

Assessment of Quality of Comprehensive Abortion Care in Selected Health Institution of Addis Ababa, Ethiopia

Tatek Tesfaye¹, Ephrem Mamo², Trhas Tadesse², Yared Tesfaye¹, Gelane Lelise¹, Ayele Teshome¹, Selahadin Seid³, Jemal Mohammed⁴, Tamerat Assefa⁴

¹Obstetrics and Gynaecology Department, Yekatit 12 Hospital Medical College, Addis Ababa, Ethiopia

²Public Health Department, Yekatit 12 Hospital Medical College, Addis Ababa, Ethiopia

³Meristopes International Ethiopia, Addis Ababa, Ethiopia

⁴Armaure Hansen Research Institute, Addis Ababa, Ethiopia

Email address:

ephremmamo2015@gmail.com (Ephrem Mamo)

To cite this article:

Tatek Tesfaye, Ephrem Mamo, Trhas Tadesse, Yared Tesfaye, Gelane Lelise, Ayele Teshome, Selahadin Seid, Jemal Mohammed, Tamerat Assefa. Assessment of Quality of Comprehensive Abortion Care in Selected Health Institution of Addis Ababa, Ethiopia. *Journal of Gynecology and Obstetrics*. Vol. 11, No. 4, 2023, pp. 80-89. doi: 10.11648/j.jgo.20231104.11

Received: August 19, 2022; **Accepted:** September 28, 2022; **Published:** July 13, 2023

Abstract: *Back ground:* The risks of unsafe abortion are not only just to the woman involved and her family but also the costs of unsafe abortion are carried by the whole of the society. However, unsafe abortion is commonly neglected reproductive health care problem in developing countries like Ethiopia. Therefore, the aim of this study was to determine the level of quality comprehensive abortion care and its associated factor in selected hospitals of Addis Ababa Ethiopia. *Method:* An institution based cross sectional study was conducted. Three public hospitals, 113 clients and 46 health care providers were included in the study. Data was collected through a standard structured pre-defined observation checklist adopted from WHO, client exit interview and providers self administer questioners. Frequency tables and graphs were used to describe the study variables and a logistic regression model was used to measure the association between the outcome and the predictor variable. Statistical significance was declared at $p\text{-value} < 0.05$. Direction and strength of association were expressed using OR and 95% CI. *Result:* Only 36 (31.9%) of the participants were counseled on contraceptive use and 54.3% of the providers were trained on comprehensive abortion care services. Consent was taken verbally from 41 (36.3%) of the clients' and privacy was maintained for 34 (30.1%) of the clients during physical examination. Over all 52 (46%) of clients were satisfied by abortion care services. Clients with no history of previous pregnancy and muslim religions and protestant were more likely satisfied by CAC service compared to clients with a history of previous pregnancy and orthodox religion respectively. *Conclusion:* The proportion of quality of comprehensive abortion care was low. Religion and previous history of pregnancy were significantly associated with quality of comprehensive abortion care. Policymakers and other concerned bodies should focus on those areas to improve the quality of comprehensive abortion care.

Keywords: Comprehensive Abortion Care, Quality, Service, Ethiopia

1. Introduction

Unsafe abortion is still an important problem in the world [1] and it is identified as one of the major causes of maternal morbidity and mortality [2]. In Sub-Saharan Africa (SSA), abortion is more common and it tends to be secret and unsafe that has a substantial contribution to maternal mortality [3, 4]. Comprehensive abortion care

aims to reduce deaths and injury from either incomplete or unsafe abortion by: evacuating the uterus; treating infection; addressing physical, psychological and family planning needs; and referring to other sexual health services as appropriate [5]. Quality of comprehensive abortion care services aim to achieve three ultimate outcomes: to reduce

morbidity and mortality from unsafe abortion; to ensure reproductive choice for women faced with unintended pregnancy; and to reduce the incidence of repeat unintended pregnancies and unsafe abortion by integrating post abortion contraception [6] Millions of mothers have risked and lost their lives prematurely because of a lack of quality comprehensive abortion care (CAC) [7]. The vast majority of abortions occur in response to unintended pregnancies, which typically result from ineffective use or nonuse of contraceptives [8]. Other factors are also important drivers of unintended pregnancy and the decision to have an abortion. Some unintended pregnancies result from rape and incest [9]. Other pregnancies become unwanted after changes in life circumstances or because taking a pregnancy to term would have negative consequences on the woman's health and well-being [10]. As a result, abortion continues to be part of how women and couples in all contexts manage their fertility and their lives, regardless of the laws in their country [10]. Thus, Quality of comprehensive abortion care services will always be needed [11]. Comprehensive abortion care services are a package of essential health services which includes management of post-abortion complications, safe termination of pregnancy, and provision of contraceptives [12, 13], and these services need to be timely, reliable, confidential, skilled, and compassionate [11, 14]. It must be provided by people who have been properly trained [13, 15]. Increased efforts are needed, especially in developing regions like Ethiopia, to ensure access to quality of comprehensive abortion care services. Therefore, this study will aim to strengthen the quality of comprehensive abortion care services in selected hospitals of Addis Ababa, Ethiopia.

