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ORIGINAL ARTICLE

Assessment of client satisfaction with family planning services and influencing factor in Southern Ethiopia: a community-based cross-sectional study

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Abstract

Aim Family planning (FP) is a major contributing factor to child survival and reducing maternal mortality. In developing countries, especially those in sub-Saharan Africa, the lowest contraception uptake is observed due to the existence of a variety of barriers. In Ethiopia, despite the presence of low level FP, there is limited information on the degree of client satisfaction with FP services provided. Therefore, this study aimed to assess the level of client satisfaction with FP services and its associated factors among FP users in Halaba Zone, Halaba Town.

Subject and methods A facility-based cross-sectional study was conducted from April 30 to June 30, 2020 in public health facilities in Halaba Town. Randomly selected FP users in the reproductive age group (15–49) in selected health facilities were the study population. Data were collected using a pre-tested structured questionnaire, then entered into EpiData-3.1 and analysed using SPSS 20 software. A binary logistic regression model was fitted to identify predictors of FP service satisfaction. A P value < 0.05 was considered statistically significant.

Results The prevalence of client satisfaction with FP services was 71.2%. Educational status (secondary school [adjusted odds ratio (AOR) = 3.60, 95% confidence interval (CI): 2.78–10.30], and no formal education (AOR = 0.02, 95% CI: 0.01– 0.08)), side-effects explained (AOR = 5.00, 95% CI: 2.45–13.6), visual aids used (AOR = 3.00, 95% CI: 1.80–10.67), privacy ensured (AOR = 3.70, 95% CI: 2.13–12.54), chance to ask about any concerns (AOR = 4.40, 95% CI: 2.00– 10.76), new ANC visit (AOR = 0.12, 95% CI: 0.04–0.34), and distance to health facility (AOR = 4.00, 95% CI: 2.66–14.76) were significantly associated with clients' FP service satisfaction.

Conclusions Around one-third of clients were dissatisfied with FP services. Therefore, improving female educational status, affording opportunities to ask about any concerns, maintaining privacy, explaining side-effects, and using visual aids during service delivery should be encouraged to enhance client satisfaction with FP services.

Keywords Satisfaction · Family planning services · Clients · Ethiopia

Background

Service satisfaction is the best response for measuring the discrepancy between previous expectations and perceived performance after consuming services. The formation of this general attitude is based on a client's experience after getting a service, and reflects how much the client liked/disliked the service after receiving it. The overall satisfaction with services provided is one of the best predictors of client willingness to continue using the services. Several studies have consistently indicated a great positive link between improving client satisfaction with family planning (FP) services and improved FP service utilization (Frost and Darroch 2008; Gold et al. 2017; Tessema et al. 2017; Zarei et al. 2014).

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A woman's ability to space and/or limit her pregnancies has a direct impact on her health and well-being, as well as on the outcome of each pregnancy. Family planning is a major contributing factor to child survival and reducing maternal mortality (Ahmed et al. 2012; Central Statistical Agency (CSA) and ICF International 2016; Moreland et al. 2010; World Health Organization (WHO) 2005). An estimated 550,000 women worldwide die every year through unsafely induced abortion, pregnancy, and childbirth. At least 35% of them died due to pregnancies that would have been avoided had contraceptives been available (Darroch et al. 2011; Singh and Darroch 2012). In 2015, the WHO estimated that 303,000 women were dying globally from pregnancy-related causes and complications, of which 66% occurred in sub-Saharan Africa (WHO 2015). In Ethiopia, maternal mortality rate (MMR) was estimated to be more than twice the global average level, which is 412 maternal deaths per 100,000 live births (EDHS 2016).

Although universal access to FP can reduce maternal deaths by 40%, infant mortality by 10%, and childhood mortality by 21%, progress in ensuring universal access to FP for women in developing countries has been slow (Ahmed et al. 2012; Ethiopia Demographic and Health Survey 2016; Moreland et al. 2010; Sedgh et al. 2016; WHO 2005). Globally, in 2012, about 222 million women in developing countries who desired safe, effective FP lacked access to such services (Darroch et al. 2011; Singh and Darroch 2012). In 2015, 64% of married or in-union women of reproductive age were using some form of contraception in the world, but the percentage was much lower in Africa (33%) (United Nations Department of Economic and Social Affairs Population Division 2015).

