



Research article

Client satisfaction on family planning, its myths, and misconceptions among women in Wolaita zone, Southern Ethiopia: A mixed methods design

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ABSTRACT

Background: Client satisfaction has been recognized as an essential component in evaluating healthcare quality. In Wolaita Zone, there was a lack of research on the myths, misconceptions, and elements linked to client satisfaction with family planning. This study aimed to assess the myths and misconceptions of family planning and the factors associated with women's satisfaction with family planning services.

Methods: We used a mixed methods study design (cross-sectional study design with a phenomenological design of the qualitative study). For the survey, 777 women were selected using multistage sampling, while purposive sampling was used to recruit in-depth interview participants. We used STATA version 15 and NVIVO version 12 software.

Results: Only two-thirds, 534 (68.7 %) [95 % CI = 65.4%–71 %] clients, were satisfied with the family planning service. Clients who attended secondary education and above (AOR = 1.84; 95 % CI: 1.07, 3.23) and (AOR = 3.04; 95 % CI: 1.37, 6.72) did not wait to get the service (AOR = 5.11; 95 % CI: 1.98, 13.20), attended family planning service in a facility with convenient working hours (AOR = 4.43; 95 % CI: 2.25–8.74) and with posters in the waiting room (AOR = 3.48; 95 % CI: 1.22–9.94), comfortable with the cleanliness of clinic (AOR = 2.08; 95 % CI: 1.20, 3.94), whose Privacy was maintained (AOR = 9.56; 95 % CI: 5.02, 18.20), who were given information on the possible side effects of a method (AOR = 2.77; 95 % CI: 1.75–4.39), and on how the method works (AOR = 2.57; 95 % CI: 1.49–4.43) had higher odds of satisfaction. Also, various myths and misconceptions, such as implants moving to other parts of the body, implants causing paralysis, affecting routine activities, “womb of the woman may not hold the baby”, etc., were identified in a qualitative study.

Conclusions: Client satisfaction in this study is low. An improved provider approach that suits on-site advocacy and the quality of counselling during the family planning service is needed. There is

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also a need to improve waiting time, working hours, cleanliness, awareness creation for both couples, and maintaining clients' privacy.

1. Background

Family planning (FP) is a decision made by individuals or couples about when to start having children, how many children to have, how to space them, or when to stop having children by using modern contraception and natural methods [1,2]. Globally, the proportion of women of reproductive age who have their need for family planning satisfied with modern contraceptive methods increased slightly, from 74 % in 2000 to 76 % in 2019. The proportion of contraceptive utilization in sub-Saharan Africa increased from 36 % to 55 % [3]. About 214 million women of reproductive age in developing countries who want to avoid pregnancy are not using a modern contraceptive method [4]. The total fertility rate in Ethiopia is 4.6 children per woman, and 22 % percent of currently married women have an unmet need for family planning [5].

In Ethiopia and the study area, contraceptive methods are free and made accessible to the household level through the health extension program. The Ethiopian Ministry of Health planned to increase the contraceptive prevalence rate to 66 % by 2015 [6], which was not achieved nationally and in the study area [5]. Ethiopia has committed to increasing the modern contraceptive prevalence rate to 55 % amongst married women by 2020, reducing the total fertility rate to 3.0, increasing the number of skilled providers delivering high-quality contraceptive services, and ensuring access for all populations [7]. Moreover, the 2023–2030 Family Planning Casted Implementation Plan (FP-CIP) is in line with the Health Sector Transformation Plan (HSTP-II) objective, which is to decrease the unmet need for FP from 22 % to 17 % by 2030 and raise the modern contraceptive prevalence rate (mCPR) among married women (MW) from 41 percent to 54 percent [8]. Moreover, by 2030, the ultimate goal is to raise the percentage of money collected for family planning goods from 48 % to 62 % [8].

Improvements in the quality of family planning services have been found to increase contraceptive acceptance and behaviour of users and ensure continuity of use of the methods [9]. Client satisfaction has been recognized as an essential component in evaluating healthcare quality. Client satisfaction has been recognized as necessary in evaluating healthcare quality [10,11]. Thus, its assessment is important to improve the health system's quality.

According to a study, a major factor in young women's decision not to utilize contraceptive methods was their perception of the negative effects of hormonal methods, including menstruation disruption, as well as their reputations, social status, partner relationships, sex, and pressure [12]. Myths and misconception is also a crucial hindering factor to contraceptive use, especially in developing countries [5,13,14]. Myths and misconceptions are usually unsubstantiated concerns around perceived side effects or future infertility [15–18] and the significant obstacles to adopting modern contraceptive behaviour [16].

Understanding myths and misconceptions and determining the level of client satisfaction was key for program improvement, policy and decision-makers, healthcare managers, and service providers to implement programs client-centred [10,19]. In Ethiopia, there is limited information on the myths, misconceptions, and client satisfaction with family planning services, particularly in southern Ethiopia. Thus, this study intended to explore myths and misconceptions and estimate the proportion of client satisfaction with family planning services among women of reproductive age in the Wolaita zone, southern Ethiopia. It also further aimed at identifying factors associated with client satisfaction.