2. Methods

2.1. Study Design

Cross-sectional study design was conducted in three selected hospitals (Ghandi, Tirunesh Bejing and Yekatit 12 Hospital medical college) found in Addis Ababa to assess the current level of quality of comprehensive abortion care services and determine factors associated with quality of comprehensive abortion. The study was conducted in January 2021.

2.2. Sample Size and Sampling Technique

the sample size was determined using a single population proportion formula. The calculations was based on the assumption outcome variable of interest was 92.0%, at 95% confidence interval, limit of precision of 5%. The calculated sample size was 113. To achieve the desired sample size per health facilities, the total number of sample women was proportionally allocated to each hospital based on the average number of CAC service users in the most recent quarterly report of each hospital. Patient record was used as sampling frame. Study subjects at each hospital was selected by systematic random sampling. fort five health

care providers were selcetd from the three hospitals who are working directly on CAC service.

2.3. Data Collection Instrument and Procedure

Assessment tools was prepared to measure the quality score of all indicators of interest and the data was collected through a standard structured pre-defined observation checklist adopted from WHO and Inter-agency Field Manual on Reproductive Health in Humanitarian Settings [15] and modified based on the local situation, and Client exit interview, and charts. A structured interviewer-administered, closed-ended questionnaire was used to collect data using an interviewer-administered technique which is developed after reviewing different relevant literatures of similar studies.

2.4. Data Management and Analysis Plan

The data was checked, cleaned and entered to SPSS version 20 for analysis. The study variables were described using descriptive statistics such as frequency tables and graphs. a logistic regression model was used to measure the association between the outcome and the predictor variable. Statistical significance was declared at $p\text{-value} < 0.05$. Direction and strength of association were expressed using OR and 95% CI.

2.5. Operational Definition

Quality of CAC: assessed based on client satisfaction, provider's competency and working condition of the health facilities.

Client satisfaction: overall client's perception toward the CAC services she received and rated by 11 items each having five points.

2.6. Ethical Consideration

Ethical permission was obtained from Yekatit12 Hospital Medical College of Ethical Review Committee and permission to study and intervene on the practice at hospitals was obtained from the relevant health bureaus as well as the hospital administration. All informants was ensured anonymity and confidentiality, and informed consent was secured after an appropriate explanation of the study objectives.

3. Result

3.1. Socio-Demographic Character of the Respondent

A total of 113 women received CAC services in selected hospitals in Addis Ababa during the study period. The women's age ranged from 18 - 43 years with a mean age of 27.9 ± 5.7 years. The majority of women, 44 (38.9%) were young adults of age 25–30 years. Regarding the level of education, 35 (31%) of them attended a higher level (12+) of education while only 7 (6.2%) were illiterate. About one-third, 36 (31.9%) of the women were

housewives, and 76 (67.3%) were orthodox by religion. (Table 1). Three-fourth, 85 (75.2%) of the women were married

Table 1. Socio-demographic characteristics of the respondent at the selected Hospitals in Addis Ababa Ethiopia, January 2021.

Variables	Category	Frequency	Percentage
Education status	18-24	39	34.5
	25-30	44	38.9
	31-35	19	16.8
	>35	11	9.7
	Illiterate	7	6.2
	Read and write	13	11.5
	Elementary school	24	21.2
	Grade 9-10	26	23
	Grade 11-12	8	7.1
	Higher level (12+)	35	31.0
Marital status	Never married	22	19.5
	Married	85	75.2
	Divorced	6	5.3
Religion	Orthodox	76	67.3
	Muslim	20	17.7
	Protestant	17	15
Occupational status	Student	13	11.5
	House wife	36	31.9
	Gov't employee	30	26.5
	Private employee	23	20.4
	Other (daily laborers & merchant)	11	9.7

3.2. Reproductive Health Status of the CAC Users

More than half, 68 (60.2%) of the women had a history of previous pregnancy while 45 (39.8%). From the total of mothers who had a history of pregnancy, 17 (39.8%) history of previous abortion of which 13 (76.5%) of the women underwent abortion once and the rest 4 (23.6%) underwent abortion twice or three times. Regarding the type of previous

abortion, 3 (2.7%) had a history of induced abortion which was performed outside the health facilities. Sixty-nine (61.1%) of women had a history of family planning use. The most common method of family planning used by the respondents was implant 29 (25.7%) followed by injectable 22 (19.5%). The majority of the women, 93 (82.3%) had less than 12 weeks of gestational age. The gestational week of the current conception varied from 4-24 weeks (Table 2).

Table 2. Reproductive and Contraceptive History of the Clients at the Selected Hospitals in Addis Ababa, Ethiopia, January 2021.

Variables	Categories	Frequency	Percentage
Hx of previous pregnancy	Yes	68	60.2
	No	45	39.8
Hx of previous abortion	Yes	17	39.8
	No	51	45.1
Frequency of previous abortion	1	13	76.5
	2-3	4	23.6
	Spontaneous	10	8.8
Type of previous abortion	Induced (out of the health facility)	3	2.7
	Induced (in health facility)	4	3.5
Hx of FP use before the current pregnancy	Yes	69	61.1
	No	44	38.9
Type of FP used	Oral pills	14	12.4
	Injectable	22	19.5
	Implant	29	25.7
	Others (IUCD & Condom)	4	3.6
GA of the current pregnancy	<12 week	93	82.3
	>12 week	20	17.7

3.3. Reasons for Not Using Family Planning

The reason for not using family planning includes using natural method 13 (29.5%), want to be pregnant 11 (25%),

not planned to have sex 7 (13.9%), religious reasons 6 (13.6%) and others (I don't know about family planning, fear of side effect and opposition from partners 6 (13.6%) (figure 1).