Even though FP positively contributes to the reduction of maternal deaths, contraceptive prevalence rates (CPRs) are low, and the unmet need for FP services is also high in Ethiopia, including the region where our study area is located. Findings from the EDHS 2016 indicated a contraceptive prevalence rate of 36%, with 22% of married women having an unmet need for FP. In addition to this, more than one-third (37%) of Ethiopian women who commence contraception discontinue use within 12 months. In Southern Ethiopia, where the study area was located, the use of modern contraceptives for currently married women was 40% and it was reported that married women aged 15–49 with an unmet need was 21%, indicating that a very large number of respondents' demands were unsatisfied in the region where the study area is located (EDHS 2016).

In sub-Saharan African countries including Ethiopia, the lowest rate of contraception and highest level of unmet need were observed. This was due to the existence of a variety of barriers, but mainly client dissatisfaction with the FP services provided (Aliyu 2018).

Outcome measures are important in order to identify the barriers affecting universal access to FP services. In the provision of FP services, outcome is usually related to client satisfaction. Client satisfaction has been found to be a key determinant of uptake and continued use of FP services (Hameed et al. 2015). Measuring client satisfaction not only evaluates certain aspects of quality of care, but also reveals better prospects for sustainability in terms of recruiting new users and maintaining those clients who are already in the service (Hameed et al. 2015; Hutchinson et al. 2011). Client satisfaction also provides important information on the provider's success in meeting expectations of what is more relevant to the client, and constitutes an important tool to evaluate administrative and planning processes in health care (Slater et al. 2018; Tessema et al. 2016). In order to improve FP service utilization, it is better to assess levels of client satisfaction with the service delivered and its determinants (Slater et al. 2018; Tafese et al. 2013).

Although a number of studies on this topic exist, there is limited information available on the level of client satisfaction with FP services in Ethiopia, including in the region where our study area was located. Hence, we aimed to assess the level of client satisfaction and its influencing factors among FP users at public health facilities in Halaba Town, Southern Ethiopia. The insights gained can be used as input for improving FP service delivery in the southern part of Ethiopia and particularly in the study area.

Methods

Study setting and design

A facility-based cross-sectional study was conducted in Halaba Town, Southern Ethiopia, from April 30 to June 30, 2020. Halaba Town is located in the southern part of Ethiopia, 265 km southwest of Addis Ababa, the capital city. The total population of Halaba Town was 353,486, of whom 180,028 were expected to be females. One general hospital and one health center are available in the town. The catchment population of Halaba General Hospital is 76,427 and of Halaba Kulito Health Center 18,619.

Study population and sample size determination

All females in the reproductive age group (15–49 years) in Halaba Town were the source population, whereas all randomly selected female FP users in the reproductive age group (15–49) constituted the study population. All FP users in the reproductive age group who agreed to an exit interview at the time of data collection were eligible for the study, whereas those FP users who were unable to communicate, due to illness for example, were excluded.

The sample size of the study was determined using Epi-Info 7.1 statistical software, taking the proportion of client satisfaction among new visitors to be 67% (Argago et al. 2015) to arrive at a maximum sample size with a 95% CI, 80% power, and 5% margin of error. With an anticipated 5% non-response rate, the final sample size was 538.

Sampling procedures

A systematic random sampling technique was used. The number of women to be selected and interviewed in each facility was assigned proportionally, based on the numbers of women who had visited in the past 2 months. The sampling interval was determined by dividing the total number of women in the past 2 months (1056) by the required sample size (538), which gave a sampling interval of two. The initial study subject was randomly selected by the lottery method. Every second participant was then selected as a study subject until the total sample size was reached. In cases where a randomly selected client did not fulfill the inclusion criteria, the next client was interviewed.

