ መምጣም	አል ስማ ምጣም	መካ ኝ	እስ መም ለው	በጣም እስማ ማለው
		ምላሽ ሰጪ ት					
2 1 4	R S 1	አ መከሪ ወለ ደንበኞቹ ለምን ለግልበትን ትክክለ ኛ ጊዜ መከሪ ወቅት አለበት	1. በጣም አልስ መምጣም	2. አል ስማ ምጣም	3.አ መካ ኝ	4. እስ መም ለው	5. በጣም እስማ ማለው
2 1 5	R S 2	የ እርግዝና መከላከያ አ መከሪ ደንበኞችን ሰላምታ መከራ ጠቅላይ ፍጥነት ለግልበት መከራ ጠቅላይ በት	1. በጣም አልስ መምጣም	2. አል ስማ ምጣም	3.አ መካ ኝ	4. እስ መም ለው	5. በጣም እስማ ማለው
2 1 6	R S 3	በምርጫ ደረጃ ላይ አ መከሪ ሁል ጊዜ ለረዳ ማድረግ መሆን አለበት	1. በጣም አልስ መምጣም	2. አል ስማ ምጣም	3.አ መካ ኝ	4. እስ መም ለው	5. በጣም እስማ ማለው
2 1 7	R S 4	አ መከሪ ለጥያቄዎቹ ምላሽ ለ መከራ ሁል ጊዜ ዝግጁ መሆን አለበት	1. በጣም አልስ መምጣም	2. አል ስማ ምጣም	3.አ መካ ኝ	4. እስ መም ለው	5. በጣም እስማ ማለው
		ርህራሄ					
2 1 8	E 1	አ መከሪ ወይ ግል ትኩረት ሊሰጠኝ ይገባል	1. በጣም አልስ መምጣም	2. አል ስማ ምጣም	3.አ መካ ኝ	4. እስ መም ለው	5. በጣም እስማ ማለው
2 1 9	E 2	ለ እኔ ልዩ FP ፍላጎቶች ስለመሆን ሆኑ ዘዴዎችን እንደሌለ አ መከሪ ሪሲርዳ ማድረግ ይገባል	1. በጣም አልስ መምጣም	2. አል ስማ ምጣም	3.አ መካ ኝ	4. እስ መም ለው	5. በጣም እስማ ማለው

2 2 0	E 3	የእርግዝና መከላከያ አመክሮችን ለማቆም ለመጠንቀቅ ማድረግ	1. በጣም አልስጥምም	2. አልስጥምም	3. አላስጥምም	4. እስጥምም	5. በጣም እስጥም
2 2 1	E 4	አመክሮችን ለማቆም ለማድረግ ለማድረግ ለማድረግ	1. በጣም አልስጥምም	2. አልስጥምም	3. አላስጥምም	4. እስጥምም	5. በጣም እስጥም
2 2 2	E 5	የአቅራቢው ሥራ ስራ ለማቆም ለማድረግ ለማድረግ	1. በጣም አልስጥምም	2. አልስጥምም	3. አላስጥምም	4. እስጥምም	5. በጣም እስጥም

ክፍል-3:

ስለየ እርግዝና መከላከያ ምክር አገልግሎት ደንቦችን ግንዛቤ ለመላካት ጥያቄዎች

1. በጣም አልስማምም 2. አልስማምም 3. አማካኝ 4. እስማማለሁ 5. በጣም እስማማለሁ

ተ.ቁ		የጥራት ልኬቶች እና ጥያቄዎች	ምላሽ				
		ተጨማሪ ት	1	2	3	4	5
301	T1	የእርግዝና መከላከያ ምክር ክፍል ደረጃ ማሻሻያ ስራዎችን በር	1. በጣም አልስማምም	2. አልስማምም	3. አማካኝ	4. እስማማለሁ	5. በጣም እስማማለሁ
302	T2	የእርግዝና መከላከያ ምክር አገልግሎት አቅራቢ ምክር ወቅት የእይታ ቁሳ ቁሳዎችን (የኤፍፒዘ ዲናሚክስ ገበያዎች፣ በራሪ ወረቀት) ተጠቅሟል	1. በጣም አልስማምም	2. አልስማምም	3. አማካኝ	4. እስማማለሁ	5. በጣም እስማማለሁ
303	T3	የወሊድ መከላከያ ምክር አገልግሎት ስራ ማሻሻያ ስራዎችን ደ.ህ.ነ በር	1. በጣም አልስማምም	2. አልስማምም	3. አማካኝ	4. እስማማለሁ	5. በጣም እስማማለሁ
304	T4	የእርግዝና መከላከያ አማካሪ ወጥ ፍልጠስ የሰጠ እና ደ.ህ.ነ በር	1. በጣም አልስማምም	2. አልስማምም	3. አማካኝ	4. እስማማለሁ	5. በጣም እስማማለሁ
		አስተማማኝነት					
305	R L1	የእርግዝና መከላከያ ምክር አገልግሎት አቅራቢ ወላጅ ማድረግ ያልቻለ ገቢዎችን አድርጓል	1. በጣም አልስማምም	2. አልስማምም	3. አማካኝ	4. እስማማለሁ	5. በጣም እስማማለሁ

306	R L2	የ እርግዝና መከላከያ የ ምክር አገልግሎት በሰዓቱ ይሰጣል	1. በጣም አልስማምም	2. አልስማምም	3. አላማኝ	4. እስማማለሁ	5. በጣም እስማማለሁ
307	R L3	የ እርግዝና መከላከያ የ ምክር አገልግሎት አቅራቢው መረጃ ላይ የተመሰረተው ጥያቄ እንደወሰነ ረድቶኛል	1. በጣም አልስማምም	2. Disagree	3. አላማኝ	4. እስማማለሁ	5. በጣም እስማማለሁ
308	R L4	የ እርግዝና መከላከያ የ ምክር አቅራቢ የ ቀጠሮካር ድሰጠኝ እና ማቆላከት ትል መሆኑን እንዳላብኝ አሳውቀኝ	1. በጣም አልስማምም	2. አልስማምም	3. አላማኝ	4. እስማማለሁ	5. በጣም እስማማለሁ
309	R L5	የ ወሊድ መከላከያ የ ምክር አገልግሎት ለ ሎት አቅራቢው ምክር አገልግሎትን በመጀመሪያ ዙር ጉብኝት ሰጥቶኛል	1. በጣም አልስማምም	2. አልስማምም	3. አላማኝ	4. እስማማለሁ	5. በጣም እስማማለሁ
		ዋስትና					
310	A1	የ እርግዝና መከላከያ የ ምክር አገልግሎት አቅራቢው እኔ ላይ የሚመጡ ስሜትን ፈጥሮ ጎንዮሽ ጉዳዮችን በተመለከተ ያለኝን ፍርሃት አስወግዶኛል	1. በጣም አልስማምም	2. አልስማምም	3. አላማኝ	4. እስማማለሁ	5. በጣም እስማማለሁ
311	A2	ከ እርግዝና መከላከያ የ ምክር አገልግሎት ሰጪዎች ጋር ስነ ጋገር ደህንነትና መረጃ ጋጋት ተሰጥቶኛል	1. በጣም አልስማምም	2. አልስማምም	3. አላማኝ	4. እስማማለሁ	5. በጣም እስማማለሁ
312	A3	የ እርግዝና መከላከያ የ ምክር አገልግሎት አቅራቢው ጣምን ትህትና እና ወዳጃዎ በሆነ መንገድ አስተናግዶኛል	1. በጣም አልስማምም	2. አልስማምም	3. አላማኝ	4. እስማማለሁ	5. በጣም እስማማለሁ