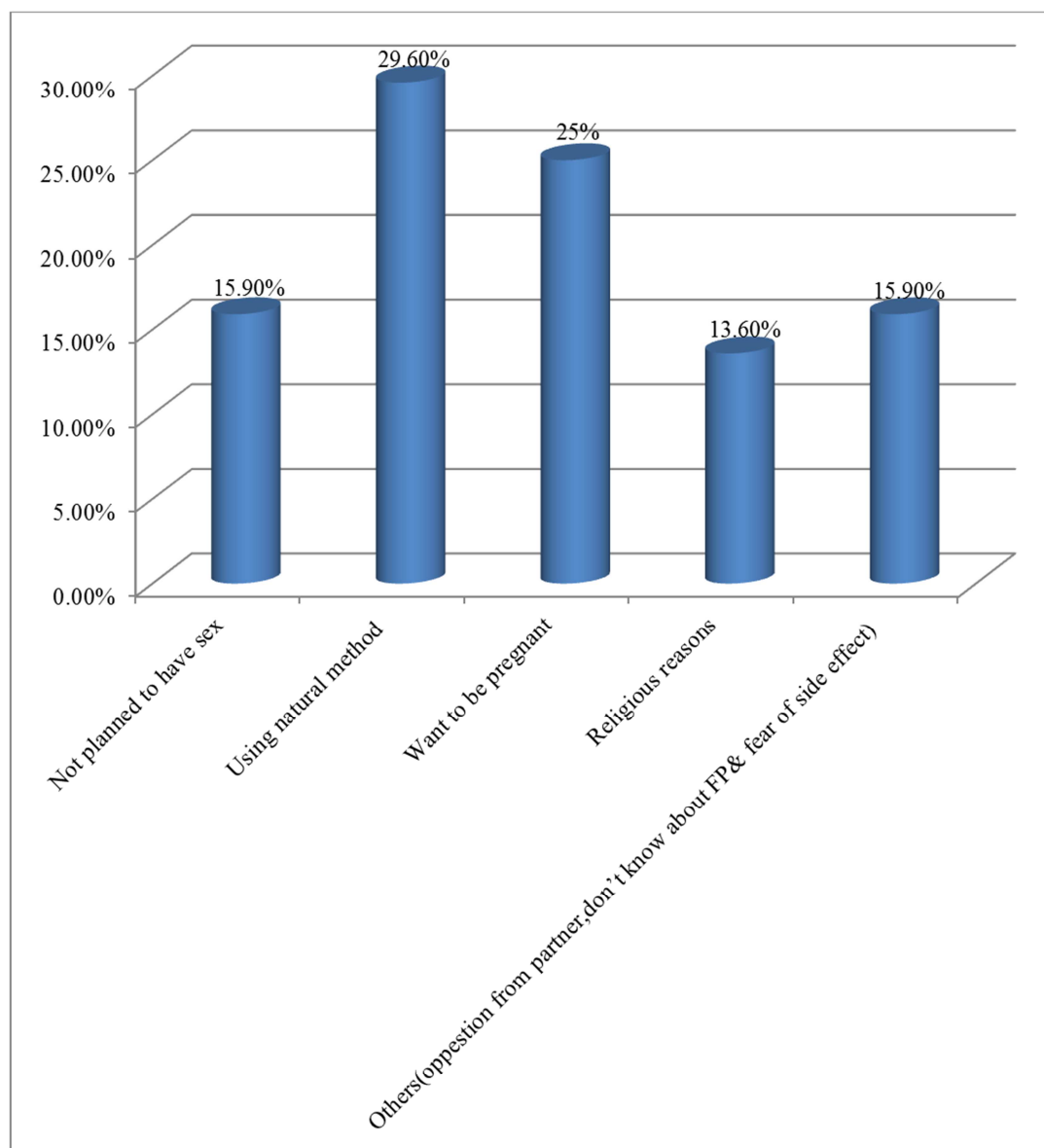


Figure 1. Reasons for Not Using Family Planning of the Clients at the Selected Hospitals in Addis Ababa, Ethiopia, January 2021.

3.4. Reason for Seeking Comprehensive Abortion Care Services

The reason for using the CAC services was financial problem 51 (45%), no need for additional child 25 (22%), disagreement with partner 23 (20%), rape 12 (11%), and congenital anomaly 2 (2%) (Figure 2).

