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Research Article

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Assessment of Health Care Providers' Perception on Safe Abortion Care in Kimbibit District, North Shoa Zone, Oromia Regional State, Ethiopia, 2021

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Abstract

Background: *Abortion is termination of pregnancy before fetal viability. The induced abortion may be safe or unsafe abortion. In the worldwide about 22 million of unsafe abortion is occurring yearly. From this , 98% is occurring in developing countries. In Ethiopia about 30% of maternal death was related to unsafe abortion. Assessing the health provides' perception on safe abortion is important for setting interventions to reduce unsafe abortion.*

Objective: *To assessing health care providers' perception on safe abortion care in Kimbibit District, North Shoa, Oromia Region, Ethiopia, 2021.*

Methods: *An institutional based cross-sectional study design was conducted from March 25-April 5/2021. Two hundred eighty six health care providers included in the study. Data were collected using structured pretested questioner. Binary logistic regression analysis was used to identify the independent predictors' of Health Care providers' perception on safe abortion. Adjusted odds ratio and its 95% CI were used to measure the strength of statistical association and its significance respectively. Significant association was declared at p-value less than 0.05.*

Result: *A total 286 health care providers participate in the study. About 53.8% of the participants had favorable perception. Those respondents who are male (AOR=1.51; 95% CI: 1.09, 2.91), those in age group of 43-49 years (AOR=3.54; 95% CI: 1.00, 12.51), those who were married (AOR=2.13; 95% CI: 1.20, 3.76), those who had high attitude (AOR=5.58; 95% CI: 3.25, 9.59) were more likely had favorable perception toward safe abortion.*

Conclusion: *Health Care providers' perception on safe abortion was unfavorable. According to this study, Sex, age, marital status, attitude of respondents were determinant factors for perception of health care provider toward safe abortion. Therefore, to increase favorable perception of health care provider toward safe abortion on job training should be given.*

Keywords: Safe abortion, health care provider, pregnancy, fetal viability, Oromia Region.

List of abbreviation

AOR: Adjusted Odd Ratio
CI: Confidence Interval
COR: Cumulative Odd Ratio
EFMOH: Ethiopia Federal Ministry of Health
GNM: General Nurse Midwife
LNMP: Last Normal Ministerial Period
MVA: Manual Vacuum Aspiration

SAC: Safe Abortion Care
SMC: Sharp Metallic Curettage
SPSS: Statistical Package for Social Science
WHO: World Health Organization

1. Introduction

Abortion is the termination of pregnancy before fetal viability, which is conventionally taken to be less than 28 weeks from Last Normal Ministerial Period (LNMP); if LNMP is not known a birth weight of less than 1000gm is considered as an abortion [1].

Globally, over 42 million abortions are performed annually and 10–15% of the cases take place in second trimester period, over half of which are considered unsafe, and disproportionately contribute to maternal death [2]. Death due to unsafe abortion accounts a significant proportion (13%) of global maternal mortality. Each year an estimated 36 million to 53 million abortions are performed worldwide. Of this figure, around 20 million are considered unsafe [3]. World Health Organization (WHO) estimates show that the proportion of maternal mortality due to abortion complications ranges from 8% in Western Asia to 26% in South America, with a worldwide average of 13%. In developing countries complications of unsafe abortion causes between 50,000 and 100,000 women's deaths annually [3-5].

Unsafe abortions are of major public health problem. Half of abortions globally are unsafe or estimated to be between 21 million and 22 million; around one in ten pregnancies ends in an unsafe abortion. Almost all of them occur in developing countries, with the higher number of deaths concentrated in Africa, especially Sub-Saharan Africa, and South Asia [6]. Unsafe abortion is still common and demands a heavy toll on women in Ethiopia and 382,000 induced abortions occurred in 2008 and abortion rate is 23 per 1,000 women in reproductive age; 11-15 abortions occurred per 100 live births [7]. In 2008, World Health Organization (WHO) report indicate that 21.6 million unsafe abortion performed worldwide; from this 360,000 was done in developed region, 21,200,000 in less developed region, 4,990,000 in least developed countries, in Africa 6,190,000 was performed whereas 5,510,000 of them were done in sub-Saharan Africa counties [8].

