

# Client Satisfaction with Family Planning Services and Associated Factors in Tembaro District, Southern Ethiopia

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**Introduction:** Client satisfaction influences the use of family planning and other reproductive health services. This study aimed to assess the magnitude of client satisfaction with family service and its associated factors among reproductive-age women.

**Patients and Methods:** We conducted a facility-based cross-sectional study. A total of 411 clients, nested in four health facilities, were included in the analysis. Systematic sampling was employed to select study units for the exit interview. Data collection instruments for this study were pre-tested structured questionnaires. Client satisfaction was assessed using fifteen Likert-scaled question items. Each item of question has 5 points ranging from 1 (strongly disagree) to 5 (strongly agree) and, finally, mean was computed. The pre-coded data were entered into Epi Data version 4.2.0 and exported to SPSS version 25 for analysis. Logistic regression analysis was carried out to identify independently associated factors at a confidence interval of 95% and a significance level of p-value less than 0.05.

**Results:** Magnitude of client satisfaction with family planning service was 46% [95% CI: 41–50.8]. Rural residence [AOR=3.07; 95% CI: 1.10–8.62], educational level of college and above [AOR=0.22; 95% CI: 0.07–0.70] as compared to the educational level of primary education, waiting time of less than half an hour [AOR=7.80; 95% CI: 2.48–24.48], maintaining privacy [AOR=7.16; 95% CI: 2.89–17.69], describing side effects of methods [AOR=3.14; 95% CI: 1.02–9.76] were factors significantly associated with client satisfaction.

**Conclusion:** The overall magnitude of client satisfaction with the services was found to be low. Many of the factors that attributed to the low level of client satisfaction are modifiable. There is a need for organizing the family planning room as per standards, maintaining privacy, minimizing waiting time, and describing the side effects during the provision of service.

**Keywords:** client satisfaction, family planning service, Southern Ethiopia

## Introduction

Rapid population growth resulting from high fertility rate and reduced mortality has become a new challenge of concern in sub-Saharan Africa (SSA).<sup>1</sup> Family planning (FP) is the decision of individuals or couples to decide when and how many children they have and among the practical strategies that not only slow the population growth but also reduce maternity and child mortality due to outcomes of unintended pregnancies.<sup>2–4</sup>

Client satisfaction in family planning services is a crucial indicator that measures the extent to which a client is gratified with the services received from healthcare providers. It, therefore, reflects the gap between the expected service

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and the experience of the service, from the client's point of view.<sup>5,6</sup> The satisfaction of clients is an essential component of quality and hence is expected to improve through better compliance with the service, and at the same time, satisfied clients will generate demand in the community and assist in the recruitment of new clients who can use the services.<sup>7</sup> Client satisfaction has been recognized as an essential component in the evaluation of health-care quality. One of the factors that influences the use of family planning and other reproductive health services is client satisfaction with healthcare services.<sup>8,9</sup>

Client satisfaction is also an essential determinant of service uptake and continuation because satisfied clients are more likely to revisit the service and pass on a positive message to others and continue the use of particular family planning methods.<sup>5,10</sup> It also signals other aspects of quality of care including structural and process issues of quality of care in FP services. It reflects the perception of healthcare consumers (FP clients) on the quality of care on existing health services.<sup>11</sup>

Studies from developing countries have found that not being satisfied with family planning services is a prime reason for high rates of discontinuation, reduced utilization of FP services, non-compliance, and high rates of unintended pregnancy.<sup>5,11,12</sup>

Evidence from several studies shows that client satisfaction is affected by different factors. Those are; socio-demographic factors: marital status, educational status, and age,<sup>12,13</sup> service provider level factors: provision of information on potential side effects, ensuring privacy, examining during the visit,<sup>8,10,12-14</sup> service organization factors: using educational materials, informed choice, waiting time, urban facilities, the sanitary condition of the room.<sup>5,8,10,11,13</sup> However, there is scarce information on client satisfaction with FP services in southern Ethiopia, specifically in the study area.

In Ethiopia, more than one-third (37%) of women who commence contraception discontinue use within 12 months, according to the Ethiopian Demographic and Health Survey (EDHS) 2016 report.<sup>15</sup> The Ethiopian government introduced the health sector transformation plan (HSTP) intending to increase the contraceptive prevalence rate (CPR) to 55% and reduce the unmet need for FP use to 10% by 2020, but the progress is slow as EDHS 2019 found CPR to be 41%.<sup>16,17</sup>

Thus, improving client satisfaction with FP services could be one strategy to contribute to the achievement of the goal. Therefore, assessments of client satisfaction are needed to know the current status plan for program

improvement. Therefore, this study tried to assess client satisfaction with family planning services and its associated factors at the public health facilities of Tembaro district, Kembata Tembaro zone.