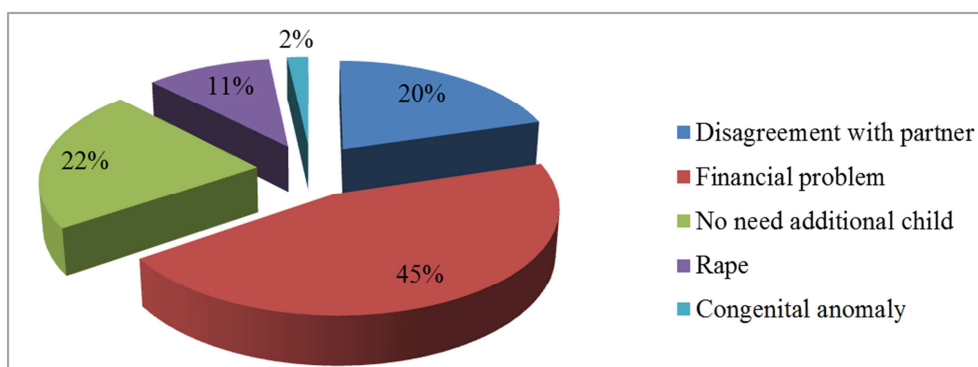


Figure 2. Reasons for Current pregnancy Termination of the Clients at the Selected Hospitals in Addis Ababa, Ethiopia, January 2021.

3.5. Professional Competency and Training

Out of the 46 health care providers who participated in this study, 32 (69.6%) were gynecologists and 14 (28.3%) B.Sc.nurses. In this study, the result showed that the mean age of the health care provider was 34.9 years with a standard deviation of ± 8.4 . The median age of the health care providers was 32 years with a minimum and maximum age of 26 years and 58 years respectively. Around 26 (56.5%) of the health care provider is found in

the age of 30 and above. With regard to their work experience related to CAC, less than half, 20 (43.5%) of them had <5 years of work experience. Of these, More than half, 25 (54.3%) and 28 (60.9%) of them got either of the following training; PAC service, MVA (manual vacuum aspiration), misoprostol administration, contraception/family planning counseling, and pre-or in-service training on subjects related to CAC in the past three years respectively (Table 3).

Table 3. Characteristics of the Health Care Providers Working on CAC at the Selected Hospital, Addis Ababa, Ethiopia, January 2021.

Variables	Category	Frequency	Percentage
Age of the health care provider	<30	20	43.5
	≥ 30	26	56.5
Current qualification	Gynecologist	32	69.6
	Nurse	14	30.4
Work experience related to CAC of the health care provider	<5 years	20	43.5
	≥ 5 years	26	56.5
Any training received on the following topics in the past 3 years	CAC	28	60.9
	PAC service, MVA Misoprostol administration, Contraception/Family Planning, and Counseling	25	54.3

3.6. Working Condition of the Health Facilities

This finding showed that less than half, 20 (43.5%) of the health care providers received technical support in their health facilities and 24 (52.2%) of them received technical support in the last three months. Concerning the type of

supervision received in the health facilities, checking the records or reports and observation were the dominant ones accounting for 31 (67.4%). About the way how feedback is given to the health care provider, giving verbal feedback is the most common type 29 (63%) (See Figure 3).

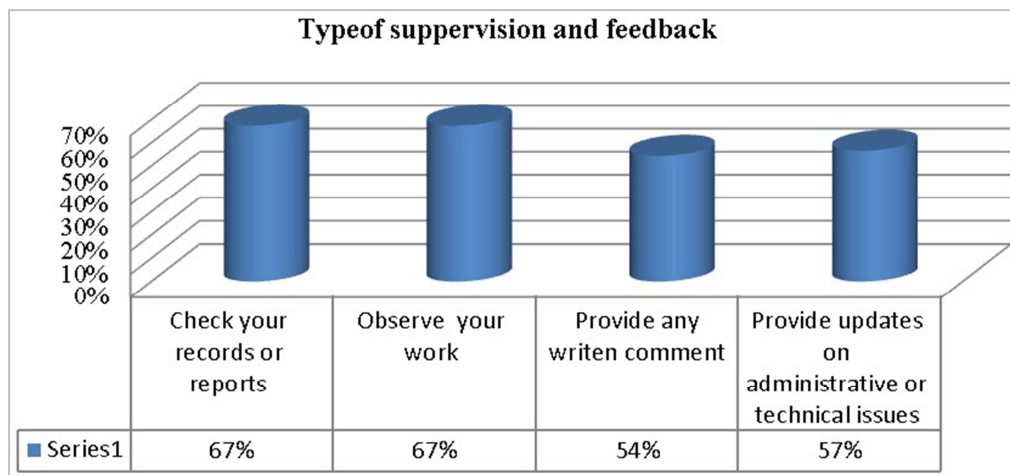


Figure 3. Type of supervision and feedback provided at the selected hospitals Addis Ababa, Ethiopia, January 2021.

3.7. Finding from Observation on Universal Precautions Practice of the Health Care Providers

The finding of the observation showed that only half, 59 (52.2%) of the health care providers practiced hand washing when handling patients/carrying out procedures. General Personal Protective Equipment (PPE) was used by 53 (46.9%) and 84 (74.3%) used antiseptic solution. Only 4

(3.5%) of the health care workers ensure safety with sharp materials while the rest of the health care providers didn't ensure safety with sharp materials (like practiced the disassembling of used needles and sharps with their hands). Segregated waste disposal with different colored bins/bags was practiced by 86 (76.1%) of the health care provider (Table 4).