Worldwide maternal death was estimated 287,000 from this 83.8% of maternal death were occurred in sub Saharan Africa and southern Asia. Worldwide 7.9% of the cause of maternal death was due to abortion and in sub Saharan Africa 9.6% the cause of maternal death was due to abortion [9]. Every year, more than 70, 000 women die as a result of unsafe abortion and hundreds of thousands may eventually suffer from a serious health consequence, and often, a permanent disability [10]. Ethiopia Federal Ministry of Health (EFMOH) in 2006 estimated that abortion-related deaths accounted for more than 30% of maternal deaths in Ethiopia. Besides this, access to second trimester abortions is severely limited. Only 9–10% of all facilities have a provider who can perform this service [11]. According to 2010 report of EFMOH, 32% of all maternal deaths in Ethiopia were related to unsafe abortion [1,12].

The study in India showed that the majority of them belief that trained General Nurse Midwives (GNM) would have capacity to provide abortion care [13]. Study performed in Ghana revealed that physician who believe abortion is illegal might reluctant to provide abortion service [14]. The study conducted in Adama show that 48% of health providers have positive attitude on safe abortion care [15].

Worldwide, most high-resource countries, abortion laws were liberalized between 1950 and 1985 on safety and human rights grounds [16]. Challenges such as service limitations, including shortages of facilities ready to provide legal abortions, lack of health professionals trained in safe techniques like manual vacuum aspiration, and opposition to abortion on the part of some trained health professionals are contributing to the unavailability and accessibility of Safe Abortion Care (SAC) services in the world [16, 17]. Induced abortions are legal on various grounds in several sub-Saharan Africa and Southeast Asian countries; However, the health care providers in these countries often persist in viewing induced abortion as immoral, rather than recognizing the legal status of abortion in their country [18]. A systemic review done in sub-Sahara and Southeast Asia factors influence Health Care providers' attitude towards abortion service were human right, gender, access, unpreparedness, quality of live, ambivalence, quality of care and stigma [19].

The study done in India showed that safe abortion care is not readily available to the country's vast rural population due to a lack of trained physicians and the scarcity of registered facilities [20]. In many low-resource countries, the stigma associated with abortions means that the providers offering these services suffer discrimination in and outside the work place [21,22]. The discrimination causes many providers to cease providing abortion services [21,22]. The study performed in Addis Ababa revealed that 75% health workers who participate on the study were not comfortable to working abortion and 25% of the participants agreed to on legal allowed under any circumstances; 27.7% favor on safe abortion and only 20.5% of the participants took training on safe abortion [23]. The study conducted in Adama showed that reasons of Health Care providers' not comfortable working in site where safe abortion was done were due to religious grounds, personal value, out of their scope of practices and lack of training (42.3%, 15.1%, 8.1 and 5%) respectively [15].

Even though it is major public health problem in Ethiopia, there is no enough and updated information about unsafe abortion practice. There are a limited number of studies related to unsafe abortion and little is known about the factors leading to this problem. One of the major causes of unsafe abortion is perception of health care provider related to legality of safe abortion.

Therefore, this study designed to assess health care providers' per-

ception on safe abortion service in Kimbibit District, North Shoa, Oromia Region, Ethiopia.

2. Methods And Materials

2.1. Study Area and Period

Kimbibit District has 4 health centers, 29 health posts, one district hospital, 6 private clinics and 4 private pharmacies. The study was conducted from March 25-April 5, 2021.

2.2. Study Design

A facility based cross sectional study was conducted in Kimbibit District.

2.3. Study Population

All health workers working in Kimbibit District who manage safe abortion were considered as source population for the study. All health workers working in health facilities who were able to manage safe abortion such as midwifery, nurses, health officers, general physician, emergency surgeons, who were living in health facilities during the study period used as the study population.

2.4. Sample Size Determination

This study was conducted using structured interview survey with health care providers' perception on safe abortion employed at government and private owned health facilities provide abortion care.