Data collection procedures

Data were collected by exit interviews using an interviewer-administered structured questionnaire which was initially prepared in English and translated to the local languages Amharic and Halaba by an expert who had good mastery of all three languages. The Amharic and Halaba language versions were back-translated into English by another expert to ensure consistency. The questionnaire was pre-tested on 54 women in the reproductive age group, constituting 10% of the final sample size, before it was administered to all study participants in the local language. The pre-test was conducted in Shone Town, where the cultural and socio-economic characteristics were similar to the target population. The potential for information contamination and inclusion of the pre-tested participants in the final study was minimal, since the two locations are situated far apart. Based on the pre-test, some modifications were made to the questionnaire before final data collection.

Two data collectors (nursing graduates) and two supervisors (public health professionals) were recruited and given 1-day training by the principal investigator regarding the objectives of the study, the data collection procedures, and confidentiality. The principal investigator coordinated the overall process of data collection and frequently checked it for consistency together with the supervisors. Moreover, the collected data were checked daily by the principal investigator to ensure their completeness and clarity.

The exit interview was designed to collect information on clients' socio-demographic and reproductive characteristics, facility-related factors, and client satisfaction with the services provided by different aspects of FP services.

Client satisfaction questionnaires were presented using a 5-point Likert scale (1-very dissatisfied, 2-dissatisfied, 3-neutral, 4-satisfied, and 5-very satisfied). Clients were considered satisfied if their score was more than or equal to {(total highest score−total lowest score)/2} + total lowest score and dissatisfied if less than {(total highest score−total lowest score)/2} + total lowest score obtained from the demarcation threshold formula (Argago et al. 2015; Dulla et al. 2019). In our research, the highest total score was 85, and the lowest total score was 67. Hence, (85−67/2) + 67 = 76. Therefore, respondents who scored more than or equal to 76 were considered satisfied, and those who scored less than 76 were considered dissatisfied.

Data processing and analysis

After data collection, questionnaires were checked for completeness and consistency. The data template format was prepared and double-entry validation was carried out in EpiData version 3.1. Data were then exported and analyzed using SPSS version 20. Descriptive statistics including frequencies, means, and standard deviations were computed to summarize the variables. Categorical variables were stated as a number (percentage) whereas the continuous data were given as means ± standard deviation (SD). Bivariate analysis was applied to assess associations between independent variables and the outcome variable. Crude and adjusted ORs, together with the corresponding 95% CIs, were computed. Finally, efforts were made to assess whether the necessary assumptions for the application of multivariable logistic regression had been fulfilled.

Multicolinearity was checked using a variance inflation factor (VIF), and all variables were found to have a VIF of less than three. Model fitting was also checked with Hosmer–Lemeshow test methods. Independent variables with a P value < 0.25 in bivariate analysis were candidates for multivariable logistic regressions and entered in the final model. With a dummy dependent variable, a binary logistic regression model was fitted to identify predictors of FP service satisfaction. A P value < 0.05 was considered statistically significant in this study.

Results

Socio-demographic characteristics of the study participants

A total of 538 mothers were invited to take part in the study, with 520 of them volunteering to participate, making the response rate 96.65%. Of all respondents, 353 (67.9%) resided in an urban area. The mean age [± standard deviation (SD)] of the respondents was 33.8 (± 6.5) years, with a maximum of 43

and a minimum of 19 years. The mean (± SD) number of family size for respondents was six (± 2), with a maximum of ten and a minimum of three family members (Table 1).

Facility related factors and client experience

Three hundred and twenty-five (62.5%) respondents were from Halaba Health Center and the remaining 195 (37.5%) were from Halaba General Hospital. Both facilities reported that blood pressure apparatus, weight measuring scales, lights in the FP room, gloves, hand washing facilities in the FP room, waste disposal boxes, speculums, and FP guidelines were available. Both facilities were providing FP services for 5 days from Monday to Friday in the week and 8 hours per day. More than half (52.9%) of respondents could visit the health facility with less than 30 minutes of travel time.

Provider–client interaction

The majority of participants 502 (96.5%) reported that their health care provider gave adequate information regarding FP services. Only a few — 68 (13.1%) — reported that the provider had not explained how the procedure (method of delivering the services) works. Regarding privacy and confidentiality, 335 (64.4%) and 358 (68.8%) respectively reported that their visual privacy and confidentiality respectively had been ensured by providers (Table 2).

