

ORIGINAL ARTICLE**Quality of Family Planning Services and Associated Factors in Jimma Town Public Hospitals, Southwest Ethiopia****Bezawit Birhanu^{1*}, Yibeltal Siraneh², Beshea Gelana³, Gebeyhu Tsega⁴****OPEN ACCESS**

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ABSTRACT

BACKGROUND: *The quality of care is greatly compromised specially in resource limited settings that influence the uptake and continuation of use of family planning services. However, there is paucity of studies in Jimma Town public hospitals. Thus this study aimed to assess the quality of family planning services and associated factors in Jimma Town public hospitals, Southwest Ethiopia.*

METHODS: *A facility-based cross-sectional study design using both qualitative and quantitative methods was employed from March 25 to April 25, 2018. A total of 278 female family planning users (15-49 years old) in Jimma Town public hospitals were included in the study. The sample was calculated using single population proportion formula and consecutive sampling methods was used. Descriptive statistics and multiple logistic regressions were used for analysis.*

RESULTS: *The mean waiting time of the client before getting service and mean consultation duration were 23.5 and 12.5 minutes respectively. Participant who were unable to read and write were 64% less likely to be satisfied than those who were completed primary and secondary or preparatory schooling (AOR=0.363; CI:0.160, 0.822), and clients who were waited for < 30 minutes at waiting area were 2.7 times more likely to be satisfied than those who waited ≥ 30 minutes (AOR=2.769; CI:1.300, 5.898).*

CONCLUSIONS: *In this study, the satisfaction of clients in family planning service was low. Waiting time and received information on what to do in cases of problems and educational level of clients were significant predictors of client satisfaction.*

KEYWORDS: *Family planning, quality of FP services, client satisfaction, Jimma Town public hospitals*

INTRODUCTION

Quality of care in family planning encompasses a wide range of issues including technical competence, choice of methods, information given to clients, interpersonal relationships and appropriate constellation of services (1). Several studies have shown that quality of care greatly influences the uptake and continuation of use of family planning services (2-5).

Evidence has shown that good quality of healthcare positively correlates with patient satisfaction (6). As a result, client satisfaction is widely used for measuring quality of care in family planning and other health services and has been used in a number of previous studies in low and middle income country settings aimed at determining the factors associated with quality of care in family planning services (7,8,9–11).

Strengthening family planning services is crucial to improving health, human rights, economic development, and slowing population growth (12). Worldwide, approximately 830 women died every single day due to complications during pregnancy or childbirth in 2015 (13). Studies have shown that up to 40% of maternal deaths could have been averted through utilization of family planning services (14,15).

High fertility rate is a major issue in many developing countries due to its long term effect on social and economic development. Deeply rooted traditional beliefs and values allied with low level of development and low level of FP use are among the factors that lead to high fertility rate (16).

Ethiopian Demographic and Health Survey 2016 reported that the total fertility rate was 4.6 children per women and contraceptive Prevalence Rate (CPR) was 36%. Whereas the unmet need for family planning was 22% and 29% nationwide and in Oromia respectively. The surveys also indicate a substantial decline in the maternal mortality ratio which was 412 deaths per 100,000 live births (17).

There is a general agreement that the quality of family planning and reproductive health services positively affects contraceptive use and behavior of the clients; and that clients deserve to receive safe and high quality services with respect and dignity (18). Although studies on assessment of quality of family planning services conducted in Ethiopia (19,20), the quality of family planning services in Jimma Town public hospitals has not been studied. In addition to this, socio-demographic difference may bring disparity in user satisfaction, and the nature, status and interpretation of quality by itself needs update in every setting with different time point. Hence, the aim of this study is to assess the quality of family

planning services and associated factors including the level of client satisfaction.

METHODS

Study design and setup: A facility-based cross-sectional study was conducted from March 25-April 25 2018, among 278 female family planning users (15-49 years old) using both qualitative and quantitative methods. The study was conducted in Jimma University Medical Center and Shanen Gibe Hospital, which are found in Jimma Town. Jimma Town is located 356 kms Southwest of Addis Ababa. Family planning services were provided in health centers, private clinics and non-governmental health institutions. However, the number of FP users' flow was high towards those two hospitals for unclear reasons. The retention and quality of the services not studied in those hospitals. From the record review, in both hospitals, the number of users of family planning service in the fiscal year of 2009 Ethiopian calendar was 3011.