Multistage random sampling procedures were applied to select respondents. In the first stage, district-wise number of government and private owned health facilities were listed. There were five government and six private health facilities in the district. In the second stage, four government and five private health facilities providing safe abortion care were selected. In the third stage, a list of health care providers were prepared at each facility by contacting health facilities administrators and a total of 288 health workers who were providing safe abortion care (235 eligible respondents in the government and 53 in private health facilities).Out of total interviewed, 233(80.9%) from government, 53(18.4%) were from private health facilities whereas two care providers were on annual leave during interview.

2.5. Data Collection Tools And Procedures

In this study a pre-tested, self-administered structured questionnaire was used. The questionnaire was adopted from different literatures of similar study conducted in different part of the country [15, 23]. Data collectors and supervisor were trained on how to collect data, objective and methods of the study. They were also instructed on issues of confidentiality and rights of the respondents.

3. Operational definition

3.1. Abortion: is termination of pregnancy before fetal viability, which is conventionally taken to be less than 28 weeks from LNMP. If the LNMP is not known a birth weight of less than 1000gm [24].

3.2. Safe abortion: termination of pregnancy that is offered to client as permitted by the law[24].

3.3. Perception: respondents asked a serious of questions to know their perception. Accordingly, those score above the mean value were considered as favorable perception and those whose score below the mean value were considered as unfavorable perception.

3.4. Attitude: respondents asked a serious of questions to know their attitude. Accordingly, those who score above the mean were considered high attitude and those score below the mean were considered as low attitude [25].

3.5. Favorable responses: Agreeing with the positive statements (respondents those answer greater than mean perception score considered as favorable perception).

3.6. Unfavorable responses: Disagreeing for positive statement (respondents those answer with a score below mean perception score considered as unfavorable perception).

4. Data Quality Control

Before commencement of actual data collection, the questionnaires were pre-tested on 5% of the total sample size on similar Health care providers in different health facilities in neighbor district. Based on the findings of the pre test, there some content modifications were made. Data collectors were well instructed to check the completeness of each questionnaire whether every question was completely answered and supervisors as well as principal investigator were rechecked the completeness of the questionnaire immediately after submission.

4.1. Data Processing And Analysis

Data were coded, cleaned, entered using Epi data version 3.1 and exported to SPSS version 16 for further analyses. Descriptive statistics were carried out to compute different proportion, frequencies, and means were used for descriptive purpose. So as to identify the factors associated Health Care providers' perception towards safe abortion service bivariate and multivariate logistic regression analysis were performed and p-value < 0.05 were considered to indicate statistical significance. Variables with P at < 0.2 during bivariate logistic regression analysis were included in a multivariate logistic regression analysis to see the effect of confounding variables, adjusted odd ratio with 95% confidence interval at p-value $<$ 0.05 as significant level were calculated.

5. Result

5.1. Socio Demographic Characteristics of The Respondents

From total of 288 study participants 286 of health care providers were participated in the study which makes the response rate 99.3%. Among study participants 196 (68.5%) were male. The median age of respondent was 29 (±6.72) years. About 197 (67.1%) were currently married, of about 177 (61.9%) were orthodox follower and 31.1% were protestant follower. Majority of respondents 233 (81.4%) primary work place were government health facilities. From the participants 53.1% were nurse. About 56.3% of the respondents had less than or equal to 5 years of work experience (Table 1).

Variable	Frequency	Percentage
Sex respondents		
Male	196	68.5
Female	90	31.5
Age of respondents		
22-28	129	45.1
29-35	104	36.1
36-42	23	8.0
43-49	12	4.2
>=50	18	6.3
Marital status of respondents		
Married	197	68.8
Unmarried	86	30.1
Divorced	3	1.0
Profession of respondents		
Nurse	152	53.1
Midwifery	82	28.7
Health officer	39	13.6
General physician	11	3.8
Emergency surgery	2	0.7
Year of professional experience in year		
1-3	105	36.7
4-5	56	19.6
6-10	86	30.1
>10	39	13.6
Work place of respondents		
Government hospital	95	33.2
Government health center	138	48.3
Private clinic	53	18.6

Table 1: Socio-demographic characteristics study participants Kimbibit woreda, North Shoa, Oromia region, Ethiopia, 2021.