Prevalence of FP service satisfaction

The majority of respondents 388 (74.6%) were satisfied with the facility's working hours and times, whereas the remaining 132 (25.4%) were not. Also, 454 (87.3%) were satisfied with the facility's cleanliness, whereas 66 (12.7%) were not (Table 3). The overall client satisfaction with FP services was 71.2% (95% CI = 67.3–75.1).

Factors associated with client satisfaction with FP services

For further analysis, all independent covariates which fulfilled the minimum requirement for multivariable logistic regression, namely a significant association at $P < 0.25$, were entered for multiple logistic regression modeling. Accordingly, age, family size, monthly income, age at first pregnancy, age at last pregnancy, duration of marriage, type of visit, educational status of the respondent, occupational status of the respondent, husband's educational status, husband's occupation, history of abortion, satisfaction with the adequacy of information given, methods demonstrated, side-effects explained, asked about concerns, privacy ensured, confidentiality maintained, visual aids used, and distance from health facility were candidate variables for multiple logistic regression analysis. Backward stepwise regression was employed to

Table 1 Socio-demographic characteristics of respondents in Halaba Town, Southern Ethiopia, 2020 ($n = 520$)

Variable	Category	Frequency	Percentage (%)
Age (years)	≤ 24	85	16.3
	25–34	130	25.0
	≥ 35	305	58.7
Educational status	No formal education	191	36.7
	Primary school	121	23.3
	Secondary school	96	18.5
	Higher than secondary school	112	21.5
Husband's education	No formal education	109	21.0
	Primary school	144	27.7
	Secondary school	138	26.5
	Higher than secondary school	129	24.8
Occupational status	Government employee	112	21.5
	Trader	33	6.3
	Housewife	375	72.1
Husband's occupation	Government employee	181	34.8
	Trader	162	31.2
	Farmer	133	25.6
	Daily laborer	44	8.5
Monthly income (ETB)	> 2500	324	62.3
	≤ 2500	196	37.7

ETB: Ethiopian birr

Table 2 Provider–client interaction during family planning services in Halaba Town, Southern Ethiopia, 2020 ($n = 520$)

Variables	Yes (%)	No (%)
Got information needed	502 (96.5%)	18 (3.5%)
Easily understood FP provider	473 (91.0%)	47 (9.0%)
Informed about possible method changes	176 (33.8%)	344 (66.2%)
Provider demonstrated methods	186 (35.8%)	334 (64.2%)
Provider explained possible side effects	139 (26.7%)	381 (73.3%)
Provider gave a chance to ask questions after providing the services	156 (30%)	364 (70.0%)
Provider explained how method works	68 (13.1%)	452 (86.9%)
Visual privacy assured	335 (64.4%)	185 (35.6%)
Confidentiality assured	358 (68.8%)	162 (31.2%)
Visual aids used during consultation	67 (12.9%)	453 (87.1%)
Give opportunity for two-way discussion on the concerns idea during service provision	180 (34.6%)	340 (65.4%)

controls the problem of multicollinearity. Multiple logistic regression analysis revealed seven independent predictors of FP service satisfaction for women in Halaba Town.

Among socio-demographic factors, educational status of participants [secondary school (AOR = 3.60, 95% CI: 2.78–10.30), and no formal education (AOR = 0.02, 95% CI: 0.01–0.08)] were significantly associated with FP service satisfaction compared with respondents with higher than secondary school level. However, there was no statistically significant difference in the level of FP service

Table 3 Level of satisfaction with different components of FP services in Halaba Town, Southern Ethiopia, 2020 ($n = 520$)

