

ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES SCHOOL OF ALLIED HEALTH

SCIENCES DEPARTMENT OF NURSING AND MIDWIFERY

ASSESSMENT OF HEALTH CARE PROVIDERS' ATTITUDE AND ASSOCIATED
FACTORS TOWARDS SAFE ABORTION CARE AT PUBLIC HEALTH INSTITUTIONS
IN EAST GOJJAM ZONE, AMHARA, ETHIOPIA, CROSS SECTIONAL STUDY, 2015

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Acronyms

EDHS...Ethiopia Demographic and Health Survey

GA.....Gestational age

GP.....General practitioner

GYN.....Gynecologist

HCP.....Health care provider

HF.....Health facility

HO.....Health officer

IRB.....Institution review board

LNMP...Last normal menstrual period

MDG....Millennium Development goal

OBY.....Obstetrician

PAC.....Post abortion care

SAC.....Safe abortion care

SPSS....Statistical Package for social sciences

WHO--World Health Organization

ABSTRACT

Background: Globally, unsafe abortion has become one of the fifth causes of maternal mortality and morbidity. Studies suggested that health care providers' attitudes towards safe abortion had an impact on safe abortion. In the countries where abortion is one of the major challenges, such attitudinal assessment is vital. The reason is that in Ethiopia, the annual rate of abortion was 23 per 1, 000 women aged 15-44 and the abortion ratio was 13 per 100 live birth. It was supposed that maternal mortality is closely related to the quality of health facilities and professionals.

Objective: Assessment of Health Care Providers' Attitude and Associated Factors towards Safe Abortion care at Public health institution, in East Gojjam zone Amhara, Ethiopia, Cross Sectional Study, 2015.

Method: A descriptive cross sectional study was done from January to June, 2015 using self administrative questionnaire. 249 samples of health care providers were targeted. Of these, 238 respondents completed and returned the questionnaires completely. Hence, with the response rate of 96.5%, the data was coded into Epi data version 3.1 and computed with SPSS version 21 for its statistical significance and cross tabulation. The data was interpreted with simple frequency distribution, cross tabulation, logistic regression for statistical significance with confidence interval of 95 % of alpha 0.05.

Result : The study revealed that 92.4% of health care providers believed that unsafe abortion was one of the major health problems in Ethiopia. Providers who had formal training were 3.740[95% CI 1.728-8.094] times more likely to have favorable attitudes than those who had no training. Similarly, providers who had perform abortion were 2.025[95% CI 1.050-3.905] times more likely to have favorable attitudes than those who did not perform. Those health care providers who needed more legalization were 2.243[95% CI 1.059- 4.752] times more likely to have favorable attitudes than those who did not support more legalization

Conclusion and Recommendation: It was concluded that training and more legalization were found to be significant to determine the attitudes of health care providers. It is recommended that health care providers should be given abortion training and legalization to abortion should be more liberalized than the current status.

Key words: Health care provider, attitude, and safe abortion care

1. INTRODUCTION

1.1 BACKGROUND

Abortion is the termination of a pregnancy by the expulsion of a fetus or embryo from the uterus. An abortion can occur spontaneously due to complications during pregnancy or can be induced. By convention, induced abortion is usually defined as pregnancy termination prior to 20 weeks (for developed countries) and 28 weeks (for developing countries) gestation or less than 500-gm birth weight; it can be safe or unsafe abortion. Hence, unsafe abortion is one of the major medical and public health problems in developing countries including Ethiopia. However, there is a lack of up-to-date and reliable information on induced abortion distribution and its determinant factors in the country. In settings where abortion is legally restricted or access to safe services is limited, women with unwanted pregnancies often resort to unsafe abortions (1, 2).

According to some recent reports, unsafe abortion rate has been found to be significant. For instance, out of 42 million abortions, 20 millions are unsafe abortions in each year. It is also reported that 47, 000 women died due to complication of unsafe abortion in 2008 according to WHO. The result of unsafe abortion has happened because of those people who lack skills or unmet minimal medical standard or either both cases (3). As a result, unsafe abortion has become one of the four causes of maternal mortality and morbidity. This may be because of the unavailability of safe abortion almost in all countries. It is also stated that all deaths of maternal and morbidity because of unsafe abortion occur in countries where abortion law is restricted (4).