## Patients and Methods

### Study Design and Setting

A facility-based, cross-sectional study was conducted in Tembaro district, Kembata Tembaro zone, Southern Nations Nationalities and People Region (SNNPR). It is known for its high population density. Mudula, the capital of the district, is located at a distance of 169 kilometers from the regional capital, Hawassa, and 370 kilometers from Addis Ababa. The district, under its total surface area of 135 square kilometers encompasses 19 kebeles (the smallest administrative unit). The total population of the district is close to 140,000, with the population divided between 50.9% female and 49.1% male. The district has 1 primary hospital, 3 functional health centers, and 22 health posts staffed with 122 health workers and 56 health extension workers to serve its population located in the 19 kebeles.

### Sample Size Determination and Sampling Procedure

The sample size was determined by using both single and double population proportion formula. The following assumptions were used to calculate sample size for the first objective: 95% confidence level (1.96), 5% margin of error, and proportion (P) of the family planning clients satisfied with service given in a facility-based study in Wonji town which is 56%.<sup>13</sup> Accordingly, the sample size was calculated by using the formula:

$$n = (z_{(\alpha/2)})^2 p(1-p)/d^2$$

where n= sample size,  $Z(\alpha/2)$ = critical value of normal distribution, P=population proportion, and d= margin of error. The sample size becomes 411, including 10% non-response.

The sample size for the second objective was determined using double population proportion formula with the assumptions of 95% CI, 5% margin of error, 80% power, and unexposed to the exposed ratio of 1:1 and odds ratio of 3.04<sup>10</sup> and the sample size becomes 274. The final sample size is therefore 411.

The study population (n) was further allocated to each of the selected facilities proportional to the size of their client flow. For this allocation, a sampling fraction ( $=n/N$ ) was used for all the facilities proportionally, making it

proportional to size. The study participants were consecutively interviewed from each facility until the calculated sample size achieved.

## Data Collection Method

The instrument was adapted from previous works of literature.<sup>5,8-12,18-20</sup> Data were collected using a validated and pre-tested structured questionnaire. The questionnaire contained the following: socio-demographic factors of the clients, their health service organization experience, reproductive health history, and provider competence from the four public health facilities. Data were collected by four health workers who were briefly trained on the objectives of the study and the tool. To minimize observational bias, the participants were well informed about the risks, benefits, confidentiality, and the right of stopping/rejecting their responses at any time during the interview.

## Variables and Measurements

In this study, client satisfaction (outcome variable) was assessed using fifteen Likert-scaled question items. Each item of the question had 5-points, one denoting “1” strongly disagree, two “2” disagree, three “3” not sure, four “4” agree and five “5” strongly agree. Finally, the mean was computed, and by classifying to above/equal and below the mean the response was categorized in to “Satisfied (coded as 1)” and “Not-satisfied (coded as 0)”, respectively.

The independent variables include socio-demographic factors (age, residence, marital status, educational level, religion, ethnicity, occupation), health facility-related factors (frequency of visit, opening time convenience, privacy maintained during counseling and procedure, cleanliness of the clinic, waiting time and rooms having posters with key messages of family planning), information given and provider-related factors (appointments made for follow-up, clinical staff show respect, providers explain how the method works, providers demonstrate how to use the method, providers describe the possible side-effect, providers describe what to do when a problem occurs and providers describe the possibility of changing the method when there is complication) and other interpersonal characteristics.

## Data Management and Analysis

The pre-coded data were entered into Epi Data version 4.2.0 and exported to SPSS version 25 for analysis. Descriptive statistics were used to present the frequencies, proportion, and summary statistics. Bivariate analysis was carried out to

see the association of each independent variable with the client satisfaction with family planning service. Those variables with a p-value of less than 0.25 were included in multivariable logistic regression analysis. Age category, occupation, and received family planning method were excluded from multivariable analysis because p-value > 0.25. Multivariable logistic regression analysis was carried out to control possible confounders and identify factors independently associated with client satisfaction with family planning service. Finally, variables with a p-value of less than 0.05 in the multivariable logistic regression analysis were considered as significant association with client satisfaction with family planning service. The odds ratio was used to identify the strength of client satisfaction with family planning services.