5.2. Health Facility Factors on Safe Abortion

Among respondents about 276(96.5%) were responded that the service was given in their health facility. About 217(75.9%) study participants respond that their facility had separate class for abortion and out of the participants who respond that safe abortion were not given in their facility were 60% were due to lack of training. Concerning the method given on safe abortion about 83.6% of the participants respond that both medical abortion & MVA methods were given in their health facility (Table.2).

Variables	Frequency	Percentage
Safe abortion given in health facility		
Yes	276	96.5
No	10	3.5
Separate class for safe abortion		
Yes	217	75.9
No	69	24.1
Reason of safe abortion didn't given in health facility		
Lack of training	6	60
Lack of man power	4	40
Abortion method given		
Medical abortion only	37	12.9
Both medical abortion & MVA	239	83.6

Table 2 : Health facility factors of safe abortion Kimbibit woreda, north Shoa, Oromia region, Ethiopia, 2021

Attitude of Health Care Providers on Safe Abortion

The overall attitude of health care providers towards safe abortion care had categorized as high and low attitude. Accordingly, about 55.2% of respondents had high attitude on safe abortion care, while 44.8% of them had low attitude on safe abortion care. The participants were asked whether unsafe abortion cause problem or not. As such, about 96.9% agree that unsafe abortion cause problem. Respondents asked whether expansion of access to quality abortion reduce unsafe abortion or not. About 82.2% agree that expansion of access to quality abortion care reduce unsafe abortion. Similarly, respondents asked whether they think women had the right to terminate pregnancy. About 40.2% agree that woman had the right to terminate pregnancy, while 25.2% disagree with the statement. Respondents asked whether they belief that people have no right to end one's life; it is the right of God/Allah or not. About 54.5% agree that it was the right of God/Allah (Table 3).

Variable	Frequency	Percent
Over all Attitude of respondents		
High attitude	158	55.2
Low attitude	128	44.8
Unsafe abortion cause problem		
Strongly disagree	2	0.7
Disagree	1	0.3
Neither agree nor disagree	6	2.1
Agree	134	46.9
Strongly agree	143	50
Do you think expansion of access to quality abortion service is reduce unsafe abortion		
Disagree	44	15.4
Neither agree nor disagree	6	2.1
Agree	236	82.5
Do you thing woman has the right to terminate pregnancy		
Strongly disagree	32	11.2
Disagree	72	25.2
Neither agree nor disagree	27	9.4
Agree	115	40.2
Strongly agree	40	14
Do you belief that people have no right to end one's life; it is the right of God/Allah		
Strongly disagree	32	11.2

Disagree	77	26.9
Neither agree nor disagree	21	7.3
Agree	99	34.6
Strongly agree	57	19.9

Table 3: Health Care providers' attitude on safe abortion Kimbibit woreda, North Shoa, Oromia region, Ethiopia, 2021

5.3. Perception of Health Care Providers on Safe Abortion Service

The overall perception of health care providers on safe abortion care categorized as favorable and unfavorable perception. Accordingly, about 53.8% of respondents had favorable perception on safe abortion, while 46.2% of them had unfavorable perception on safe abortion. The participants were asked whether they were comfortable or not. As such, about 57.7% agree that they were comfortable while doing safe abortion. Respondents asked safe abortion should be legal and accessible under any circumstance or not. About 50.3% disagree that safe abortion should not legal and accessible under any circumstance. The participants asked whether abortions at unregistered clinics are more harmful than registered or not. About 63.6% disagree abortions at unregistered clinics are more harmful than registered. And also the participants asked whether they perceive that drug addicted parents should be gate safe abortion service or not. About 52.4% agree that drug addicted parents should be gate safe abortion service. Similarly, the participants asked whether Legal abortion is used as a form of contraception or not. About 83.6% disagree that legal abortion was not used as a form of contraception. The respondents asked whether to minimize unsafe abortion; message about legalization of abortion should be informed by media or not. About 56.6% agree that to minimize unsafe abortion; message about legalization of abortion should be informed by media and also 63.3% were agree that strengthening adoption strategy is system to prevent abortion (Table.4).