In general, unsafe abortion and related factors have been the most dominant challenges which affect maternal mortality and morbidity. This global maternal health problem has seriously affected the Millennium Development Goal (MDG)5 which has been set to address maternal health improvement such as reducing maternal mortality and morbidity by the year 2015 (5). It makes the challenge series when we come to Africa. This is to mean that the impact of unsafe abortion is higher in Africa which accounts 62 % deaths are related to unsafe abortion according to WHO reports in 2008. It is also reported that the risk of maternal mortality is much higher in sub Saharan African as compared to developed regions (1 in 30 versus 1 in 5600) (6). Hence, though there is a tendency of progress in maternal health issues, there is

still maternal mortality and associated challenges on women's life especially in developing countries such as sub Saharan Africa countries including Ethiopia (4).

1.2 STATEMENT OF THE PROBLEM

Unsafe abortion has remained the major problem for the death of women in the world scope. In this regard, WHO (2003) reported that almost 20 million induced abortions which are unsafe created a burden of approximately 67 thousand deaths each year. The worst is that about 97% of unsafe abortions occur in developing countries. In addition to this pregnancy related deaths and attributed physical and psychological damages have been reported that they are the consequences of unsafe abortion. WHO (2012) also reported that approximately about 47,000 pregnancy-related deaths and 5 million suffer from disability are the effects of unsafe abortion and complications(4).

In addition, almost half of overall abortions have been practiced by unskilled practitioners and/or less standard sanitation or under both conditions. Hence, it is one of public health concerns in many parts of the world. This worldwide reality has become one of the challenges for many Ethiopian women or/and all reproductive ages (7).

Ethiopia is one of the African countries where maternal health and associated problems have been found to be the focus of health concern. Nationally, the annual abortion rate was 23 per 1,000 women aged 15–44, and the abortion ratio was 13 per 100 live births. The abortion rate in Addis Ababa (49 per 1,000 women) was twice the national level. Overall, about 42% of pregnancies were unintended, and the unintended pregnancy rate was 101 per 1,000. However, maternal health related problems such as abortion, post abortion complication and maternal deaths are found to be the major challenges in clinical and related services. It is also reported that the —improvement in maternal mortality is closely related with the access to and the quality of health facilities and professionals (5).

A study done by the Ethiopian Society of Obstetricians and Gynecology found that only 29 percent of health workers knew the correct provision of the penal code for termination of pregnancy. According to an abortion care expert who is familiar with abortion in legally transitioning countries, including abortion skills as part of the training of midlevel providers, nurses and physicians, is crucial to increase availability of safe abortion services. Furthermore, the negative attitudes of health care providers create barriers for women in

seeking safe abortion services. Providers must be educated on their ethical obligations to perform abortion services for women whose circumstances fall under the revised penal code or refer them to a physician who will (8). Despite their professional code of conduct and training, health care providers may carry religious, cultural and societal biases that inhibit them from providing services when abortion is legally permissible. Individuals who refuse to perform certain medical services because of religious or moral beliefs are commonly known as conscientious objectors.

Some conscientious objectors display their intolerance for the abortion law by refusing to complete routine training for abortion-related equipment (6). Health care providers must be educated on the revised penal code and its legal obligations, which they are required to fulfill. Ethiopia has a limited number of gynecologists and midwives. Hence, health officers and nurses are allowed to perform an abortion (up to the 12th week of gestation) but are often not properly trained. In addition, they are often unaware of the newly revised abortion laws (8).

Unsafe abortion is thus an urgent issue. Both of the primary methods for preventing unsafe abortion less restrictive abortion laws and greater contraceptive use face social, religious, and political obstacles, particularly in developing nations, where most unsafe abortions (97%) occur. Even where these obstacles are overcome, women and health care providers need to be educated about contraception and the availability of legal and safe abortion, and women need better access to safe abortion and post abortion services. Otherwise, desperate women, facing the financial burdens and social stigma of unintended pregnancy and believing they have no other option, will continue to risk their lives by undergoing unsafe abortions (9).

Ethiopia is said to be the major contributor to worldwide death of mothers as a result of unsafe abortion, obscured labor puerperal sepsis, eclampsia and hemorrhage'. It is estimated that maternal mortality ratio is about 676 and 19, 000 maternal death annually (10). In 2008, an estimated 382,000 induced abortions were performed in Ethiopia, and 52,600 women were treated for complications of such abortions. There were an estimated 103,000 legal procedures in health facilities nationwide 27% of all abortions. Unsafe abortion is still common and exacts a heavy toll on women in Ethiopia. To reduce rates of unplanned pregnancy and unsafe abortion increased access to high-quality contraceptive care and safe abortion services are needed (11).