## Ethical Statement

Before data collection, the ethical clearance was obtained from the institutional review board (IRB) of the College of Health Science and Medicine, Wolaita Sodo University with IRB number CHSM/ERC/43. Participation in the study was on voluntary bases and they were informed about the right not to participate or withdraw at any time. We obtained informed verbal consent from the participants after necessary explanation about the purpose of the study, its benefits, and the outcome and was accepted and approved by the IRB of College of Health Science and Medicine, Wolaita Sodo University, and that this study was conducted following the Declaration of Helsinki.

## Result

### Socio-Demographic Characteristics

We interviewed a total of 407 clients from four family planning service delivery points. The response rate was 99%. Two hundred fifty (61.4%) were rural dwellers. More than three-quarters of the respondents, 79%, were repeat clients. The mean age was 27.7 + 5.2SD years old with a range between 18 and 44 years. More than half of the participants, 57%, were between 25 and 34 years old. Most of the respondents, 90%, were married, and 6.9% were single, the rest widowed and divorced. More than one-third, 39%, reported completing primary-level education, and 32% reported completing high school (Table 1).

### Health Facility and Service Providers Related Factors

The majority of clients, 86.5%, responded that the opening time of the family planning room was convenient to them

**Table 1** Sociodemographic Characteristics of Respondents, Tembaro, September 2019

Background Characteristics		Frequency	%
Age (in years)	15–24	119	29.2
	25–34	232	57
	35–44	56	13.8
Residence	Rural	250	61.4
	Urban	157	38.6
Marital status	Single	28	6.9
	Married	368	90.4
	Divorced	10	2.5
	Widowed	1	0.2
Educational level	No formal education	82	20.1
	Primary	128	39.4
	Secondary	103	31.7
	College and above	94	28.9
Religion	Protestant	182	44.7
	Orthodox	119	29.2
	Catholic	63	15.5
	Muslim	42	10.3
Ethnicity	Tembaro	288	71
	Hadiya	53	13
	Kembata	36	9
	Dawuro	14	3
	Wolaita	8	2
	Other	8	2
Occupation	Housewife	123	30
	Merchant	26	6
	Government employee	107	27
	No occupation	19	5
	Student	117	29
	Others	14	3
Frequency of visit	New	84	21
	Repeat	323	79

while 89% agreed on the convenience of working hours for the family planning clinic. On the contrary, 72.2% of the study participants were not comfortable with the cleanliness of the clinic. In addition to that, 61.2% of the respondents responded that the family planning waiting room had no posters with a message about family planning. As well, more than half of the respondents, 52%, responded that privacy was ensured during the procedure (Table 2).

Regarding the perceived technical competence of service providers, 71.5% of the women answered in agreement with whether the provider explained how the method worked. Around 70% of users said that the provider had demonstrated how to use the method chosen. Almost two-

**Table 2** Clients Responses with Aspects of FP Services Organization in Government Health Facilities in Tembaro, September 2019

Clients Response	Frequency	%	
Opening time convenience	Yes	352	86.5
	No	55	13.5
Working hour convenience	Yes	362	89
	No	45	11
Privacy ensured during the procedure	Yes	211	51.8
	No	196	48.2
Comfortable with the cleanliness of the clinic	Yes	113	27.8
	No	294	72.2
Clinical staff showed respect	Yes	317	77.9
	No	90	22.1
Waiting room has a poster on family planning	Yes	158	38.8
	No	249	61.2
Client waiting time	Less than 30 minutes	131	32
	30 minutes up to an hour	135	33
	Greater than one hour	141	35
Follow up card filled with date of appointment was given	Yes	354	87
	No	53	13

thirds, 60.4%, of the women said that they had received a description from providers about the possible side effects of the methods. The provider informed about the complications they could expect to experience for 59.7% of users (Table 3).

## The Magnitude of Client Satisfaction on Family Planning

The overall client satisfaction with family planning services was 46% [95% CI: 41%-50.8%].