Statements	Agree N (%)	Disagree N (%)	Neither agree nor disagree N (%)
Do you comfortable doing safe abortion	165(57.7)	108(37.8)	13(4.5)
Safe abortion should be legal and accessible under any circumstance	111(38.8)	144(50.3)	31(10.8)
Abortion at unregistered clinics are more harmful than registered clinic	89(31.1)	182(63.6)	15(5.2)
Drug addicted parents should be gate safe abortion service	150(52.4)	115(40.2)	21(7.3)
Legal abortion is used as a form of contraception	38(13.3)	239(83.6)	9(3.1)
To minimize unsafe abortion, message about legalization of abortion should be informed by media	162(56.6)	82(28.7)	42(14.7)
Strengthening adoption strategy is system to prevent abortion	181(63.3)	93(32.5)	12(4.2)
Essential supplies and drugs need to be adequately available for safe abortion	163(57)	110(38.5)	13(4.5)

Table 4: Health Care providers' perception on safe abortion Kimbibit woreda, North Shoa, Oromia region, Ethiopia, 2021

5.4. Factors Associated With Perception Of Safe Abortion

To identify factors associated with heath care provider perception toward safe abortion practice, first bivariate regression analysis was performed. At this level variable with p value <0.2 were included in multivariable logistic regression analysis to assess their independent effect on dependent variable. The result show that after controlling for confounding effects, covariates such Sex of respondents, age of respondents, marital status of respondents and attitude of respondents were significantly associated with perception of safe abortion.

As per the results of multivariable logistic regression analysis, the odds of perception of safe abortion of male respondents were 1.51 times higher than those female respondents (AOR=1.51; 95% CI: 1.09, 2.91). The odd of perception of safe abortion of those respondents who were in age group of 43-49 years 3.54 times higher than those in age group of >=50 years (AOR=3.54; 95% CI: 1.00, 12.51). Those who were married had 2.13 times higher odd of perception of safe abortion compared to unmarried one. Similarly, the odd of those who had high attitude were 5.58 times higher than those who had lower attitude (AOR=0.2; 95% CI: 0.04, 0.97) (Table.5).

Variables	Perception of safe abortion		COR [95% of CI]	AOR [95% of CI]
	Favorable N (%)	Unfavorable N (%)		
Sex of respondents				
Male	81(41.3)	115(58.7)	1.70(1.03, 2.81)*	1.51(1.09, 2.91)*
Female	49(54.4)	41(45.6)	1	1
Age of respondents				
22-28 years	65(50.4)	64(49.6)	0.51(0.18, 1.44)	0.95(0.48, 1.88)
29-35 years	41(39.4)	63(60.6)	0.33(0.11, 0.93)*	1.68(0.50,5.62)
36-42 years	7(30.4)	16(69.6)	0.22(0.06, 0.82)*	2.20(0.45, 10.77)
43-49 years	5(41.7)	7(58.3)	0.36(0.08,1.62)	3.54(1.00, 12.51)*
>=50 years	12(66.7)	6(33.3)	1	1
Profession of respondents				
Nurse	64(42.1)	88(57.9)	1.67(0.97,2.87)	1.47(0.76, 2.85)
Midwifery	45(54.9)	37(45.1)	1.45(0.71, 2.93)	1.89(0.73, 4.93)
Health officer	20(51.3)	19(48.7)	0.31(0.06, 1.46)	0.73(0.13, 4.00)
General practitioner	0(0.0)	11(100)	1.37(0.08, 22.39)	4.47(0.21, 95.11)
Emergency surgeon	1(50)	1(50)	1	1
Marital status of respondents				
Married	78(40.6)	114(59.4)	0.51(0.31, 0.85)**	2.13(1.20, 3.76)**
Unmarried	52(57.1)	39(42.9)	1	1
Presence of separate class for abortion in the facility				
Yes	92(42.4)	125(57.6)	1.66(0.96, 2.87)	1.09(0.55, 2.15)
No	38(55.1)	31(44.9)	1	1
Attitude of the respondents on safe abortion				
High attitude	99(63.1)	58(36.9)	5.58(3.31, 9.40)*	5.58(3.25, 9.59)**
Low attitude	30(23.4)	98(76.6)	1	1

*AOR=adjusted odd ratio, COR= cumulative odd ratio, other religions are 1catholic, 1wakefata.