These and other related studies have shown that safe abortion and associated factors have been found to be the serious problems in Ethiopia in various regions. However, this study attempts to examine health providers' attitudes towards safe abortion care and fill the gap by assessing the attitudes of health care providers and associated factor in East Gojjam Zone public health intuitions where there was no any further study before on this issue as far as the knowledge of principal investigator is concerned. The study also needs to attain the knowledge and practice of safe abortion on the study settings. Hence, this study attempts to investigate the attitude of health providers' towards safe abortion; and identify associated factors in Amhara Regional State in East Gojjam Zone public health institutions.

1.3 SIGNIFICANCE OF THE STUDY

The study attempts to assess the attitudes of health care providers towards safe abortion care and to identify factors associated with health care providers' attitudes. The outcome of this study will give an insight what safe abortion problems are serious matters in the research site. In addition, the study enhances the awareness of health providers on the issue of maternal and safe abortion care services. In short, the outcome of this study will benefit policy makers and maternal health training providers as well. More significantly, the study can contribute something to the national level maternal health policy and strategies which may be the response to millennium development goal 5 as well. Hence, the result of the study will give an insight for those who may need to know what is going on public health provisions on safe abortion and related factors. In general, the study will have policy and practical relevance in response to safe abortion care services and other associated issues. Finally, this research may be used as foot step for further research in this topic and related matters.

2. LITERATURE REVIEW

Unsafe abortion remains one of the major causes of injury and death among women worldwide. Literature has shown those health care providers' attitudes can affect reproductive health services such as safe abortion care. According to global policy change and women's access to safe abortion the numerous obstacles to the provision of abortion services exist including: barriers to mid-level provider, negative provider attitudes, insufficient supplies of technologies, women's inability to access services, and lack of political will (12).

Studies in Nigeria and Zambia on attitudes and legality of abortion, and health care providers have shown that there is a connection on attitudes and safe abortion complications and associated problems. Some of the reasons in Nigeria for maternal deaths are related to hemorrhage, infection, illicit abortion and obstructed labor. Regarding legality, in Zambia, about 41% respondents reported that abortion should be legal. In Nigeria, sepsis is said to be the commonest problem in abortion practices. It takes about between 49 and 80 percent in abortion practices.

This has happened because of unskilled abortion providers' use of unsterile instruments. Hence, overall attitudes and being unskilled practitioner in the process of abortion can have an impact on safe abortion. Many of abortion related deaths in Nigeria may occur because of non medical qualified abortionists (13).

As study shows that knowledge, attitudes and practices of medical practitioners in Calabar, many responded that they had negative attitudes towards unwanted pregnancy and they often do not want to help women who may come with such problems and counsel them to continue with the pregnancies. Some 25.1% of the doctors often refer such women to clinics that perform terminations, the reason for this negative reaction is related to religion, moral considerations and the perception that abortion is against their profession (14).

On the Assessment of Provider Knowledge, Attitudes and Practices in Latin American and Caribbean Countries, when asked about training the majority of the respondent (79%) receiving training in both surgical and medical methods of abortion, the vast major (83%) of providers also agreed that greater access to abortion services could reduce maternal mortality.

Provider perceptions of the appropriateness and acceptability of abortion services as part of the continuum of reproductive health services reveals support for broader access to safe voluntary termination of pregnancy but some reluctance and personal opposition to offering abortion services. While most care providers (67%) agreed that expansion of access to quality abortion services was a key step to reducing the toll of unsafe abortion only half of care providers believed that their association should be directly involved in the provision of safe abortion services to meet that need. A considerable proportion of care providers (44%) said that they personally would not feel comfortable working in a site that performed terminations of pregnancy. when asked about legalization the majority of providers (71%) in support of liberalization of abortion legislation were only in favor of nominal liberalization of the law to allow women, while the majority (62%) of providers agreed that only a woman should have the right to decide whether she should terminate a pregnancy, only 36% of providers said they believed that a woman should have that right regardless of her reason for not wanting to continue the pregnancy (15).

From the study of Argentina on Health care providers' opinions on abortion: when asked about legalization of abortion the majority of the respondents (97%) abortion should be legal in case of danger to woman's life), risk to health (89%), rape (80%) and fetal malformations (86%), but revealed substantially less agreement for socio-economic conditions (20%) (16).