2. Methods

2.1. Study setting

Wolaita Zone is one of the 14 Zones in South Nations and Nationalities and Peoples Region, Ethiopia. The Zone is located 380 km south of Addis Ababa, the capital city of Ethiopia. It is structured into 16 districts and six town administrations; the administrative centre of the Zone is Sodo Town. With an area of 4208.64 square kilometres, Wolaita has a population density of 356.67. Five public hospitals, two private hospitals, 68 health centres, and other private health facilities deliver family planning services to the population in the Zone.

2.2. Study design and period

We used a mixed methods study design (facility-based cross-sectional study and a phenomenological qualitative study design) from 02 January to February 02, 2021.

2.3. Population and sampling

The source populations for the quantitative study were all women aged 15–49 years and residing in the Wolaita zone. Women aged 15–49 years who use family planning services in the Wolaita Zone were included in the study. First-time and repeat users of family planning were included in the study, whereas women with disabilities that make interview/response difficult, such as hearing and speech disabilities, and women who are seriously ill were excluded. For the qualitative part, women participants were selected purposely based on their age 15–49, and previous history of utilizing family planning for more than one year. Moreover, we purposely

selected healthcare workers directly involved in family planning service provision for over two years.

For the quantitative study, we calculated a sample size of 777 with the following assumptions: 95 % confidence interval (CI), 5 % margin of error, 80 % power, an estimated client satisfaction proportion of 66.1 % [20], a design effect of 2, and 10 % non-response rate. There are 22 districts (16 districts in rural and 6 town administrations in urban) in the Wolaita Zone. Sixty-eight health centres and seven hospitals in all communities provide family planning services. The districts were stratified into rural and urban areas. Thirty percent of the districts (five from rural and two from urban town administrations) were selected randomly. From the selected communities and town administrations, 11 health centres and one hospital (one-third of the health facilities) were selected randomly. The sample size was allocated to each selected facility based on the probability proportional to the last three months' case flow of the facilities in the Zone. Finally, all eligible women were recruited consecutively until sub-samples for the facilities and the total sample size for the study were achieved. For the qualitative research, sixteen in-depth interviews were held until saturation of ideas was attained.

3. Variables

3.1. Outcome

Client satisfaction: Fifteen Likert scale questions were asked to assess client satisfaction in family planning services: strongly agree, agree, neutral, disagree, and strongly disagree. Then the responses neutral, disagree, and strongly disagree were merged into 'not satisfied', and strongly agree and agree into 'Satisfied'. Responses with the mean or above the mean were categorized as 'Satisfied', and those below the mean were categorized as 'Not satisfied'.

3.2. Exposure variables and covariates

Socio-demographic and socio-economic: age, residence, marital status, educational status, religion, occupation, ethnicity, family size, and wealth index.

Reproductive health characteristics: a history of unintended pregnancy, previous history of pregnancy, history of any side effect from any method, and shifting a method.

Service organization: Family planning room localization, convenient opening hours, convenient working hours, Privacy during examination, waiting time, cleanliness, staff respect, appointment, waiting room posters, and visual materials in the family planning room.

Providers' technical competence.

3.3. Data collection

A structured, interviewer-administered questionnaire was adopted from relevant articles and related literature for the quantitative study. In order to maintain the tool's internal consistency and determine the reliability of the test, we used Cronbach's Alpha (0.7 and higher). Data collectors and supervisors were recruited and trained on different questionnaire modules, participants' selection, and ethics for two days. The questionnaire was pretested on five % of the sample size in health facilities, which were later not included in the main study. Data were collected using Open Data Kit (ODK) software version 1.9.0. Close supervision was carried out during data collection, and the principal investigator and other research team members monitored the overall data quality.

The qualitative study used a semi-structured questionnaire with further probing questions. Data collection was done by the research team and research assistants (RA) with qualitative data collection experience and who had master's degrees in health science professions. We recorded all in-depth interviews in a private room using a digital recorder.

3.4. Trustworthiness

The researcher spent time in the field to maintain credibility and collected data from women and healthcare workers (HCWs). We provided the participants' perspectives, and we undertook peer debriefing after each of the interviews. Moreover, to ensure transferability, we provided thick descriptions to let other readers criticize whether the findings were transferable to their context. To ensure dependability, we let our analysis be grounded in the data. Confirmability was also ensured by applying the audit trail (the researcher maintained detailed procedural records of the research process).

3.5. Data management and analysis

Data collected using ODK software was exported to Stata version 15.0 for analyses. Normality was checked for all continuous variables. Hosmer-Lemeshow's good-of-fit and Receiver Operating Characteristics (ROC) tests were conducted to have confidence in the regression model. The ROC curve result showed outstanding discrimination with the area under the ROC curve = 0.9013. We used binary logistic regression to identify exposure variables associated with the outcome variable. Exposures and covariates with $p < 0.25$ during the bivariate analysis were included in multivariable analysis to increase the model's power. Multivariate analysis was carried out to control for potential confounders and identify independent predictors of the outcome variable using a stepwise regression method. Adjusted Odds Ratio (AOR) with a 95 % confidence interval (CI) was reported. The level of significance was set at $p < 0.05$.