Data collection tools and procedures: Data was collected by 3 BSC nurses/midwives and one supervisor using structured pre-tested interviewer-administered questionnaire, observational checklist and in-depth interview for FP provider . The entire questionnaire was adapted from a similar study done elsewhere (19). The exit interview was aimed to collect information on clients' understanding of the consultation and client satisfaction with the services provided. Structured checklists, for observation of client provider interaction, was used to assess the extent to which service providers adhered to standards of care. In order to minimize bias during observation, the observer discarded the first three observations.

Data quality control: Data quality was maintained by giving one day trainings and appropriate supervisions for data collectors by the principal investigator. The questionnaire was pre-tested using (5%) of the sample size in Jimma Higher one Health Center.

Method of data analysis: After the completion of data collection, Data was entered into Epi data version 3.1 for cleaning, editing and coding. Then, it was exported to SPSS version 21.0 for analysis. Descriptive statistics and simple and multiple logistic regressions were used to analyze

quantitative data. First, candidate variables were identified using bivariate logistic regression at p-value of < 0.25 .

Then Variables which showed association in multivariate analysis were considered as final predictors of client satisfaction with p-value of less than 0.05. The qualitative data was analyzed thematically and presented narratively and triangulated to the quantitative findings.

Ethical clearance was obtained from Institutional Review Board (IRB) of the Institute of Health, Department of Health Economics, Management and Policy, Jimma University. During data collection, informed consent was obtained from the study participants. For observation of the client-provider interaction, both the provider and the clients were asked for their willingness to be observed, and verbal informed consent was secured from each participant before the actual observation

RESULTS

Socio-demographic characteristics: A total of 278(100%) clients were included in the exit interview. The majority, 256(92.1%), of the respondents were from towns. The mean age of the respondents was 27 ± 5 years old with a range of 17-42 years. One hundred and five (37.8%) of the respondents belonged to the age group of 25-29 years. The majority, 136(48.9%), of the respondents were Muslims followed by orthodox Christians, 78(28.1%). Regarding the occupational status of the respondents, 132(47.5%) were housewives (Table 1).

Table 1: Socio-demographic characteristics of clients using FP service in Jimma Town public Hospitals, southwest Ethiopia, 2018.

Socio demographic variables	Number (%) (n=278)
Age	
15-24	91 (32.7)
25-29	105 (37.8)
30-34	47 (16.9)
>35	35 (12.6)
Mean\pmSD	27\pm5
Ethnicity	
Oromo	149 (53.6)
Amhara	27 (9.7)
Yem	37 (13.3)
Kefa	17 (6.1)
Others*	14 (5.0)
Religion	
Muslim	136 (48.9)
Orthodox	78 (28.1)
Protestant	64 (23.0)
Marital status	
Married	242 (87.1)
Single	25 (9.0)
Other (divorced or separated and widowed)	11 (4.0)
Occupation	
Government employee	24 (9.0)
Private employee	26 (9.4)
Merchant	44 (15.8)
Housewife	132 (47.5)
Day laborer	28 (10.1)
Student	16 (5.8)
Others(unemployed,sex worker)	8 (2.9)
Income	
<250	2 (0.7)
251-500	33 (11.9)
501-750	29 (10.4)
751-1000	55 (19.8)
>1000	159 (57.2)
Gravidity (number of pregnancy)	
No pregnancy history	41 (14.7)
One pregnancy history	62 (22.3)
More than one pregnancy history	175 (62.9)

Others* = Gurage, Kambata, Sidama, Hadiya and Selte

The mean \pm SD of waiting time of clients before getting service was 23.5 \pm 14.13 minutes with range of 2-60 minutes. Two hundred and twenty (79.1%) of the clients waited for < 30 minutes to get service whereas 58(20.9%) of them waited for \geq 30 minutes to get service. Most of the clients, 259(93.2%), traveled for <1/2 an hour to arrive at the facility, and 18(6.5%) them traveled for 1/2 to 1 hours. Two hundred seventy-six (99.3%) of the client said that there was enough privacy during consultation and examination while 272(97.8%) believed that the provider kept information that they shared about themselves confidential.