Table 5: Factors associated with Health Care providers' perception on safe abortion Kimbibit woreda, North Shoa, Oromia region, Ethiopia, 2021

6. Discussion

The study attempted to assess the overall perceptions of health care provides toward safe abortion care and associated factors in Kimbibit woreda, North Shoa, Oromia region, Ethiopia. Different research findings show perception of health care provider and other different factors affect successful services of safe abortion [19,26]. Similarly, different factors associated with abortion are supposed to have an impact on the perception of health care providers, and this in turn affects the overall safe abortion [19,27,28]. Therefore, dealing with the perception of health care provider and understanding the impacts of associated factors is important step to minimized and stop maternal morbidity and mortality. So, this study tried to assess the overall perception of health care provider and associated factors toward safe abortion.

According to this study, the magnitude of favorable perception of health care provider toward safe abortion was 53.8%. This indicates that fairly higher number of health care providers had favorable perception towards safe abortion care. Result of this study almost consistent with result of study done in Adama town, Ethiopia which show that 48% of the respondents were found to have favorable perceptions towards safe abortion care [29]. However, the result is somewhat lower than study done in Addis Ababa, Ethiopia, 2015 which found 56.7% of respondents had favorite attitude toward safe abortion care [30]. Similarly it is also lower than a study done in Addis Ababa, Ethiopia in which about 75% of respondents were comfortable in performing safe abortion [31]. The difference might be due to variation in data collection tool use of different cut-off points, sample size, sampling methods, study setting and study participant's variation.

Safe abortion legal restrictions that establish the circumstances under which a women can legal terminate a pregnancy [19,26]. Unsafe abortions are directly correlated with poverty, social inequity and the constant, methodical denial of women's' human rights [19]. In many countries where the abortion law has been

liberalized, abortion still gives rise to controversy both among health professionals and among the general public, not the least in countries where faith traditions and practices are prevalent, as is the case in sub-Saharan Africa, including Ethiopia [32]. Similar to this, result of this study show that about 50.3% of study participants were dis-agreed that safe abortion should be legally accessible under any circumstance. The study done in Adama show that 44.6% of the participants' reports that legalization of safe abortion service reduces maternal mortality due to unsafe abortion service [15]. However, study done in Zimbabwe show that about 78% community support legal and safe abortion [33].

Researchers identified sex of respondents is one of determining factors of perception of health care providers toward safe abortion. According to this study those male respondents were more likely to have favorable perception abortion. However to this studies, many studies done in Ethiopia show that sex of respondents do not significantly associated with health care provider's perception of safe abortion [19,29,34].

This study show that 55.2% of the respondents had high attitude towards safe abortion and 54.9 % of the participants participate on safe abortion. From those participants who didn't participate on safe abortion 66.6% of them rose that they didn't took the training. The same to this study the study done in Addis Ababa health centers 54.1% of the respondents had positive attitude towards safe abortion [23]. The study in Asella hospital show that 44.9% of the participants didn't participate on safe abortion and 39.2% of the respondents didn't participate on safe abortion due to lack of training [35]. The differences were due to this study done both in health center and hospital.

7. Conclusion

Greater than half of Health Care providers' perception on safe abortion was favorable. About 96.5% responded that safe abortion service was given in their facility the rest were raised their health facility didn't give safe abortion practice due to lack of trained man power. According to this study, Sex, age, marital status, attitude were determinant factors for perception of health care provider toward safe abortion.

Recommendation

• It is better if ministry of health give training for health providers who give safe abortion service at all level

• Health facilities facilitate for health providers to take on job training on safe abortion.

• Government and non-government sectors should work to improve health provider's attitude on safe abortion.

• Further qualitative study should be done on perception of health care provider

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