313	A4	የ ወሊድሙካላ ከያዩ ምክር አገ ልግ ሎት አ ቅራቢውስ ለ ጠዩ ቅ ኩት ዘ ዴበ ቂሚ ጃ ሰ ቶኛ ል	1. በ ጥምሕ ልስ ማም ም	2. አ ልስ ማም	3.አ ማክ ኝ	4. እ ስ ማምላ ው	5. በ ጥምሕ ስ ማምላ ው
		ምላሽ ሰጪ ት					
314	RS 1	የ እ ር ግዝና ሙካላ ከያዩ ምክር አገ ልግ ሎት አ ቅራቢውዩ ማዎ ገ ለ ግ ለ ኝ በ ት ን ት ክ ክ ለ ር ሰ ዓ ት አ ሰ ወቆኛ ል	1. በ ጥምሕ ልስ ማም ም	2. አ ልስ ማም	3.አ ማክ ኝ	4. እ ስ ማምላ ው	5. በ ጥምሕ ስ ማምላ ው
315	RS 2	የ እ ር ግዝና ሙካላ ከያዩ ምክር አገ ልግ ሎት አ ቅራቢው ለ ምታ እና ፈ ጣ ን ዩ ምክር አገ ልግ ሎት ሰ ቶኛ ል	1. በ ጥምሕ ልስ ማም ም	2. አ ልስ ማም	3.አ ማክ ኝ	4. እ ስ ማምላ ው	5. በ ጥምሕ ስ ማምላ ው
316	RS 3	የ ወሊድሙካላ ከያዩ ምክር አገ ልግ ሎት ሰጪው ሚ ጥ ኩት ዘ ዴላ ይሊረ ዳ ኝ ፈ ቃ ደኛ ነ በ ር	1. በ ጥምሕ ልስ ማም ም	2. አ ልስ ማም	3.አ ማክ ኝ	4. እ ስ ማምላ ው	5. በ ጥምሕ ስ ማምላ ው
317	RS 4	የ እ ር ግዝና ሙካላ ከያዩ ምክር አገ ልግ ሎት አ ቅራቢው ለ ጥያ ቄ ዎ ቼ ምላ ሽ ለ ሙካ ጠ ት ዝ ግ ጁ ነ በ ር	1. በ ጥምሕ ልስ ማም ም	2. አ ልስ ማም	3.አ ማክ ኝ	4. እ ስ ማምላ ው	5. በ ጥምሕ ስ ማምላ ው
		ርሀራሄ					
318	E1	የ እ ር ግዝና ሙካላ ከያዩ ምክር አገ ል ግ ሎት ሰጪው ግ ለ ሰ ብ ት ኩረ ት ተ ሰ ጥ ቶኛ ል	1. በ ጥምሕ ልስ ማም ም	2. አ ልስ ማም	3.አ ማክ ኝ	4. እ ስ ማምላ ው	5. በ ጥምሕ ስ ማምላ ው

319	E2	የ እርግዝና ማላከያ የ ምክር አገልግሎት አቅራቢዉ እኔ ልዩ የ ቤተሰብ እቅድ ፍላጎት ተስማሚ ሆኑ ዘዴዎችን እንደላይ ረድቶኛል	1. በጣም አልስማምም	2. አልስማምም	3. አማካኝ	4. እስማማለሁ	5. በጣም እስማማለሁ
320	E3	የ እርግዝና ማላከያ የ ምክር አገልግሎት አቅራቢዉ እኔን ፍላጎት ለማሟላት ሚሮ ጃሰቶኛል	1. በጣም አልስማምም	2. አልስማምም	3. አማካኝ	4. እስማማለሁ	5. በጣም እስማማለሁ
321	E4	የ እርግዝና ማላከያ የ ምክር አገልግሎት አቅራቢዉ ጅምር ወይን ለደቆኛል	1. በጣም አልስማምም	2. አልስማምም	3. አማካኝ	4. እስማማለሁ	5. በጣም እስማማለሁ
322	E5	የ እርግዝና ማላከያ የ ምክር አገልግሎት አቅራቢዉ ሥራ ሰዓት ለ እኔ ተስማሚ ነው	1. በጣም አልስማምም	2. አልስማምም	3. አማካኝ	4. እስማማለሁ	5. በጣም እስማማለሁ

Annex 5: Assurance of Principal Investigator

I, the undersigned agree to accept all responsibilities for the scientific and ethical conduct of the research project. I will provide timely progress report to my advisor and seek the necessary advice and approval from my primary advisors in the module of the research. I will communicate timely to my advisors all stakeholders involved in the study including any source of funding for this research.

Name of the student: Frezer Melelo

Date: December, 2024

Signature:

Approval of the primary Advisor

Name of the primary advisor: Dr Werissaw Haileselassie (MPH, PhD)

Date: December, 2024

Annex 6: Training Manual

Overview of the study;

The aim of the study is to analyze service quality gap of contraceptive counseling service using SURVQUAL model at selected health centers in Addis Ababa. The analysis is from client's perspective and is measured by the gap between client's expectation and perception of the counseling service provided. The study participants will be reproductive age group women attending family planning clinics in selected health centers.