Empirical studies in health care providers' attitudes and safe abortion care service in Ethiopia suggested various results in relation to different associated factors. Some studies have shown that health care providers have positive or favorable attitudes towards safe abortion care service To the contrary; some other local studies have indicated that care providers have shown unfavorable attitudes towards abortion for various reasons to be mentioned. This argument has still continued in most or recent works. Accordingly, Zaid (2012) reported that 94.6 % of 81 % respondents who had never performed safe abortion showed their favorable attitudes towards safe abortion. To the contrary, Jemilla (2008) identified that only the quarter of the majority respondents needed to participate in termination of pregnancy. Accordingly, 37 % of health care providers showed willingness to participate in pregnancy termination and 41. 8% of the participants had

been pro-legalization. When asked if they had formal training on procedures terminate pregnancy, only 29.4% responded in the affirmative. Of those who had previous training, the majority (85.4%) had training on MVA procedure. The result from the fitted regression shows that those who already performed safe abortion service were 2.57 (95% CI 1.49-4.44) times more likely to have a favorable attitude than those who hadn't practice safe abortion service (17,18).

According to Abraham result, When asked about definition of abortion, around 63.3 % of them defined abortion which is conventionally taken to be less than 28 weeks, while a response to a question of whether SAC service should be provided to a pregnant woman with an incident case or not, almost 87% of respondents agreed with the idea termination it. While 6.6% of them did not support the idea of providing SAC service to such causes. A seventy two percent of positive response was reported by providers to permit SAC service to a woman who was below 18 years old though 8% of the participants would refuse to permit the service. Mean while, around 84.5% of health providers assured their interest to allow SAC to service seeking women who encountered a pregnancy that endangers or threatens their life (19).