A total of 24 client-provider interaction sessions were observed in both hospitals. Of 24 clienta observed, 10 were new while the rest 14 were continuing. The mean consultation duration was 12.5 \pm 4.3 minutes (range=5-20 minutes). In 24(100%) of the cases, the provider greeted the clients at the beginning of the session. In 23(95.8%) of observed interactions, the provider informed the clients about modern family planning methods.

Concerning types of particular methods promoted by the providers, particular methods were emphasized in 24(100%) of the sessions. IUCD was repeatedly discussed in 11(45.8%) of the sessions followed by Depo/injectable in 7(29.2%) of the sessions. On the other hand,

norplant and pills were infrequently promoted by the providers (Table 2).

Table 2: Types of particular contraceptive methods repeatedly discussed by the providers in Jimma Town public Hospitals southwest Ethiopia, 2018.

Particular method	Number (%) (n=24)
IUCD	11(45.8)
Depo/injectable	7(29.2)
Norplant	4(16.7)
Pills	2(8.3)

From the observation, in about 15(62.5%) of the consultation sessions, the providers used at least one IEC material, while in 9(37.5%) of observation sessions, they did not use any IEC materials. The most frequently used IEC materials during consultation were samples of contraceptives (41.7%) and anatomical model (20.8%).

During medical history and physical examination, from the total 24 observations, the providers asked the history of contraceptive method used, 23(95.8%), LMP, 24(100%), unusual vaginal discharge/bleeding, 23(95.8%), and pelvic pain, 7(29.2%). On the other hand, the providers took blood pressure and weight, did physical examinations and check for STIDs in about 1(4.2%) of observation sessions (Table 3).

Table 3: Medical history and physical examination during client provider interaction in Jimma Town public Hospitals southwest Ethiopia, May 2018

Medical history and physical examination	Number (%) (n=24)	
	Yes (%)	No (%)
Contraceptive method history	23 (95.8)	1(4.2)
Date of LMP	24 (100)	-----
unusual vaginal discharge	23 (95.8)	1 (4.2)
Pelvic pain	7 (29.2)	17 (70.8)
STDS/STI	1 (4.2)	23 (95.8)

One pelvic examination was observed out of 24 . Clients were consented, provider washed hands and sterile procedure was followed and the outcomes of the examinations were told. In the same way, one IUCD insertion procedure was observed and the providers used uterine sound and speculum, followed sterile procedure and gave emotional support.

Likewise, out of 24 observations, in 15(62.5 %) of the cases, providers administered Depo-Provera, and in 100% of the cases, the providers used new sterile needle and syringe and Depo vial shaken before drawing into syringe. But in 8(33.3%) of the cases, the provider massaged injection sites and in

10(20.8%) of the cases, the clients were not sent to injection room.

There were signs announcing that family planning services were available in JUMC but not in Shanen Gibe Hospital. Regarding the availability of IEC, material sample of contraceptive and Brochure/pamphlet were observed in Shanen Gibe Hospital and anatomical model in JUMC. Nevertheless, different IEC materials like flipchart, FP posters, information sheet, job aids and counseling card were not observed in both hospitals.

There was standard family planning guideline in Shanen Gibe Hospital but not in JUMC. There were no separate rooms/areas for physical examination in both hospitals, and the examination room in Shanen Gibe Hospital was narrow since it was being used with ANC and EPI units. Adequate Water and light were available in the examination room in both hospitals.

Concerning the availability of basic equipment and commodities and functionality, both hospitals had speculum, scissors, teneculum, antiseptic solutions, disposable gloves, Examination table, Needle and syringe, Sterile gloves, different contraceptive methods and minor surgery set while sterilizer, blood pressure apparatus, weight scale, flash light, uterine sound, thermometer, pregnancy test and autoclave were not available at both hospitals specifically to the family planning unit. Needle and syringe, disposable gloves, examination table and antiseptic solution were shared with other departments like ANC in Shanen Gibe Hospital.

Both Hospitals had recording system for received and dispensed FP commodities and adequate storage facilities for contraceptives. The commodities were stored according to expiration date in both Hospitals. Both hospitals had multiple revisits and new client records, daily family planning activity register/logbook, and monthly statistical reports about family planning activity to a higher unit or supervisor. The last report was sent before a month, and feedback was received on report. The last time a supervisor visited the unit in relation to family planning was before a month.