Table 4. Observed Practice of Universal Precautions of the Health Care Provider During the Comprehensive Abortion Care (n=113) among Clients at the Selected Hospitals in Addis Ababa, Ethiopia, January 2021.

Variables	Categories	Frequency	Percentage
Wash his/her hands	Yes	59	52.2
	No	54	47.8
Used PPEs	Yes	53	46.9
	No	60	53.1
Used an antiseptic solution	Yes	84	74.3
	No	29	25.7
Ensure safety with sharp items	Yes	4	3.5
	No	109	96.5
Segregated waste for disposal at different coloured bins/bags	Yes	86	76.1
	No	27	23.9

3.8. Process Attributes of Comprehensive Abortion Care

3.8.1. Pre-procedural Counseling and Its Records

A total of 113 clients were observed to identify whether the clients receive the proper pre-procedural counseling or not. From the total observed, 69 (61.2%) of the clients were maintained their privacy (visual and auditory) while they receive pre-procedural counseling, 58 (51.3%) of the clients receive CAC service in a nonjudgmental manner.

Besides, 47 (41.6%) of the clients did not get the opportunity to pose questions and concerns and only 39 (34.5%) of the participants asked their reason for the current abortion. Only one-fourth, 27 (23.9%) of the clients received an explanation on the care required after the procedure, 23 (2.4%) and 67 (59.3%) of the clients received an explanation of the risk associated with the procedure and the immediate risk of pregnancy respectively (Table 5).

Table 5. Observed Received Service of Pre-procedural Counseling and its Record on the Card During the Comprehensive Abortion Care (n= 113) Clients at the Selected Hospitals in Addis Ababa, Ethiopia, January 2021.

Pre-procedural counseling received	Frequency	Percentage
Privacy maintained	69	61.2
Nonjudgmental	58	51.3
Gained here confidence	47	41.6
Makes the woman feel comfortable	29	25.7
Identify the reason for abortion	39	34.5
Simple language used	89	78.8
Her doubts clarified	54	47.8
Assessed her for the CAC procedure	93	82.3
The risks associated with the procedure explained	23	2.4
The the care required after the procedure explained	27	23.9
The immediate risk of pregnancy explained	67	59.3
Explain to wait for at least six months before trying to conceive again	54	47.8
The need and schedule for a follow-up explained	17	15
Helped the woman to sign the consent	49	43.4
Contraceptive methods discussed	80	70.8
Assessment finding recorded	62	54.9
Procedure recorded	93	82.3
contraception refusal or acceptance recorded	72	63.7
Advice given recorded	24	21.2

3.8.2. Physical Examination

Pelvic, speculum, and bimanual examination were performed for 59 (52.2%), 79 (69.9%), 90 (79.6%) clients respectively. Meanwhile, consent was taken verbally from 41 (36.3%) of the clients' and privacy was maintained for 34 (30.1%) of the clients during physical examination (Table 6).

Table 6. Service and Procedures Performed for CAC clients (n=113) at the Selected Hospitals in Addis Ababa, Ethiopia, January 2021.

Service/procedure (n = 113)	Frequency	Percentage
Pelvic examination performed	59	52.2
Informed the procedure	72	63.7
verbal consent taken	41	36.3
Privacy maintained	34	30.1
Ready equipment needed	95	84.1
Asked to empty the bladder	93	82.3
Speculum examination performed	79	69.9
Bimanual examination performed	90	79.6

3.8.3. Post-Procedural Counseling and Its Records

Advice about when to return to the hospital, when to avoid intercourse and family planning was given for 221 (59.9%), 151 (40.9%), and 130 (35.2%) women, respectively (Table 7).

Table 7. Observed Received Service of Post-procedural Counseling During the Comprehensive Abortion care (n= 113) among Clients at the Selected Hospitals in Addis Ababa, Ethiopia, January 2021.

Postprocedural counseling received	Frequency	Percentage
Privacy maintained	51	45.1
Enquire the woman how she is feeling	46	40.7
Informed avoid intercourse till bleeding stops	12	10.6
Informed to return to a hospital incase severe abdominal pain	66	58.4
Informed to return to a hospital incase heavy vaginal bleeding	96	85
Informed to return to a hospital incase fever	57	50.4
Informed to return to a hospital incase fainting	42	37.2
Informed to return to a hospital incase abdominal distention	53	46.9
Informed to return to a hospital incase severe vomiting	52	46
Called for a follow-up visit in a week	31	27.4
Counseled again if she had not accepted anyform of contraception.	36	31.9

3.9. Outcome Attributes

Client satisfaction was rated by 11 items each having five points Likert scale from strongly disagree (1) to strongly agree (5) which has internal reliability (Cronbach's α of 0.890). This shows that the items were internally consistent. To see the total score of each respondent, the points obtained from the 11 items by each respondent were

computed. A respondent had a minimum of 5 and a maximum of 55 points on the CAC satisfaction score. Clients were categorized as not satisfied (if they score below the mean) or satisfied (if they score \geq to the mean satisfaction score). The mean score for client satisfaction on the CAC services received was 43 and 61 (54%) of the study women were scored less than the mean satisfaction score (not satisfied) (Table 8).