Training and its arrangement: Full training will be give in person to data collectors about the study objective, the data collection tool and on how should the data be collected, at Addis Ababa University college of health science, school of public health, Sefereselam Campus.

Interviewing skill and technique; the data collection technique is face to face interview. The data collectors will be two individual who have bachelor degree in health preferably midwifery, Health officer or medical doctor.

Pre-testing and its purpose; A pretest of the questionnaire will be conducted on 5% of the sample size which is (14 clients who get contraceptive counseling service) one week before the actual data collection. The purpose is to check the sequence of questions, to check language comprehension and to know duration of time required to complete the questioner.

Data quality management during data collection; Data collectors will be instructed to check the completeness of each questionnaire at the end of each interview. The completeness of the questionnaire at the end of the day will be rechecked by the principal investigator.

Supervision of data collection: There would be one supervisor for the data collection of this study. The supervisor should have prior data collection and supervision experience. The supervisor will be responsible to monitor data collectors and report to principal investigator on a daily base.

Annex 6: Curriculum Vitae of Principal Investigator

Name: Frezer Melelo

Public Health Professional

Sex; Female

Nationality; Ethiopian

Address; Addis Ababa, Ethiopia

Mobile; +251965518952

Email; frezermelelo@gmail.com

Skills

- Public speaking and report writing
- Excellent Interpersonal communication skill
- Competent English writing, listening and speaking skill
- Ability to conduct community diagnosis and develop intervention plan for community problems
- Data collection and research data analysis skill
- Excellent Microsoft office skill
- Research software like SPSS (statistical package for social science), Open data kit collect (ODK), Kobo tool box skill.
- Teamwork and managerial skill
- Quick adaptability and capacity to work in a multidisciplinary and multicultural environment.

Experience

July, 2022 – September, 2023

Arba Minch University, Arba Minch - Assistant Lecturer

- Coordinating clinical attachment of public health students
- Assisting in research work and data analysis
- Providing community service

October, 2021- November 2021,

Ethiopian Catholic Church-Social and Development Commission (NGO), South Omo, Jinka - Volunteer

- Home to home community awareness creation about covid-19 pandemic and cholera epidemic in districts of South Omo zone
- Preparing daily and weekly report

July, 2021-September, 2021

Leader of Team Training Program, Merab Abaya Site, Arba Minch University

- Facilitating discussions to clarify the roles and responsibilities of each individual from different department within our team
- Scheduling and conducting regular team meetings
- Ensure adequate logistical arrangements for our training by communicating with instructors and coordinators, such as Gloves, flipchart, marker.
- Time management
- Daily and weekly report writing

Education

October 2023 - present

Addis Ababa University, Addis Ababa - Master of public Health in Health system Management

October, 2017- December, 2021

Arba Minch University, Arba Minch- Bachelor of Science in Public Health

Training and Certificates

- Professional Registration and Licensing Certificate from Southern Nation Nationalities and People, Regional Health Bureau, 2021.
- Certificate of Recognition for Volunteering for two months as Community health worker in awareness creation about Covid-19 Pandemic and cholera Epidemics from Ethiopian Catholic Church-Social and Development Commission (NGO), 2021.
- Certification of completion of training on **Data analysis Fundamentals** provided by UDACITY Nano degree program October, 2024.
- Certificate of achievement for completing course **Mainstreaming of gender equality, disability and social inclusion (GEDSI) in WASH in health-care facilities** offered on OpenWHO.org, An online learning initiative of World Health Organization Health Emergencies Programme, November, 2024.

- Certificate of achievement for completing course **Introduction to the Emergency Response Framework (ERF)** offered on OpenWHO.org, An online learning initiative of World Health Organization Health Emergencies Programme, November, 2024.

References: **Dr. Werissaw Haileselassie** (MPH, PhD) Addis Ababa University, Ethiopia

Email; werissawhaileselassie@yahoo.com

Mustefa Glagn (MPH) Arba Minch University, Ethiopia

Email; mustesami02@gmail.com