## Factors Associated with Client Satisfaction

In bivariate analysis, age, residence, educational level of the participants, waiting time, ensuring the family planning room

**Table 3** Perceived Technical Competence of Family Planning Providers, Tembaro, September 2019

Technical Competence	Frequency	%
Provider explained how the method work		
Yes	291	71.5
No	116	28.5
Demonstrate how to use the method		
Yes	285	70
No	122	30
Describe possible side effects		
Yes	246	60.4
No	161	39.6
Describe what to do when a problem occurs		
Yes	281	70.8
No	119	29.2
Describe the possibility of changing method if not happy		
Yes	322	79.1
No	85	20.9
Describe follow-up visit		
Yes	358	88
No	49	12
Information regarding complication		
Yes	243	59.7
No	164	40.3

is indicated with bold lettering, maintaining privacy during the procedure, having family planning room with posters displaying key messages on family planning, having a history of side effects of the methods, having a discussion with husbands about the family planning methods, measuring blood pressure during the visit, measuring weight during the visit, describing how the methods work, clear description of the side effects, and making an appointment for the next visit were factors associated with client satisfaction. The result from multivariable logistic regression was that those clients from the rural residence were three times higher odds to be satisfied with the family planning service as compared to urban residence [AOR = 3.07; 95% CI: 1.10–8.62]. Clients whose educational level of college and above possessed 78% fewer odds of satisfaction with the family planning services as compared to those whose educational level was that of primary education [AOR = 0.22; 95% CI: 0.07–0.70]. Clients who waited for less than half an hour had eight times higher odds of being satisfied with services than those who waited for more than an hour [AOR = 7.80; 95% CI: 2.50–24.48]. Regarding privacy, clients whose privacy was ensured had seven times higher odds of

being satisfied with the family planning services as compared to those who were not treated with privacy [AOR = 7.16; 95% CI: 2.89–17.69]. Clients who received a clear description of the side effect of the methods had three times higher odds of being satisfied with the family planning services as compared to those who do not get a clear description of the side effects of the method [AOR = 3.14; 95% CI: 1.02–9.76]. Furthermore, clients who received services from facilities that had posters with messages on family planning were nine times more likely to be satisfied with family planning services as compared to those who received services from facilities that did not post posters with messages on family planning [AOR = 9.00; 95% CI: 3.27–24.75] (Table 4).

## Discussion

The magnitude of client satisfaction with family planning service was found to be 46% [95% CI: 41%–50.8%]. Moreover, residence, educational level, waiting time, maintaining privacy during the procedure, presence of posters with messages on family planning in the waiting room, and getting a clear description of the side-effects of the methods are all factors that are significantly associated with client satisfaction.

The magnitude of client satisfaction with family planning services was found to be 46%. This finding was consistent with studies conducted in Jigijiga (41.7%),<sup>21</sup> Wonji (45%)<sup>13</sup> eastern Ethiopia and Congo (42%).<sup>14</sup> This finding is lower than studies conducted in Bahirdar (66.1%),<sup>22</sup> Hossana (75.3%),<sup>10</sup> west Shawa (62.6%),<sup>7</sup> countrywide Ethiopia (58.5),<sup>11</sup> Tanzania (91%),<sup>12</sup> Mozambique (86%),<sup>9</sup> Bangladesh (75),<sup>23</sup> and Mexico (80%).<sup>24</sup> The probable reasons for the discrepancy among the studies might be due to socio-demographic differences among the different study populations.

The odds of reporting satisfaction is higher among clients from rural residences as compared to clients from urban residences. Literature suggests that the majority of rural dwellers have a low level of knowledge on family planning, and this could affect their level of expectation.<sup>25</sup> The odds of reporting satisfaction is lower among clients with the educational level of college and higher as compared to clients with a primary level of education. A higher educational level could mean that expectations could be higher because satisfaction can be affected by hope. This finding is a consistent study conducted in Jimma<sup>20</sup> and Wonji.<sup>13</sup>

The odds of reporting satisfaction were higher among clients who waited less than 30 minutes to receive care as