Variables	Strongly dissatisfied *n* (%)	Dissatisfied *n* (%)	Neutral *n* (%)	Satisfied *n* (%)	Strongly satisfied *n* (%)
Provider was respectful	0	36 (6.9)	133 (25.6)	318 (61.2)	33 (6.3)
Other staff were respectful	0	19 (3.7)	232 (44.6)	236 (45.4)	33 (6.3)
Adequacy of information given	0	12 (2.3)	119 (22.9)	356 (68.5)	33 (6.3)
Provider maintained privacy	0	0	87 (16.7)	400 (76.9)	33 (6.3)
Provider competency/skills	0	20 (3.8)	73 (14.0)	393 (75.6)	34 (6.5)
Consultation duration	0	30 (5.8)	111 (21.3)	346 (66.5)	33 (6.3)
Confidentiality was maintained	0	31 (6.0)	135 (26.0)	314 (60.4)	40 (7.7)
Convenience of working days	0	31 (6.0)	156 (30.0)	333 (64.0)	0
Availability of FP methods	0	26 (5.0)	101 (19.4)	393 (75.6)	0
Waiting time to get the service	9 (1.7)	4 (0.8)	182 (35.0)	315 (60.6)	10 (1.9)
Distance of facility site	17 (3.3)	118 (22.7)	110 (21.2)	268 (51.5)	7 (1.3)
Facility cleanliness	8 (1.5)	3 (0.6)	179 (34.4)	317 (61.0)	13 (2.5)
Working hours of service	9 (1.7)	36 (6.9)	82 (15.8)	393 (75.6)	0
Provide services in comfortable ways	5 (1.0)	21 (4.0)	235 (45.2)	253 (48.7)	6 (1.2)
Provider explained procedures	2 (0.4)	46 (8.8)	284 (54.6)	188 (36.2)	0
Trust provider	0	3 (0.6)	266 (51.2)	251 (48.3)	0
Provider was cooperative	11 (2.1)	17 (3.3)	207 (39.8)	280 (53.8)	5 (1.0)
Positive communication held	8 (1.5)	17 (3.3)	290 (55.8)	198 (38.1)	7 (1.3)
Convenience of facility location	16 (3.1)	48 (9.2)	340 (65.4)	116 (22.3)	0
Attractiveness of facility	3 (0.6)	17 (3.3)	281 (54.0)	219 (42.1)	0
Waiting room had enough seating	5 (1.0)	17 (3.3)	32 (6.2)	458 (88.1)	8 (1.5)

FP: family planning

satisfaction for those with primary education compared to the reference group.

With regard to provider–client interactions, respondents for whom the provider let clients ask about any concerns (AOR = 4.40, 95% CI: 2.00–10.76), those who were given information about contraceptive side-effects (AOR = 5.00, 95% CI: 2.45–13.60), those whose privacy was ensured (AOR = 3.70, 95% CI: 2.13–12.54), and for whom visual aids were used during service provision (AOR = 3.00, 95% CI: 1.80–10.67) were significantly more likely to be satisfied with FP services.

The findings of this research indicated that new FP users in Halaba Town were less likely to be satisfied with FP services (AOR = 0.12, 95% CI: 0.04–0.34) than repeat FP users. The other predictor of client satisfaction was distance/time to reach the health facility. Respondents were more likely to be satisfied with FP services when distance/time to reach the health facility was ≤ 30 min (AOR = 4.00, 95% CI: 2.66–14.76) compared to when distance/time to reach to the health facility was > 30 min (Table 4).

Discussion

This study assessed the level of service satisfaction with FP services and influencing factors on service satisfaction in women of Halaba Town by incorporating socio-demographic factors, facility-related factors, provider–client interaction, and respondents' reproductive health-related factors.

The overall proportion of mothers who were satisfied with FP services in this study was 71.2%. This was similar to that of a study done in Kucha District, Southern Ethiopia, which revealed about 68.4% of the clients were satisfied with the service they received (Dulla et al. 2019), and a study from Hosanna, Southern Ethiopia, which reported that 75% of clients were satisfied with FP services (Argago et al. 2015). This may be due to similarities in health service quality, and the socio-demographic characteristics of the respondents. Also, an almost identical finding was reported from Nairobi, Kenya which indicated an overall participant satisfaction of 74.3% with delivered health services (Mbeki et al. 2017). This might also be due to comparable health care

Table 4 Multivariable logistic regression analysis of factors associated with FP service satisfaction, Halaba Town, Southern Ethiopia, 2020 ($n = 520$)