Client satisfaction with family planning service:

The clients' overall satisfaction level was classified into satisfied score above a specified cut-of point and dissatisfied score below a specified cut of point. Cut-of point was calculated using mean score. The mean score of overall satisfaction was 40.21, and based on overall satisfaction score, 46% of the clients were satisfied with family planning services. Specific to each satisfaction item, the majority of the respondents were satisfied with ease of getting clinic site (79.2%), waiting time (61.9%), opening hour convenient (71.5%), cleanliness of clinic area (91.7%), provider greeting friendly approach (81.3%), information given to client (86.7%), methods availability (86.7%), maintaining privacy (90%), provider's discussion on client health condition (87.1%), provider's knowledge (93.9%) (Table 4).

Table 4: Clients response to satisfaction Likert scale on family planning service in Jimma Town public Hospital Southwest Ethiopia May 2018.

<i>Component on satisfaction</i>	<i>Very dissatisfied № (%)</i>	<i>Dissatisfied № (%)</i>	<i>Neutral № (%)</i>	<i>Satisfied № (%)</i>	<i>Very satisfied № (%)</i>
clinic site easy to get	11(4.0%)	15(5.4%)	32(11.5%)	167 (60.1%)	53 (19.1%)
waiting time at waiting area	18(6.5%)	49(17.6%)	39(14.0%)	132 (47.5%)	40 (14.4%)
Opening time convenient for you	2(0.7%)	34(12.2%)	43(15.5%)	143 (51.4%)	56 (20.1%)
Cleanness of the facility	0	0	23(8.3%)	146 (52.5%)	109(39.2%)
Provider greeting and friendly approach	2(0.7%)	7 (2.5%)	43(15.5%)	138(49.6%)	88(31.7%)
Information given to client	1(0.4%)	3(1.1%)	33(11.9%)	160(57.6%)	81(29.1%)
Methods availability	0	4(1.4%)	28(10.1%)	162(58.3%)	84(30.2%)
Privacy maintained	1(0.4%)	9(3.2%)	17(6.1%)	165(59.4%)	86(30.9%)
Provider discussion on client health condition	0	5(1.8%)	3(11.2%)	182(65.5%)	60(21.6%)
Provider knowledge	0	0	17(6.1%)	198(71.2)	63(22.7%)

Predictors of client satisfaction: On multiple logistic regression analysis, educational level of the clients, waiting time and received information on what to do in cases of any problems were found to be statistically significant predictors of client satisfaction in family planning services at p -value < 0.05.

Clients who were unable to read and write were 64% less likely to be satisfied than those who completed primary and secondary or preparatory

schooling (AOR=0.363: CI:0.160,0.822), and clients who were waiting for < 30 minutes at waiting area were 2.7 times more likely to be satisfied than those who waited for \geq 30 minutes (AOR=2.769:CI:1.300,5.898). Clients who received information on what to do in cases of any problem were 2.8 times more likely to be satisfied than those who Did not receive the information (AOR=2.846:CI:1.371,5.909) (Table 5).

Table 5: Factors predicting the satisfaction of clients on family planning services, Jimma Town Public Hospitals Southwest Ethiopia, May 2018.

Variables	Satisfaction of FP users		Crude OR (95% CI)	Adjusted OR (95% CI)
	<i>Satisfied</i>	<i>Dissatisfied</i>		
Did you receive the method you requested				
Yes	127	145	4.39(0.50,37.98)	0.618(0.054,7.082)
No	1	5	1.00	
Provider kept confidentiality of information				
Yes	127	145	4.39(0.50,37.98)	0.841(0.075,9.416)
No	1	5	1.00	
Told about any other methods				
Yes	124	136	3.19(1.02,9.95)	2.694(0.755,9.612)
No	4	14	1.00	
Told about the methods side effect				
Yes	119	131	1.91(0.83,4.40)	1.011(0.374,2.732)
No	9	19	1.00	
Received information on what to do if any problem experience				
Yes	112	100	3.50(1.87,6.53)	2.846(1.371,5.909)*
No	16	50	1.00	1.00
Waiting time				
<30 minutes	114	106	3.38(1.75,6.50)	2.769(1.300,5.898)*
\geq 30 minutes	14	44	1.00	1.00
Travel time				
<30 minutes	123	136	2.53(0.88,7.23)	2.259(0.705,7.238)
>30 minutes	5	14	1.00	
Educational status				
Unable to read and write	13	43	0.247(0.124,0495)	0.363(0.160,0822)*
Able to read and write	27	35	0.631(0350,1.140)	0.576(0.291,1.138)
Primary ---secondary/preparatory completed	88	72	1.00	1.00
Occupation				
Government employee	13	11	1.00	
Private employee	7	19	0.394(0.066,2.361)	0.361(0.053,2.477)
Merchant	28	16	0.123(0.020,0758)	0.126(0.017,0.912)
Housewife	50	82	0.583(0.105,3.239)	0.665(0.104,4.244)
Day laborer	15	13	0.203(0.039,1.046)	0.250(0.042, 1.487)
Student	9	7	0.385(0.066,2.245)	0.355(0.52,2.399)
Unemployed, sex worker and others	6	2	0.429(0.065,2.810)	0.322(0.444,2.501)