For the qualitative study, we used thematic analysis, employing the following six steps. First, familiarisation; to become familiar with the data, all interviews were transcribed verbatim and translated into English. The transcripts were read again to obtain the concepts or codes of a particular sentence or paragraph. We also transcribed the audio, read the text, took our first notes, and looked through it. Secondly, coding: The coding was carried out by four research teams, including the principal investigator, while interviews were done with the research team and research assistants. The sentences, words, or phrases that best describe the chosen topic were highlighted in portions of the sentences. Each code describes the concept or emotion made clear in that passage of text. We continued to add sentences and phrases while highlighting all the ones that meet these codes. We maintained bracketing, which means the codes generated were not based on the subjective opinion of the coder. In step three, we generated themes. Then, codes were categorized into the emerged themes. NVIVO version 12 software was used to assist data organization and analysis. We now reviewed the codes we've produced, looked for commonalities, and begun developing themes. A single theme was typically created by combining many codes. In the fourth step, we reviewed the themes and compared them to the data set. Defining and naming topics was step five. Writing up is step six. We put up our data analysis at the end.

4. Results

4.1. Socio-demographic characteristics of respondents

We successfully interviewed 777 Family Planning users after they had received care in twelve [12] public health facilities and made a response rate of 100 %. The mean \pm SD age of respondents was 26.99743 \pm 4.758876 years. Three hundred and twenty-eight (42.2 %) of the study participants were within the age group of 24–29 years of age. Of the study participants, 278 (35.8 %) were urban residents, and 499 (64.2 %) were rural residents.

The majority, 740 (95.2 %) of the study participants were married by marital status. Of the total study participants, about 486 (62.6 %) were protestant, and 220 (28.3 %) were Orthodox Christians in religion. Three hundred-twenty (41.2 %) and 227 (29.2 %) were housewives and merchants in occupation. About 133 (17.1 %) of respondents had no formal education and only 56 (7.6 %) attended high school [9–12] (Table 1).

Table 1

Socio-Demographic characteristics of family planning service users in public health facilities of Wolaita Zone, Southern Ethiopia, January–February 2021 (n = 777).

Variables	Category	Number	Percentage
Age	≤24 years	212	27.3
	25–29 years	328	42.2
	30–34 years	170	21.9
	35+ years	67	8.6
Residence	Urban	278	35.8
	Rural	499	64.2
Marital status	Married	740	95.2
	Others	37	4.8
Educational status	No formal education	133	17.1
	Primary Education [1–8]	307	39.5
	Secondary Education [9–12]	59	7.6
	College and above (12+)	278	35.8
Religion	Catholic	47	6.0
	Muslim	10	1.3
	Orthodox	220	28.3
	Protestant	487	62.7
	Others ^a	13	1.7
Ethnicity	Wolaita	695	89.4
	Amhara	27	3.5
	Hadiya	15	1.9
	Gurage	13	1.7
	Others ^b	27	3.5
Occupation	Government employee	105	13.5
	Housewife	320	41.2
	Merchant	227	29.2
	Private employee	24	3.1
	Student	60	7.72
	Others ^c	41	5.3
Family size	≤4	390	50.2
	>4	387	49.8
Wealth Index	Poor	265	34.1
	Middle	277	35.7
	High	235	30.2

^a Apostolic.

^b Gamo, Oromo, Dawuro, Kambata

^c Daily labour, unemployed, NGO.

4.2. Reproductive health characteristics

Nearly all 751(96.8 %) study participants have been pregnant. Most 662(85.2 %) women would like to have children, and 558 (84.3 %) planned not to get pregnant earlier than three years. More than three-fourths of 278(35.8 %) of the study participants had faced a history of side effects of any family planning method they used, and 341(43.9 %) shifted to a method (Table 2).

4.3. Service organization-related characteristics

Of 777 women, 561(72.2 %) responded that the family planning room is localized with bold letters, and 716 (92.1 %) reported that the clinic's opening hours are convenient. Two-thirds (518, 66.7 %) of the women didn't wait to get family planning services. The working hours of the clinic were convenient for 715(92.0 %) of the study participants, and 644(82.9 %) had enough Privacy during a consultation. The majority, 660 (84.9 %), of the study participants are comfortable with the cleanliness of the clinic, and 742(95.5 %) conveyed that the clinic staff showed regard to them. Most 729 (93.8 %) of the participants were given an appointment card filled with the date of the next consultation. More than half, 452(58.2 %) of the participants, stated that the waiting room has no posters with a message on family planning, and 353(45.4 %) responded that the family planning room has no visual materials that depict messages on family planning (Table 3).

4.4. Clients' interviews on providers' technical competence

When asked whether a service provider explains how the method works, 451(58.04 %) clients said it is clearly explained. Providers demonstrated using the method in 460 (59.2 %) clients. In 491(63.2 %) clients, providers described possible side effects. The majority of clients, 655 (84.3 %) received an explanation of the possibility of changing the method if they were not happy with it. Three hundred (43.4 %) clients were informed that the chosen method does not protect against STIs and AIDS. More than half, 351(62.2 %) of the respondents were asked about problems with the method. The majority 197(83.47 %) of the providers understood the nature of the problem, and 199(84.3 %) suggested actions to be taken to resolve the problem (Table 4).