Variables	Satisfaction level		COR (95% CI)	AOR (95% CI)
	Dissatisfied *n* (%)	Satisfied *n* (%)		
Respondent's education				
No formal education	122 (23.5)	69 (13.3)	0.12 (0.07–0.22)*	0.02 (0.01–0.08)*
Primary school	7 (1.3)	114 (21.9)	3.54 (0.99–8.74)	1.92 (0.48–7.75)
Secondary school	1 (0.2)	95 (18.3)	4.00 (2.10–9.89)*	3.60 (2.78–10.30)*
Higher than secondary school	20 (3.8)	92 (17.7)	1	1
Asked about concerns				
Yes	17 (3.3)	139 (26.7)	4.71 (2.72–8.13)*	4.40 (2.00–10.76)*
No	133 (25.6)	231 (44.4)	1	1
Possible side effects explained				
Yes	7 (1.3)	132 (25.4)	11.33 (5.15–24.90)*	5.00 (2.45–13.60)*
No	143 (27.5)	238 (45.8)	1	1
Privacy ensured				
Yes	47 (9.0)	311 (59.8)	3.83 (2.57–5.71)*	3.70 (2.13–12.54)*
No	103 (19.8)	59 (11.3)	1	1
Visual aids used				
Yes	4 (0.8)	63 (12.1)	7.49 (2.67–20.97)*	3.00 (1.80–10.67)*
No	146 (28.1)	307 (59.0)	1	1
Type of visit				
New	73 (14.0)	180 (34.6)	0.50 (0.22–0.89)*	0.12 (0.04–0.34)*
Repeat	77 (14.8)	190 (36.5)	1	1
Time to reach the facility				
≤ 30 min	63 (12.1)	272 (52.3)	7.55 (3.42–14.99)*	4.00 (2.66–14.76)*
> 30 min	87 (16.7)	98 (18.8)	1	1

Note: * Statistically significant association, Abbreviations: AOR: adjusted odds ratio; CI: confidence interval; COR: crude odds ratio; FP: family planning

delivery systems and quality of FP services provision in the public health facilities.

However, this finding was low when compared with a study from Mozambique, where 86% of respondents were satisfied with FP services (Chavane et al. 2017) and another from Nepal, which showed that 89% of the clients interviewed at the facility were satisfied with the FP services they received (Pant and Pandey 2018). This difference might be attributable to socio-cultural, health service quality, subjective measure of satisfaction, and study period discrepancies, and an increase in the expectation of clients with regard to the service they are going to receive in the context of rapid advancements in technology and people's thinking.

Among socio-demographic factors included in the study, educational status was significantly associated with FP service satisfaction, whereby participants with primary and secondary schooling were approximately two and four times respectively more likely to be satisfied with FP service delivery than those with higher than secondary school education.

However, respondents without formal education were less likely to be satisfied with FP service delivery when compared with those with higher than secondary school educational status. This finding is similar to a study from the Kucha District of southern Ethiopia (Dulla et al. 2019), where respondents who attended secondary education had higher service satisfaction. This is also similar to a study from Jimma, Southwest Ethiopia (Tafese et al. 2013) which showed educational status is a predictor of service satisfaction. One possible reason for this could be that higher educational status increases expectations.

Respondents who were given the chance to ask questions about any concerns related to FP were more likely to be satisfied with FP services than their counterparts. This finding is similar to studies from the Kucha District, Southern Ethiopia (Dulla et al. 2019), Tembaro District, Southern Ethiopia (Wogu 2020), and Mexico (Slater et al. 2018), where higher levels of service satisfaction were reported when respondents had the opportunity to ask questions and clarify doubts. This shows the importance of these factors and how strongly they can shape the overall impression of services provided.

Similarly, we found that respondents who were given a clear idea of contraceptive side-effects had higher levels of FP service satisfaction than those who were not given this information. The study from Kucha also reported a higher level of service satisfaction among respondents who were adequately made aware of these facts (Dulla et al. 2019). This finding was also similar to the results of studies from Hosanna (Argago et al. 2015) and Mettu (Djorbassa and Guan 2019), which indicated a higher level of service satisfaction among respondents who were briefed about possible side-effects of FP. These similarities may be due to comparable socio-cultural and economic factors. These outcomes suggest that in addition to advice on the benefits of FP, counseling on side-effects has an important impact on improving satisfaction with service delivery, as well as indirectly affecting service quality and coverage.