Table 8. Level of Client Satisfaction on CAC Service Provided in Selected Hospitals of Addis Ababa, Ethiopia, January 2021.

Items	Level of satisfaction on each item n (%)					Mean \pm SD
	S. Disagree	Disagree	Uncertain	Agree	S. Agree	
Satisfied with the locating CAC service	1 (0.9)	1 (0.9)	9 (8)	80 (70.8)	22 (19.5)	4.07 \pm 0.62
Waiting time was fair	1 (0.9)	5 (4.4)	13 (11.5)	78 (69)	16 (14.2)	3.19 \pm 0.71
Waiting area was adequate & with seats	-	12 (10.6)	9 (8)	73 (64.6)	19 (16.8)	3.88 \pm 0.81
Provider's greeting was good and in a friendly way (polite)	-	9 (8)	10 (8.8)	88 (77.9)	6 (5.3)	3.81 \pm 0.65
The provider was easy to understand	-	3 (2.7)	10 (8.8)	85 (75.2)	15 (13.3)	3.99 \pm 0.58
Satisfied with the courtesy & respect	-	2 (1.8)	8 (7.1)	82 (72.6)	21 (18.6)	4.08 \pm 0.57
Satisfied with privacy maintained during examinations	6 (5.3)	6 (5.3)	11 (9.7)	70 (61.9)	20 (17.7)	3.81 \pm 0.97
Provider perform the procedure with cleanliness and sanitation	-	10 (8.8)	69 (61.1)	30 (26.5)	10 (8.8)	4.11 \pm 0.69
The clinic has clean latrine & adequate water supply	3 (2.7)	25 (22.1)	20 (17.7)	44 (38.9)	21 (18.6)	3.49 \pm 1.11
You feel that today you received full information about CAC.	-	1 (0.9)	11 (9.7)	82 (72.6)	19 (16.8)	4.05 \pm 0.55
I want to come again in this health facility.	-	-	-	-	-	4 \pm 0.57

3.10. Predictors of Client Satisfaction with Comprehensive Abortion Care

To assess the association of different independent variables (socio-demographic, structure, and process attributes of quality) with the outcome variable of client satisfaction, bivariate and multiple logistic regression analyses was carried out. Only variables with a p-value of ≤ 0.2 (educational status, marital status, religion, history of previous pregnancy, and gestational age) were included in the multivariate regression.

After adjusting for possible confounding factors with multivariate regression; religion and history of previous pregnancy were significantly associated with client satisfaction with a p-value < 0.05 . Clients with a religion of Muslim and protestant were more likely to be satisfied by the service compared to clients with a religion of orthodox [AOR = 2.5, 95%CI (1.04, 6.08)]. Similarly, clients with no history of previous pregnancy were more likely to be satisfied by CAC service compared to clients with a history of previous pregnancy [AOR = 2.5, 95%CI (1.03, 5.94)] (Table 3).

Table 9. Predictor of Quality of Comprehensive Abortion Care among CAC Service Provided in Selected Hospitals of Addis Ababa, Ethiopia, December 2021.

Variables	Category	Client satisfaction		COR with 95% CI	AOR with 95% CI
		Yes	No		
Age	<30	36	47	0.6 (0.29,1.55)	
	≥30	16	14	1	
Educational status	<12 grade	40	38	(0.88,4.61)*	1.7 (0.71,4.35)
	Higher level (12+)	12	23	1	1
Marital status	Never married	13	9	1.9 (0.75,4.96)*	2. (0.72,6.18)
	Married & divorce	39	52	1	1
Religion	Orthodox	40	36	2. (1.02,5.27)*	2. (1.04,6.08)**
	Muslim & protestant	12	25	1	1
Occupational status	House wife	6	7	(0.32,3.21)	
	Others*	54	46	1	
Hx of previous pregnancy	Yes	36	32	2.0 (0.94,4.42)*	2. (1.03,5.94)**
	No	16	29	1	1
Hx of previous abortion	Yes	8	9	0.7 (0.24,2.19)	
	No	28	23	1	
Hx of FP use before the current pregnancy	Yes	33	36	1.2 (0.56,2.58)	
	No	19	25	1	
Reason of the current abortion	Rape	6	6	1.2 (0.32,5.06)	
	Congenital anomaly	1	1	1.2 (0.07,22.72)	
	Partner disagreement	9	14	0.8 (0.26,2.59)	
	Financial problem	25	26	1.2 (0.47,3.20)	
	Don't need additional child	11	14	1	
GA of current pregnancy	<12	46	57	2.2 (0.81,6.46)*	1. (0.53,4.89)
	≥12	6	14	1	1

*student, daily laborer, merchant, student, gov't employee*p value<0.2,**P value<0.05

4. Discussion

Deaths and injuries from unsafe abortion continue to be a serious public health problem that affects families and entire community [16] and providing quality of comprehensive abortion care helps to reduce the maternal mortality rate [17, 18]. Therefore the main aim of this study tried to determine the level of client satisfaction and associated factors in selected hospitals of Addis Ababa Ethiopia. This study revealed that the level client satisfaction of comprehensive abortion care were 54%. This is lower compared to the study done in public health facility of Jimma Ethiopia which was 76.3% of the clients satisfied with the service [19]. With the study done in Guraghe zone, Ethiopia which was 83.5% of the patients was satisfied with the post abortion services [20]. This is low when it compared with the previous study conducted in Mexico City's Public-Sector Legal Abortion Program which was 88% of the clients receive of quality of comprehensive abortion care [21] and with the study conducted in family medicine centers of America which was majority of women (93%) were very satisfied with their abortion service [22]. this discrepancy might be due to the difference in method of data collection and the difference in operational definition which was used to measure quality of comprehensive abortion care.