4.5. Prevalence of client satisfaction

Overall, 534 (68.7 %) [95%CI = 65.4%–71 %] clients were satisfied with the service they received. Six hundred eighty-nine (88.67 %) agreed on provider concern, 722 (92.92 %) agreed on trusting the provider, 703 (90.48 %) agreed on provider cooperativeness, 387 (49.81 %) agreed on a provider-given method of choice, and 519 (66.80 %) agreed on availability of an adequate provider (Table 5).

4.6. Factors associated with client satisfaction

Women who attended secondary education and above have a higher chance of being satisfied with family planning services (AOR = 1.84; 95 % CI: 1.07, 3.23) and (AOR = 3.04; 95 % CI: 1.37, 6.72), respectively. Women who did not wait to get the service were more likely to be satisfied than those who waited more than 30 min (AOR = 5.11; 95 % CI: 1.98, 13.20). Women who attended family planning service in a facility with posters in the waiting room and with convenient working hours had a higher chance of being satisfied (AOR = 3.48; 95 % CI: 1.22–9.94) and (AOR = 4.43; 95 % CI: 2.25–8.74). Clients who were comfortable with the cleanliness of the clinic had about two times higher chance of being satisfied (AOR = 2.08; 95 % CI: 1.20, 3.94). The odds of being satisfied were about ten times higher for clients whose Privacy was maintained and whose BP was measured by the provider (AOR = 9.56; 95 % CI: 5.02, 18.20) and (AOR = 2.10; 95 % CI: 1.22–3.62) respectively. Clients who were given information on the possible side effects of a method and on how the method works were about three times more likely to be satisfied with the family planning service (AOR = 2.77; 95 % CI: 1.75–4.39) and (AOR = 2.57; 95 % CI: 1.49–4.43) (Table 6).

Table 2

Reproductive health characteristics of family planning service users in public health facilities of Wolaita Zone, Southern Ethiopia, January–February 2021 (n = 777).

Variables (n = 777)	Classification	Number	Percent
Ever been pregnant	Yes	751	96.8
	No	25	3.2
Plan for more children	Yes	662	85.2
	No	115	14.8
Time of next pregnancy (n = 662)	<3 years	104	15.7
	≥3 years	558	84.3
History of side effects	Yes	278	35.8
	No	499	64.2
Shifted a method	Yes	341	43.9
	No	436	56.1

Table 3

Family planning service organization-related characteristics in public health facilities of Wolaita Zone, Southern Ethiopia, January–February 2021 (n = 777).

Variables (n = 777)	Classification	Number	Percent
FP room localized	Yes	561	72.2
Convenient opening hours	Yes	716	92.1
Waiting time	Didn't wait	518	66.7
	Waited <30 min	205	26.4
	Waited ≥30 min	54	6.9
Convenient working hours	Yes	715	92.0
Enough Privacy	Yes	644	82.9
Clean	Yes	660	84.9
Staffs respectful	Yes	742	95.5
Gave appointment	Yes	729	93.8
Posters in the waiting room	Yes	325	41.8
Visual materials in the family planning room	Yes	424	54.6

Table 4

Client interview on provider technical competence of family planning service users in public health facilities of Wolaita Zone, Southern Ethiopia, January–February 2021 (n = 777).

Variables (n = 777)	Classification	Number	Percent
Clearly explained how the method works	Yes	451	58.0
Demonstrated how to use the method	Yes	460	59.2
Described possible side effects	Yes	491	63.2
Explained what to do if problems happen before the next visit	Yes	508	65.4
Explained the possibility of changing the method	Yes	655	84.3
Stated where to go for follow-up	Yes	631	81.2
Provided information about complications	Yes	455	58.6
Got the contraceptive method of choice	Yes	655	84.3
Explained that the method does not protect against STIs	Yes	300	43.4
The provider asked about problems with the method	Yes	351	62.23
Provider understood the problem	Yes	197	83.47
Provider suggested solutions	Yes	199	84.32
Satisfied with the solutions	Yes	188	94.47

Table 5

Prevalence of client satisfaction on family planning service users in public health facilities of Wolaita Zone, Southern Ethiopia, January–February 2021 (n = 777).

Characteristics(n = 777)	Agree	Not Sure	Disagree
The service provider has shown concern	689 (88.67)	45 (5.79)	43(5.53)
Trust in the service provider	722 (92.92)	47 (6.05)	8(1.03)
Provider was cooperative	703 (90.48)	47 (6.05)	27(3.47)
Provider allowed to take part in decision-making	661 (85.07)	52(6.69)	64 (8.24)
The provider gave adequate information	632 (81.34)	45 (5.79)	100(12.87)
Provider explanation was clear and straightforward	640 (82.37)	56 (7.21)	81 (10.42)
Provider explained procedure	564 (72.59)	51 (6.56)	162 (20.85)
You were given a chance to ask any questions about family planning.	609 (78.38)	18(2.32)	150 (19.31)
You received the method of your choice.	387 (49.81)	369 (47.49)	21 (2.70)
Location of the family planning clinic	620 (79.79)	25 (3.22)	132(16.99)
The attractiveness of the clinic	548 (70.53)	63 (8.11)	166(21.36)
Availability of adequate family planning providers	519 (66.80)	183 (23.55)	75 (9.65)
Satisfaction composite score	534 (68.7 %); [95%CI = 65.4%–71 %]		No = 243(31.3 %)

4.7. Qualitative result

A total of 16 people participated in this qualitative study. Four were healthcare workers from these in-depth interviews, while the remaining 12 were women. This study identified three themes regarding myths and misconceptions. “Various reasons why community members don't use FP, Myths, and misconceptions of family planning, proposed enhancing factors in halting myths (Table 7).