Our study also showed that respondents' level of satisfaction with FP services was higher when privacy was ensured and visual aids were used by service providers during interaction with clients. This finding is in line with studies from Kucha (Dulla et al. 2019), Hosanna (Argago et al. 2015), Mettu (Djorbassa and Guan 2019), Bahirdar (Asrat et al. 2018), and the Tembaro District of Southern Ethiopia (Wogu 2020), which all reported a higher level of service satisfaction among respondents for whom privacy was ensured by service providers during interaction with clients. A study from Mozambique came to similar conclusions, whereby the low quality of health care provider/client interactions was given as a reason for women's dissatisfaction (Chavane et al. 2017). In addition, a finding from Mexico reported a higher level of service satisfaction among respondents experiencing no or few interruptions during their medical consultations (Slater et al. 2018). This implies that maintaining privacy and good provider/client communication during FP service provision is one priority area of improving service delivery satisfaction and indirectly FP service coverage.

Another finding of this research indicated that new FP user clients were less likely to be satisfied with services when compared to repeat FP users, similarly to the study conducted in Hosanna which revealed the frequency of visits to be a predictor of FP service satisfaction (Argago et al. 2015). This might be due to the fact that the quality of service given for the repeat FP service users is more comprehensive than for those clients who are using it for the first time.

The other predictor of client satisfaction with FP services was distance/time taken to reach the health facility. As expected, respondents were more likely to be satisfied with FP services when distance/time to reach the health facility was ≤ 30 min compared to > 30 min. The study from Jimma also established that ease of getting to the clinic site was a predictor of FP service satisfaction (Tafese et al. 2013), with another study from Nairobi, Kenya revealing higher FP service satisfaction among respondents for whom the facility was easily accessible (Mbeki et al. 2017). Studies from Nepal (Pant and Pandey 2018) and Egypt (Mohamed et al. 2017) reported that factors such as geographical region and place of residence can affect the accessibility of facilities and in turn client FP service satisfaction, too. These results imply that improving the nearby availability of health services could increase client satisfaction and improve the quality and coverage of FP services.

Strengths and limitations of the study

The strength of this study is that to minimize courtesy bias, interviews were conducted in an area with adequate privacy and without any involvement of health-care providers.

The study also has some limitations. The sampling procedure relied on only a 2-month report for estimating the source population. In addition, since this was a facility-based study, respondents would usually not want to express negative feelings to unknown persons, which could lead to overestimation of the level of satisfaction with FP services. Finally, due to the cross-sectional nature of the study, it was difficult to establish a causal relationship.

Conclusion

Almost one-third of the clients were dissatisfied with FP services in this study. Educational status, opportunity to ask about concerns, being informed about side-effects, use of visual aids during counseling, privacy being ensured during interactions, type of visit, and distance/time to reach the health facility were all significantly associated with FP service client satisfaction.

Therefore, to enhance client satisfaction with FP services, improving female educational status, opportunity for asking questions, maintaining privacy, explaining side-effects, and using visual aids during service delivery should be encouraged, particularly for new FP users.

Abbreviations AOR, adjusted odds ratio; CI, confidence interval; COR, crude odds ratio; CPR, contraceptive prevalence rate; EDHS, Ethiopian Demographic Health Survey; FP, family planning; MMR, maternal mortality ratio; WHO, World Health Organization.

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Authors' contributions DGA: conceived the idea, designed the study, developed the proposal and data collection tool, gave training for data collectors, and supervised the data collection procedure. MMT, YGB, BZ, and WN: supervised the data collection, analysed the data, interpreted the analysis, and wrote and reviewed the draft of the manuscript. All authors read and approved the final draft of the manuscript.

Availability of data and materials The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Code availability Not applicable.

Declarations

Competing interests The authors declare that they have no competing interests.

Ethics approval Ethical approval for this study was obtained from the Institutional Review Board (IRB) of Debre Berhan University, College of Health Science. Permission and supportive letters were also obtained from each health facility.

Consent to participate Before the actual data collection, written informed consent was obtained from the study participants. Consent to participate was collected from the partner, and also assent was obtained from those participants with age less than 16 years.

Consent for publication Not applicable.

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