**Table 4** Factors Associated with Client Satisfaction on Family Planning Services. Tembaro, 2019

Variable	Category	Satisfaction		UOR (95% CI)	AOR (95% CI)
		Satisfied	Not-Satisfied		
Residence	Rural	108	142	0.75(0.50–1.12)	3.07(1.10–8.62)*
	Urban	79	78		
Age	18–24	56	63	0.66(0.35–1.26)	0.77(0.16–3.78)
	25–34	99	133	0.55(0.31–1.00)	0.68(0.16–2.90)
	35+	32	24		
Educational level	Primary	52	42		
	Secondary	39	64	0.83(0.48–1.42)	0.41(0.13–1.35)
	College and above	65	63	0.49(0.27–0.87)	0.22(0.07–0.70)*
Waiting time	<30 minutes	114	17	32.7(16.7–64)	7.80(2.48–24.48)**
	30 minute-1 hr	49	86	2.77(1.58–4.87)	2.57(0.92–7.15)
	>1 hr	24	117		
FP room localized in bold letters	Yes	95	45	4.01(2.59–6.20)	2.31(0.88–6.10)
	No	92	175		
Privacy ensured during the procedure	Yes	161	50	21(12.5–35.4)	7.16(2.89–17.69)**
	No	26	170		
Room have posters with key messages on FP	Yes	131	27	16.7(10–27.8)	9.00(3.27–24.75)**
	No	56	193		
History of side-effect of the method	Yes	93	152	0.43(0.29–0.65)	0.39(0.14–1.09)
	No	94	67		
Blood pressure measured during the visit	Yes	110	22	12.8(7.58–21.8)	2.89(0.83–10.07)
	No	77	198		
Weight measured during the visit	Yes	129	55	6.67(4.31–10.3)	1.87(0.62–5.66)
	No	58	165		
Discussed about the method with her husband	Yes	148	146	1.92(1.22–3.01)	0.43(0.14–1.30)
	No	39	74		
Described how method work	Yes	153	138	2.67(1.68–4.24)	0.85(0.29–2.26)
	No	34	82		
Demonstrate how to use the method	Yes	143	142	1.78(1.15–2.76)	0.96(0.34–2.66)
	No	44	78		
Get description about the side-effect	Yes	146	100	4.27(2.76–6.61)	3.14(1.02–9.76)*
	No	41	120		
Appointed to come before the next visit if complication occurs	Yes	160	128	4.26(2.61–6.93)	2.26(0.59–8.66)
	No	27	92		

Notes: \*Significant p-value <0.05, \*\*Significant p-value <0.0001.

compared with clients who had to wait more than one hour. This evidence is consistent with earlier studies done in Bahirdar,<sup>22</sup> Hossana,<sup>10</sup> Wonji,<sup>13</sup> Jimma,<sup>20</sup> a countrywide study in Ethiopia,<sup>11</sup> Nigeria,<sup>8</sup> and Bangladesh.<sup>23</sup> This finding suggests that shortening waiting times could increase client

satisfaction and improve the quality of family planning services. Additionally, according to the current study, there were higher odds of being satisfied in family planning services when the clients receive services from facilities with posters with key messages on family planning services in their

waiting room as compared to their counterparts. This could be due that when clients get key messages on the services they are going to receive, it can make them ready to receive the services. The finding also suggests that equipping the service provision room could bust the client satisfaction.

Regarding privacy, in the current study, clients whose privacy was maintained during family planning counseling and procedures were more likely to be satisfied with the family planning service than their counterparts. This is in agreement with a previous study conducted in Hosanna<sup>10</sup> and Bahirdar.<sup>22</sup> This evidence was also supported by the earlier study done in Bahirdar.<sup>22</sup> This implies facilities and providers need to play their role in maintaining privacy during service provision. The odds of reporting satisfaction is higher among clients who get a clear description of the side-effects of the method as compared to their counterparts. This evidence is consistent with study findings from Jigijiga<sup>21</sup> and a countrywide study in Ethiopia.<sup>11</sup> The finding implies the counseling on side effects could improve satisfaction and indirectly improve service quality.

## Conclusion and Recommendation

In this study, the overall client satisfaction with family planning service was found to be low in family planning service delivery points, which may have an impact on the family planning service quality and utilization. Moreover, shorter waiting times, maintaining privacy during counseling and procedure (especially important for rural residents), presence of posters with a message on family planning, and receiving a clear description of the side-effects of the method were factors positively associated with client satisfaction with family planning services. Higher educational level was a factor negatively associated with client satisfaction with family planning services. Therefore, there is a need for specific interventions, namely, shortening waiting time, maintaining privacy during counseling and procedures, equipping service provision rooms with necessary materials, and improving counseling, specifically on the side effects of the family planning methods.

## Abbreviations

CPR, Contraceptive Prevalence Rate; EDHS, Ethiopian Demographic and Health Survey; FP, Family Planning; IRB, Institutional Review Board; SNNPR, Southern Nations, Nationalities, and Peoples' Region.

## Data Sharing Statement

The datasets used and/or analyzed during the current study are available from the corresponding authors on reasonable request.

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## Author Contributions

DW and TL: Designed the study, collected, analyzed, and interpreted the data, and also drafted the manuscript. MM: Participated in the conceptualization of the research, design, analyses, and interpretation of results as well as drafting and review of the manuscript. All authors contributed to data analysis, drafting or revising the article, gave final approval of the version to be published, and agree to be accountable for all aspects of the work.

## Disclosure

The authors declare that they do not have any conflicts of interest regarding any aspect of the article.

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