Theme1. Various reasons why community members don't use FP.

Various factors prevented women in Wolaita from utilizing family planning services. Among them is the community belief that family planning should be given to women with better socio-economic status who can get enough food. Moreover, the rumour that family planning leads to weight loss if they don't consume additional food seems to play a role. They also associate it with illnesses and

Table 6

Factors associated with client satisfaction among family planning service users in public health facilities of Wolaita zone, Southern Ethiopia, January to February 2021 (n = 777).

Characteristics	Client Satisfaction with Family Planning		COR (95%CI)	AOR (95%CI)
	Yes (N; %)	No (N; %)		
Educational status				
No formal education	193(62.87)	114(37.13)	1.00	1.00()
Primary Education [1–8]	41(69.49)	18(30.51)	1.35(0.74–2.45)	1.47(0.54–4.0)
Secondary [9–12]	205(73.74)	73(26.26)	1.66(1.16–2.36)	1.86(1.07–3.23)*
College and above (12+)	95(71.43)	38(28.57)	1.48(0.95–2.30)	3.04(1.37–6.72)*
Waiting time				
Client waited above 30 min	17(31.48)	37(68.52)	1.00	1.00
Below 30 min	113(55.12)	92(44.88)	2.67(1.41–5.05)	2.34(0.91–5.99)
The Client did not wait	404(77.99)	114(22.01)	7.71(4.19–14.21)	5.11(1.98–13.20)*
Convenient working hours				
Yes	518(72.45)	197(27.55)	7.56(4.18–13.67)	3.48(1.22–9.94) *
No	16(25.81)	46(46)	1.00	1.00
Cleanliness of the clinic				
Yes	496(75.15)	164(24.85)	6.29(4.11–9.62)	2.08(1.20–3.94)*
No	38(32.48)	79(67.52)	1.00	1.00
Posters in the waiting room				
Yes	289(88.92)	36(11.08)	6.78(4.58–10.05)	4.43(2.25–8.74)*
No	245(54.20)	207(45.80)	1.00	1.00
Provider maintained Privacy				
Yes	513(79.66)	131(20.34)	20.89(12.62–34.57)	9.56(5.02–18.20)*
No	21(15.79)	112(84.21)	1.00	1.00
Provider measured BP				
Yes	206(78.63)	56(21.37)	2.10(1.48–2.96)	2.10(1.22–3.62)*
No	328(63.69)	187(36.31)	1.00	1.00
The provider described possible side effects.				
Yes	407(82.89)	84(17.11)	6.07(4.36–8.45)	2.77(1.75–4.39)*
No	127(44.41)	159(55.59)	1.00	1.00
The provider explained how the method works.				
Yes	376(83.37)	75(16.63)	5.33(3.83–7.41)	2.57(1.49–4.43)*
No	158(48.47)	168(51.53)	1.00	1.00

Table 7

Socio-demographic features of healthcare workers and clients in Wolaita Zone in Ethiopia.

Participant's code(IDI)	Age	Sex	Education	Role	Residence	Marital status
IDI#1	45	M	Health officer	MCH case team	Urban	Married
IDI#2	26	F	BSc Midwife	MCH case team coordinator	Urban	Single
IDI#3	35	F	BSc Nurse	MCH case team	Urban	Married
IDI#4	30	F	BSc Nurse	MCH case team	Urban	Married
IDI#5	25	F	10th complete	Client	Urban	Married
IDI#6	22	F	Diploma	Client	Urban	Married
IDI#7	26	F	BSc	Client	Urban	Married
IDI#8	20	F	4th complete	Client	Urban	Married
IDI#9	26	F	–	Client	Urban	Married
IDI#10	30	F	Diploma	Client	Urban	Married
IDI#11	30	F	4th complete	Client	Rural	Married
IDI#12	32	F	8th complete	Client	Rural	Married
IDI#13	35	F	College	Client	Rural	Married
IDI#14	30	F	10th complete	Client	Rural	Married
IDI#15	28	F	8th	Client	Rural	Married
IDI#16	38	F	10th complete	Client	Rural	Married

dizziness.

Moreover, participants reported that fear about their health, fear of losing sexual interest, medication adherence, husbands' refusal, health care workers' refusal to remove the method before the due date, violating clients informed choice, and forcing them to choose other methods were reasons preventing them from using family planning.

Regarding equipment, some women reported that the absence of equipment to remove implants also prevents them from using family planning.

One of the women said:

"The health professionals give you a choice in selecting a method, but they are not willing to remove it before the date of removal even though there are serious problems. Some women go to private clinics for removal" (IDI#10, female client, aged 30).

Another reason preventing women from using family planning was that they also complained about side effects, but the care providers refused to remove them. Such a lack of respect for the rights of clients prevents women from utilizing the service. Forgetting to take pills, and some women taking them only when they want to have sexual intercourse, was an additional barrier to contraceptive utilization.