Post-abortion family planning counseling incorporated into comprehensive abortion care has been regarded as an appropriate venue or vehicle to decrease unwanted pregnancies and induced abortions [23] and there has been increasing evidence that family planning interventions have a role to play not only before a woman has become

pregnant, but after she has had an abortion or miscarriage [24]. As this is evidenced by the study conducted in public health facilities of Bahirdar concluded [25] and with the study conducted in Togo [26] that family Planning counseling were significantly associated with post abortion family planning utilization. In the current study only 36 (31.9%) of the participants were counseled on contraceptive use. This is slightly lower compared to the study done in government hospitals of Tigray, Ethiopia which was 48% of study subjects were informed about the available family planning methods [11] and with the study conducted in Guraghe zone, Ethiopia which was 56.5% of the clients received post abortion family planning [20], with the study conducted in Ethiopia Bahr-dar town health facilities which was 69.4% of the clients receive post abortion family planning counseling [25]. The current result also lower compared to the study conducted in African countries like Zimbabwe which was 43% of the clients counseled on contraceptive use [27].

In service training for providers and introducing appropriate protocols has lion share on improving the quality of services [28], however, In east Africa, the shortage of health-care providers trained in comprehensive abortion care is severely restricting women's access to care, and thus updated in-service comprehensive abortion-care training and quality pre-service training is imperative [29]. Similarly, this study found that 54.3% of the providers were trained. This is lower when it compared with the study conducted in Afghanistan which was 70% of providers reported having been trained in abortion care services [30] and this could affect quality of the service at all. But the current study is higher compared to the study conducted in Tigrayregion,

Ethiopia which was 22.2% of the care providers got refresher training on relevant areas [27].

5. Strength and Weakness of the Study

The strength of the study; the study has considered different assessment techniques such as patients and provider's perspective, and service observation. This study also has some weaknesses. During the service observation there could be a tendency by service provider to be at their best performance due to the presence of an observer. And the study has only focused on public health facilities and doesn't give picture of CAC practice in private health facilities.

6. Conclusion

This study has identified main concerns that could have great input on the improvement of the quality of comprehensive abortion care. Hence, that can conclude that quality of comprehensive abortion care is low in addition there is lack of refreshments trainings especially on counseling and reassuring clients. Religion and history of previous pregnancy were significantly associated with satisfied with comprehensive abortion care.

Acknowledgements

The authors would like to Acknowledg Merie Stopes International for funding this research and also thank the study participants who voluntarily participated in this study, and the full research consortium.