*significant predictorsconsidered at P-Value of <0.05, 1.00=Reference Category

DISCUSSION

Even though both hospitals had all necessary and functional equipment and supplies, in one of the hospitals, some of the pieces equipment were used by sharing with other working units. This causes delay of the service by taking much more time of both the client and providers as observed and in turn this affects the quality of FP service. This is similar with the study done in Jimma Zone health centers (20).

In this study, in one of the hospitals, there was no standard FP guideline. This affects the compliance of providers to the standard of care which in turn affects direct efforts made to improve quality of family planning.

In the current study, in fifteen (62.5%) of the observations, the providers used at least one IEC material during consultations, but the study in Jimma Zone health centers showed that the providers used IEC materials in about one-third (33.3%) of the interactions. The variation can be due to shortage of IEC materials in currently studied facilities (20). According to the National FP guideline, utilization of IEC materials is effective and creates more clear interaction between the provider and the clients (23).

In all of the observation sessions, the providers greeted the clients during the beginning of the session. In 23(95.8%) of the observed interactions, the providers informed the clients about modern family planning methods. Twenty-one (87.5%) of the clients showed preferences to particular methods. In all the sessions observed, the providers told the clients at least about one of the FP methods. This is comparable with the study done in Jimma Zone health centers in which only 65.3% of providers greeted their clients; in 82% of observed interactions, the providers informed the clients about modern family planning, and 93.3% of the clients helped to select their preferences to particular methods (20).

The study conducted in Jimma Zone health centers in 2013 showed that the majority of the respondents were satisfied with ease of getting clinic site (89%), but in this study, 79.2% of the respondents were satisfied with ease of getting clinic site. This could be due to absence of signs announcing availability of family planning service in the hospitals (20).

In this study, 79.1% of the clients waited for less than 30 minutes. This is lower than the study report from Jimma Zone health centers in which about 92.4% (20) of the clients got the service within acceptable waiting time and higher than the study done in Sokoto, North Nigeria, in which 40% (23) of the respondents

waited for less than 30 minutes. The variation can be differences in health facilities, clients' flow and health provider availability in the facility.

The mean consultation time was 12.5 minutes. This is almost comparable with the study conducted in Jimma Zone health centers, which is 10.5 minutes (20).

In this study, client provider interaction during medical history and physical examination on the providers took blood pressure and weight, did physical examinations and investigated STIDs in about 1(4.2%). This might be due to lack of separate rooms for physical examination, unavailability of equipment and absence of FP service delivery guideline.

This study showed that 54% of the clients were dissatisfied. This is very large; more than half compared with dissatisfaction reports from the study in Jimma Zone health centers, 6.3% (20), Hosanna Town public health facilities, 24.7% (21), and Northern Nigeria, 15% (23).

The reason behind this variation may be difference in socio-demographic characteristics of the respondents. However the result is almost similar with the study which is done in Wonji Hospital, which showed that 50% of the clients were not satisfied (22).

In conclusion, there is shortage of necessary equipment, supplies and some IEC materials in one of the hospital. The absence of standard FP guideline affects providers' compliance with the standard guidelines of family planning service to some extent.

In this study, the satisfaction of clients with family planning service was low. Waiting time, received information on what to do in cases of problems and educational level of clients were significant predictors of client satisfaction.

According to the providers' opinions, factors that affect quality of family planning services provisions are shortage of supply of family planning methods, lack of in-service training for providers, unavailability of all types of family planning methods, privacy issue and lack of enough place or room to provide the service.

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