Moreover, women fear using different methods. Listening to various case scenarios and a belief that the womb of women may not hold the baby at the beginning were other bottlenecks to utilizing family planning. They also believe it is not recommended to use contraceptives before giving birth to at least one baby.

One of the participants reported it as:

"It is believed that the women may not conceive if used before first birth. So, it is not recommended to use contraceptives before giving birth to at least one baby. It may lead to repeated abortions (IDI#10, female client, aged 30).

Some women also believe that family planning may lead to repeated abortions. Communities' lack of adequate information and inadequate counselling has reported a bottleneck for family planning utilization. However, women said there was no shortage of resources to use the service.

Also, a few mentioned that they don't want to expose their private parts except during labour. Moreover, some others also believe that it causes abortion. The community perceives health professionals' efforts as doing it for their own sake. However, women didn't mention issues related to the facility and availability of resources.

Health professionals also reported that there are times when providers do not disinfect contraceptive devices, and some women develop an infection because of this procedure. Moreover, they were unwilling to remove a method before the appointment. Furthermore, the providers are not willing to give depo, and they push them to use implants.

One of the clients reported it as:

"There are no problems ... the problem is that they are not willing to remove a method before the appointment date (IDI#9, female client, age 26)"

One of the clients reported it as:

"Most of the time, women complain that the health centre staff are unwilling to give depo, and they push us to use implants. So, women go to private facilities" (IDI#6, female client, aged 22)

Theme 2. Myths and misconceptions of family planning

4.8. Barriers and misconceptions to the use of pills, injectable and implants

Regarding injectable use, the belief in the community varies.

One of the participants said,

"It is believed that the womb of women may not hold the baby at the beginning, and thus injectable use will bring about infertility." (IDI#10, female client, aged 30)

Most participants have heard (some believed) that implants move to other parts of the body. They think it can move to other parts and cause pain or paralysis.

"The community believes that there is an invasive procedure for implant insertion, and they don't know that the implants stay in the upper arm. They report that implants do not stay in the upper arm but move to other places in the body." (IDI#3, female health worker, age 35)

The participants also believed that they could not work appropriately after implant insertion.

"Most of the time, daily labourers believe that they can't perform their work appropriately if they use Implanon." (IDI#2, female health worker, aged 26)

Another misconception associated with implants is that women who use implants feel hungry frequently and should get an extra meal.

"They (women) believe that they should use implants if their income is good enough to buy and consume a better diet" (IDI#3, female health worker, age 35)

4.9. Myths and misconceptions about IUCD

A widely accepted myth regarding IUCD is that it moves to other parts of the body. There is also a belief that it may come out of the uterus with menses.

"A woman in my town used IUCD, and she almost died because of it. She didn't afford to eat enough diet, and I have heard that because of that, IUCD changed its position and moved to another body part." (IDI#9, female client, age 26)"

Another common misconception is that IUCD causes discomfort during sexual intercourse. Most women reported that their husbands do not want them to use IUCD. *“Most of the time, women don’t use IUCD due to myths like ‘it creates discomfort during sexual intercourse.’ Women report that their husbands dislike IUCD because they believe it is inserted into the vagina rather than the uterus.”* (IDI#2, female health worker, aged 26).

Women also shared their concerns that since IUCD is a foreign body, it may harm the uterus.

A care provider also remarked that:

“There is a belief that since it (IUCD) is an external body, it will lead to other diseases in the uterus after a stay for a longer time. They (women) also report discomfort during sexual intercourse.” (IDI#1, male health worker, aged 45)

IUCD use was misconceived by the community as a cause of cancer, as mentioned by healthcare workers who said:

“Most of the time, women don’t use IUCD due to myths like ‘it causes cancer.” (IDI#2, female health worker, aged 26)

Respondents also reported that IUCD might cause abortion.

“The community says that IUCD is not good. They say that it causes abortion.” (IDI#15, female client, aged 28)

4.10. Myths about sterilization

There is a wide gap in knowledge about permanent methods in the community. Most women have not even heard about these methods. Since permanent methods are provided at hospitals, staff working in health centres disregard them during counselling.

One of the healthcare workers said:

“Since we don’t provide permanent methods, we don’t counsel on those methods.” (IDI#2, female health worker, aged 26)

“Due to lack of knowledge in the community about the permanent methods, it is not utilized well. The main reason for not using it is fear ... ” (IDI#3, female health worker, aged 35)

Theme 3. Proposed enhancing factors in halting myths

The primary intervention presented by the clients and healthcare workers to halt the myths and misconceptions associated with contraceptives is providing health education and counselling in a better way. Religious leaders are cited as the most accepted bodies of the community so that messages communicated through them have better acceptance in the community. It has also been mentioned that counselling on contraceptive methods should be provided in waiting rooms of other services in the health facility in addition to the family planning room.

“In some religious organizations, it is not recommended to use contraceptives. We would have achieved a better result if we had collaborated with religious organizations. The community listens to the religious leaders, and if we involve them, the community will listen to them. We should also involve women who are using contraceptives effectively.” (IDI#3, female health worker, aged 35).

“... the counselling given by the providers is also not good enough. Counselling is not given in other classes than in the family planning room. I believe that educating women during ANC, delivery, and postnatal care will help the women to decide to use a method.” (IDI#4, female health worker, aged 30)

Another intervention option mentioned is using long-acting and permanent contraceptive users as role models.