References

- [1] World health organization. International Safe Abortion Day Report. 2020.
- [2] Sageer R, Kongnyuy E, Adebimpe, WO. et al. Causes and contributory factors of maternal mortality: evidence from maternal and perinatal death surveillance and response in Ogun state, Southwest Nigeria. *BMC Pregnancy Childbirth* 2019; 19 (63). <https://doi.org/10.1186/s12884-019-2202-1>
- [3] RehnströmLoi U, Lindgren M, Faxelid E. et al. Decision-making preceding induced abortion: a qualitative study of women's experiences in Kisumu, Kenya. *Reprod Health*. 2018; 15 (166). <https://doi.org/10.1186/s12978-018-0612-6>
- [4] Ushie BA, Juma K, Kimemia G, Ouedraogo R, Bangha M, Mutua M. Community perception of abortion, women who abort and abortifacients in Kisumu and Nairobi counties, Kenya. *PLoS ONE*. 2019; 14 (12): e0226120. <https://doi.org/10.1371/journal.pone.0226120>
- [5] WHO. Medical management of abortion.2018.
- [6] Engender Health and Ipas. Taking Post abortion Care Services Scale: Quality, Access, and Sustainability. Report of an International Workshop Held in Mombasa, Kenya. 2001.
- [7] WHO. Maternal mortality fact sheet. 2018.
- [8] Melkamu Y, Enquselassie F, Ali A, Gebresilassie H, Yusuf L. Assessment of quality of post abortion care in government hospitals in Addis Ababa, Ethiopia. *Ethiop Med J*. 2005 Jul; 43 (3): 137-49. PMID: 16370545.
- [9] Alemayehu M, Yebo H, Medhanyie A. A. et al. Determinants of repeated abortion among women of reproductive age attending health facilities in Northern Ethiopia: a case-control study. *BMC Public Health*. 2017; 17 (188). <https://doi.org/10.1186/s12889-017-4106-1>
- [10] The Royal College of Obstetricians and Gynaecologists. Best practice in comprehensive postabortion care. Best Practice Paper. 2016; 3.
- [11] Herd P, Higgins J, Sicinski K, Merkurieva I. The Implications of Unintended Pregnancies for Mental Health in Later Life. *Am J Public Health*. 2016; 106 (3): 421-429. DOI: 10.2105/AJPH.2015.302973.
- [12] Sawhill IV, Guyot K. Preventing Unplanned Pregnancy: Lessons from the States. The economic studies at Brookings. 2019.
- [13] Blystad A, Haukanes H, Tadele, G. et al. The access paradox: abortion law, policy, and practice in Ethiopia, Tanzania, and Zambia. *Int J Equity Health*. 2019; 18 (126). <https://doi.org/10.1186/s12939-019-1024-0>
- [14] Mossie CB, Abera AD, Andualem AT. Dimensions of patient satisfaction with comprehensive abortion care in Addis Ababa, Ethiopia. *Reprod Health* 2016; 13 (144). <https://doi.org/10.1186/s12978-016-0259-0>
- [15] WHO. Health worker roles in providing safe abortion care and post-abortion contraception. Publications of the World Health Organization. 2015. available on the WHO website (www.who.int).
- [16] World Health Organization. Preventing unsafe abortion.2020. <https://www.who.int/news-room/fact-sheets/detail/preventing-unsafe-abortion>
- [17] Haddad LB, Nour NM. Unsafe abortion: unnecessary maternal mortality. *Rev Obstet Gynecol*. 2009; 2 (2): 122-126.
- [18] Owolabi OO, Biddlecom A, and Whitehead HS. Health systems' capacity to provide post-abortion care: a multicounty analysis using signal functions. *Lancet Glob Health* 2019; 7: e 110-18.
- [19] Kitila SB, Yadassa F. Client Satisfaction with Abortion Service and Associated Factors among Clients Visiting Health Facilities in Jimma Town, Jimma, South West, Ethiopia. *Quality in primary health care*. 2016; 24 (2): 67-76,
- [20] Tesfaye G, Oljira L. Post abortion care quality status in health facilities of Guraghe zone, Ethiopia. *Reproductive Health* 2013; 10: 35.
- [21] Becker D, Díaz-Olavarrieta C, Juárez C, García SG, Sanhueza P, Cynthia C. Harper. Clients' Perceptions of the Quality of Care in Mexico City's Public-Sector Legal Abortion Programm. *International Perspectives on Sexual and Reproductive Health*, 2011; 37 (4) 191-201, doi: 10.1363/3719111.
- [22] Wu PJ, Godfrey EM, Prine L, Andersen KL, MacNaughton H, Gold M. Women's Satisfaction With Abortion Care in Academic Family Medicine Centers.(*Fam Med* 2015; 47 (2): 98-106.

- [23] Ceylan A, Ertem M, Saka G and Akdeniz N. Post abortion family planning counseling as a tool to increase contraception use. *BMC Public Health* 2009, 9: 20 doi: 10.1186/1471-2458-9-20.
- [24] Mustafa G, Azmat SK, Hameed W, Ali S, Ishaque M, Hussain W, Ahmed A, Munroe E. Family Planning Knowledge, Attitudes, and Practices among Married Men and Women in Rural Areas of Pakistan: Findings from a Qualitative Need Assessment Study. *International Journal of Reproductive Medicine*. 2015. <https://doi.org/10.1155/2015/190520>
- [25] Muchie A, Getahun FA, Bekele YA, Samual T, Shibabaw T. Magnitudes of postabortion family planning utilization and associated factors among women who seek abortion service in Bahir Dar Town health facilities, Northwest Ethiopia, facility-based cross-sectional study. *PLoS ONE* 2021; 16 (1): e0244808. <https://doi.org/10.1371/journal.pone.0244808>
- [26] Mugore S, Kassouta NT, Sebikali B, Lundstrom L, Saad A. Improving the Quality of Postabortion Care Services in Togo Increased Uptake of Contraception. *Glob Health SciPract*. 2016; 4 (3): 495-505. Published 2016 Sep 29. doi: 10.9745/GHSP-D-16-00212.
- [27] Riley T, Madziyire GM, Owolabi O, Sully EA and Chipato T. Evaluating the quality and coverage of post-abortion care in Zimbabwe: a cross-sectional study with a census of health facilities. *BMC Health Serv Res* 2020; 20 (244). <https://doi.org/10.1186/s12913-020-05110-y>
- [28] Nebsu Asamrew, Abduilhafiz A. Endris, Musse Tadesse, "Level of Patient Satisfaction with Inpatient Services and Its Determinants: A Study of a Specialized Hospital in Ethiopia", *Journal of Environmental and Public Health*. 2020. <https://doi.org/10.1155/2020/2473469>
- [29] Cleeve A, Oguttu M, Ganatra B, Atuhairwe S, Larsson EC, Makenzius M. K. Time to act—comprehensive abortion care in east Africa. www.thelancet.com/lancetgh. 2016.
- [30] Ansari N, Zainullah P, Kim YM, Tappis H, Kols A, Currie S, Haver J, Roosmalen JV, Broerse JE and Stekelenburg J. Assessing post-abortion care in health facilities in Afghanistan: a cross-sectional study. *BMC Pregnancy and Childbirth*. 2015; 15.