“By making the counseling more robust and utilizing LAPM-using women as role models.” (IDI#2, female health worker, aged 26)

It has been mentioned that husbands are the agents in choosing contraceptives. If they disagree, women will not use contraceptives.

“Women take those methods only when their husbands agree with them. If he is not willing, they will not take.” (IDI#5, female client, aged 25)

5. Discussion

This study documented that about 68.7 %; [95 % CI = 65.4%–71 %] of family planning service clients in public health facilities of Wolaita Zone were satisfied with the service provided to them. We observed a lesser prevalence in the current study as compared to other studies in Mexico (81.3 %), Jordan (83 %), and Senegal (84 %) [21–23]. It was also lower than similar study findings from Ethiopia (75.3 %), Mozambique (86 %), and Tanzania (91 %) [24–26]. The main possible reason for the variation was that most of the above studies measured satisfaction using a single question, a subjective measure. In contrast, we used a composite score to measure satisfaction. Moreover, our qualitative study identified various myths and misconceptions regarding family planning, which reduce client satisfaction. Similarly, our qualitative finding shows that fear about their health, fear of losing sexual interest, medication adherence, husbands’ refusal, and health care workers’ refusal to remove the method before the due date were some of the reasons that might decrease client family planning satisfaction. Conversely, we found a higher prevalence of satisfaction compared to other studies in Eastern (41.7 %) and Central Ethiopia (62.6 %) [27,28]. This could be due to the lower quality of service provided. A comparable

prevalence was reported in a study in northwest Ethiopia (66.1 %) [20].

Like other study findings, a higher educational status was documented to positively predict satisfaction with family planning services. The current result agrees with a study in south Ethiopia, which might be homogeneous in many aspects of our settings, and a study from Iran [24,29]. The possible reason could be that women with higher educational status have a higher level of knowledge about contraceptives, leading to better satisfaction. Another possible explanation is that service providers are more likely to give detailed information on contraceptives to educated women than the uneducated, hoping they will understand what they have been told.

In consistency with similar studies from Mexico, Senegal, and Ethiopia, and Kenya clients who didn't wait to get family planning services had much higher odds of being satisfied as compared to those who had waited for half an hour or more [20,21,23,24,27,30]. The facilities' low client flow and better service delivery process are the most possible reasons. It might also be due to the long working hours of the family planning clinics, with staff covering 24 h and seven days a week.

In favour of our findings, studies from south and northwest Ethiopia revealed an increased chance of client satisfaction for family planning clinics with convenient working hours [20,24]. This might be because having convenient working hours will enable women to utilize the service at any time that is comfortable for them, especially the employed women who can utilize it outside their official working hours.

Clients who were comfortable with the cleanliness of the clinic had higher odds of satisfaction with the family planning service. Similarly, a study conducted in Dosso Region, Niger, showed that the cleanliness of the clinic was one of the important drivers of the dimensions contributing to client satisfaction [31].

. Moreover, the current finding agrees with similar studies from Ethiopia and elsewhere [24,32].

In this study, clients whose Privacy was ensured were more likely to be satisfied with the family planning service. This finding is consistent with other similar studies from Hossana (south Ethiopia), Bahir Dar (northwest Ethiopia), and Kenya [20,24,30]. This might imply that family planning is a personal subject and clients require Privacy to discuss their problems openly. They will feel comfortable when their Privacy is secured. Lack of privacy can make it difficult for clients to actively utilize a family planning method.

Clients who had been given explanations about the side effects of family planning methods and how to use the method had much higher odds of satisfaction. This finding agrees with other studies in Southern and Eastern Ethiopia [24,27]. These might be due to the provision of proper information and providers' good counselling skills boosted satisfaction. Different from this finding, a study from Senegal reported that clients who had been told about side effects were less likely to be satisfied [23]. The possible reason for this difference might be the lack of effective counselling, which discouraged clients as they were told of the problems they may face using the method.

Clients whose blood pressure has been measured and facilities with posters in the waiting room had a higher chance of satisfaction. These findings have not been reported in other studies, and we recommend further studies to evaluate the association between clients' satisfaction with family planning services and the measurement of blood pressure and having posters in the clinic's waiting area.

The qualitative study explored the myths and misconceptions that hinder contraceptive utilization. Even though most respondents have good knowledge about modern contraceptive methods, myths and misconceptions are widespread in the study area.

Side effects and other health-related concerns like dizziness, headache, decrease in sexual desire, abortion, and temporary infertility were mentioned by the participants as barriers to contraceptive utilization. Studies conducted in Kenya, India and Nepal reported similar findings [28,30,32]. Change in body weight was also mentioned as another side effect of contraceptives. Both weight gain and weight loss were reported using different methods. Similarly, a study from Turkey reported weight gain with the use of OCP, and weight loss was reported with IUCD use in India [29,30].

Contrary to these, another study conducted in Ghana reported that women misinterpret weight change that occurs naturally in life with contraceptive use [33]. Similarly, the use of a hormonal method (implanon) may lead to a broad variability in weight changes. For instance, a study conducted in JOS, Nigeria, on Implanon showed that its use may increase the average 2.5 kg rise in body weight during the investigation. There was, however, a wide range in each person's change in body weight, with 38.6 % either gaining weight or not changing at all. Sixteen percent of the women (61.4 %) saw a net weight gain while using Implanon(34). Our study participants reported that the use of IUCD is associated with cancer. This finding is supported by studies from Southern Ethiopia and Ghana [24,27].

The current study identified various reasons that hinder women from family planning service utilization like a belief that family planning should be given to women with better socio-economic status who can get enough food, rumours, fear about their health, fear of losing sexual interest, medication adherence, husbands' refusal, health care workers' refusal to remove the method before the due date, violating clients informed choice, and forcing them to choose other methods. Similarly, method-related health concerns or side effects were found to be the second most common reason for contraceptive discontinuation and non-use in Ethiopia [18]. In addition to reducing the utilization of contraceptives, the myths and misconceptions might even decrease satisfaction with service quality.

6. Study limitations

In the cross-sectional study, this study couldn't establish the temporal relationship between the cause and effect. Another limitation is that since the interview was conducted with clients who visited the facility, we couldn't capture the perspective of most users at the lower-level facility (the health post level). Moreover, another limitation was that we didn't look at the supply side to understand some of the reasons for the low level of satisfaction. However, we used mixed methods design to understand misconceptions, and all other barriers hindering the utilization of family planning services can be mentioned as a strength of this research.

7. Conclusions

This study used quantitative and qualitative methods to investigate client satisfaction, their feelings, and perception of myths and misconceptions within a community as a strength. Accordingly, this study identified low client satisfaction with family planning; only two-thirds were satisfied with the service delivered. Myths and misconceptions about family planning in Wolaita Zone also spread widely in the community. Higher levels of educational status of clients, ensuring privacy, having adequate information, measuring blood pressure, making working hours convenient for clients, not waiting for service, and cleanliness of the clinic were factors positively associated with client satisfaction and family planning. Moreover, the analysis of the qualitative study identified three themes regarding myths and misconceptions. “Various reasons why community members don’t use family planning, myths, and misconceptions of family planning, and proposed enhancing factors in halting myths.

Though it might not be possible to bring all childbearing or potential women with less school education, alternative opportunities for empowering women could be done. Client privacy should also be maintained during the consultation. Adequate information should be provided to clients on different aspects of family planning, particularly how to use the method and side effects. Organizational aspects like waiting time, working hours, and cleanliness should be improved. Besides, we recommend further studies on the association of blood pressure measurement and having posters in the clinic’s waiting area to clients’ satisfaction. Involving male and religious leaders in family planning programs, enhancing awareness among both husband and wife, improving the provider approach that suits on-site advocacy, and improving the quality of counselling during the family planning service provision were the critical interventions to minimize the myths and misconceptions.

Ethics approval and consent to participate

This study was reviewed and approved by the Institutional Review Board of Wolaita Sodo University, Ethiopia, with the approval number REF. NO: 885/884/12, dated 18 Nov 2019. We also got permission letters from the Wolaita Zone Health Department, the town health office, and the hospital administrators. We obtained informed verbal consent from individual clients. The study participants were asked to participate voluntarily after the purpose of the study had been explained. The right of the participants to withdraw from the study was ensured. Anonymous data was taken, and participants’ information was kept confidential.

Availability of data and materials

The data sets used to support the findings of this investigation have been uploaded and submitted to this journal as additional information. In addition, the data are available upon request from the corresponding author.

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CRedit authorship contribution statement

Mengistu Meskele: Writing – review & editing, Writing – original draft, Validation, Supervision, Software, Project administration, Methodology, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Samson Kastro Dake:** Writing – review & editing, Software, Methodology, Formal analysis, Data curation, Conceptualization. **Fekadu Elias Sadamo:** Writing – review & editing, Writing – original draft, Visualization, Resources, Project administration, Methodology, Funding acquisition, Formal analysis, Data curation. **Mihiretu Alemayehu:** Software, Methodology, Investigation, Formal analysis, Data curation. **Addisalem Kebede:** Validation, Supervision, Resources, Methodology, Funding acquisition, Data curation, Conceptualization. **Wokil Wolde:** Supervision, Methodology, Formal analysis. **Zinabu Abraham:** Visualization, Formal analysis, Data curation. **Aklilu Samuel Asale:** Methodology, Investigation, Formal analysis. **Girma Taye:** Writing – review & editing, Supervision, Project administration, Methodology, Funding acquisition, Formal analysis, Data curation.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Mengistu Meskele reports financial support was provided by EngenderHealth Inc. If there are other authors, they declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Acronyms and Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
AOR	Adjusted Odds Ratio
AVSC	Association of Volunteers without Border
CI	Confidence Interval
COR	Crude Odds Ratio
FP	
Family Planning	
HC	Health Center
HIV	Human Immune-deficiency Virus
IUD	Intrauterine Device
NGO	Non-Governmental Organisation
ODK	Open Data Kit
OPC	Oral Contraceptive Pills
RA	Research Assistant
ROC	Receiver Operator Characteristics
SRS	Simple Random Sampling
STI	Sexually transmitted Infections
WSUTRH	Wolaita Sodo University Teaching and Referral Hospital

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