2.1 Conceptual Framework

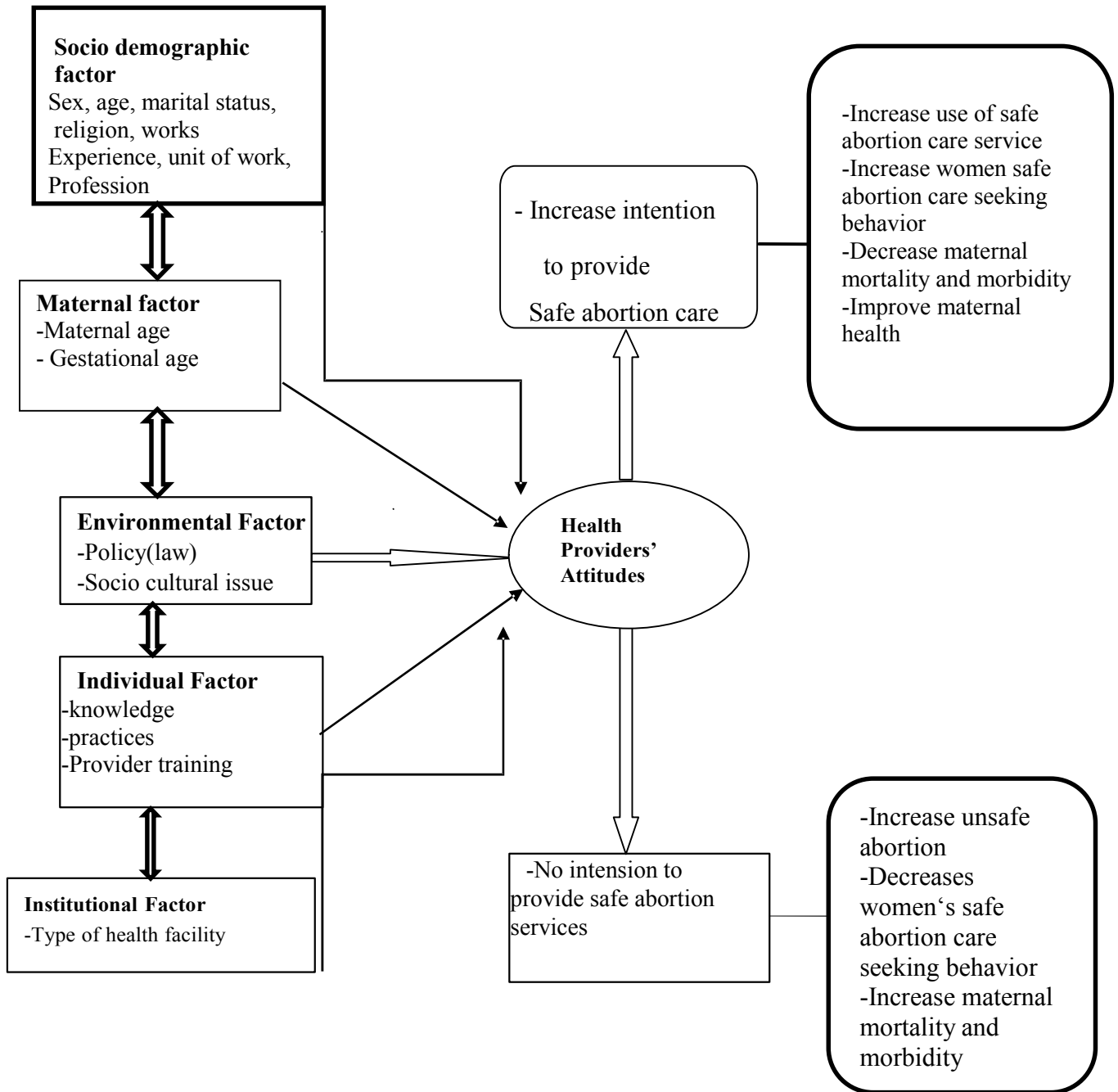


Fig.1: conceptual frame work

Source: Modified from Conceptual framework assessment of evaluating safe abortion programs (Benson 2005); and Knowledge, Attitude and Intention by Tarekegn Asmamaw, 2011(20, 21)

3. Objectives

3.1 General Objective

- To assess the overall attitude of health care providers and associated factor towards safe abortion care at public health institutions in East Gojjam zone, 2015.

3.2 Specific Objectives

- To assess the overall attitudes of health care providers towards safe abortion care.

- To assess the associated factors which affect the attitudes of health care provider to Provide safe abortion care.

4. METHODOLOGY

4.1 Study Area

The study was done in East Gojjam Administrative Zone in Amhara Region which is found to North -West of Addis Ababa around 300 kilometers to find its main town- Deberemarkos. This study focused on woreda and zonal towns public health institutions such as hospitals and health centers found in East Gojjam Administrative Zone. In zonal and woreda towns, there were twenty one public health institutions. Of these, fifteen health institutions were selected using random sampling method.

4.2 Study design

A cross-sectional descriptive institutional based study was done in East Gojjam Zone by using quantitative data collection method with self administered questionnaire.

4.3 Study period

The duration of the project was from January to June 2015 and the data collection period was from April to may 2015.

4.4 Source population

The population of this study included all health care providers at selected health facilities.

4.5 Study population

Those sampled health care providers at public health institutions selected using simple random sampling by lottery method.

4.5.1 Inclusion criteria

All health care providers such as nurses, midwives, GP, HO, GYN and OBY specialist who were working at the selected public health institution during the data collection time involved in the study.

4.5.2 Exclusion criteria

Pharmacist, laboratory technician, radiologist, health care provider with less than six month experience and free services health care provider were excluded from the study.

4.6 Sample size

The sample size was determined by using a formula for estimating a single population proportion. Prevalence was taken as 44% from a previous similar study conducted in Addis Ababa Ethiopia; within 5% marginal error and 95% confidence interval of certainty ($\alpha=0.05$). Based on this assumption the actual sample size for the study was calculated as below. Since the study population was less than 10,000 finite population correction formulas was applying. Finally after adding 10% non-response rates, the total sample size required for this study appeared to be 249 health care providers'.

$$n = \frac{z\left(\frac{\alpha}{2}\right)^2 * P(1-p)}{d^2}$$
$$n = \frac{(1.96)^2 * .44(1-.44)}{.05^2}$$
$$\underline{n = 378}$$

Where: P = 44%, estimated proportion of health care providers attitude towards safe abortion (Jemilla abdi, 2008).

d = the margin error between the sample and the population.

$Z_{\alpha/2}$ = critical value at 95% confidence level of certainty (1.96)

The total number of health provider in east Gojjam public health institution is around 568 so since this figure is below 10,000 we use the following adjustment for the sample size: i.e.

$$Nf = n + (1 + n/N) \quad \text{Where: - } Nf = \text{corrected sample}$$

n = Minimum sample size

N = number of health provider

Therefore, $Nf = 378 + (1 + 378/568) * 10\%$ non response rate

$$\underline{n=249}$$

4.7 Sampling procedure

Simple random sampling technique was used for selection of health facility out of 18 woreda town and one zonal town health facility. The total number of health care provider found in each health facility was considered and proportional sample size was calculated for each health facility so as to give the total sample size. And then respondents' health care provider was selected by simple random sampling

$$n_j = \frac{n}{N} N_j \quad (\text{Proportionate allocation}) \quad n = 0.438$$

Where n_j = total sample size

N_j = is population size of the j^{th} stratum

n = number of respondents to be selected from facility

N = Total number of health care provider in health facility

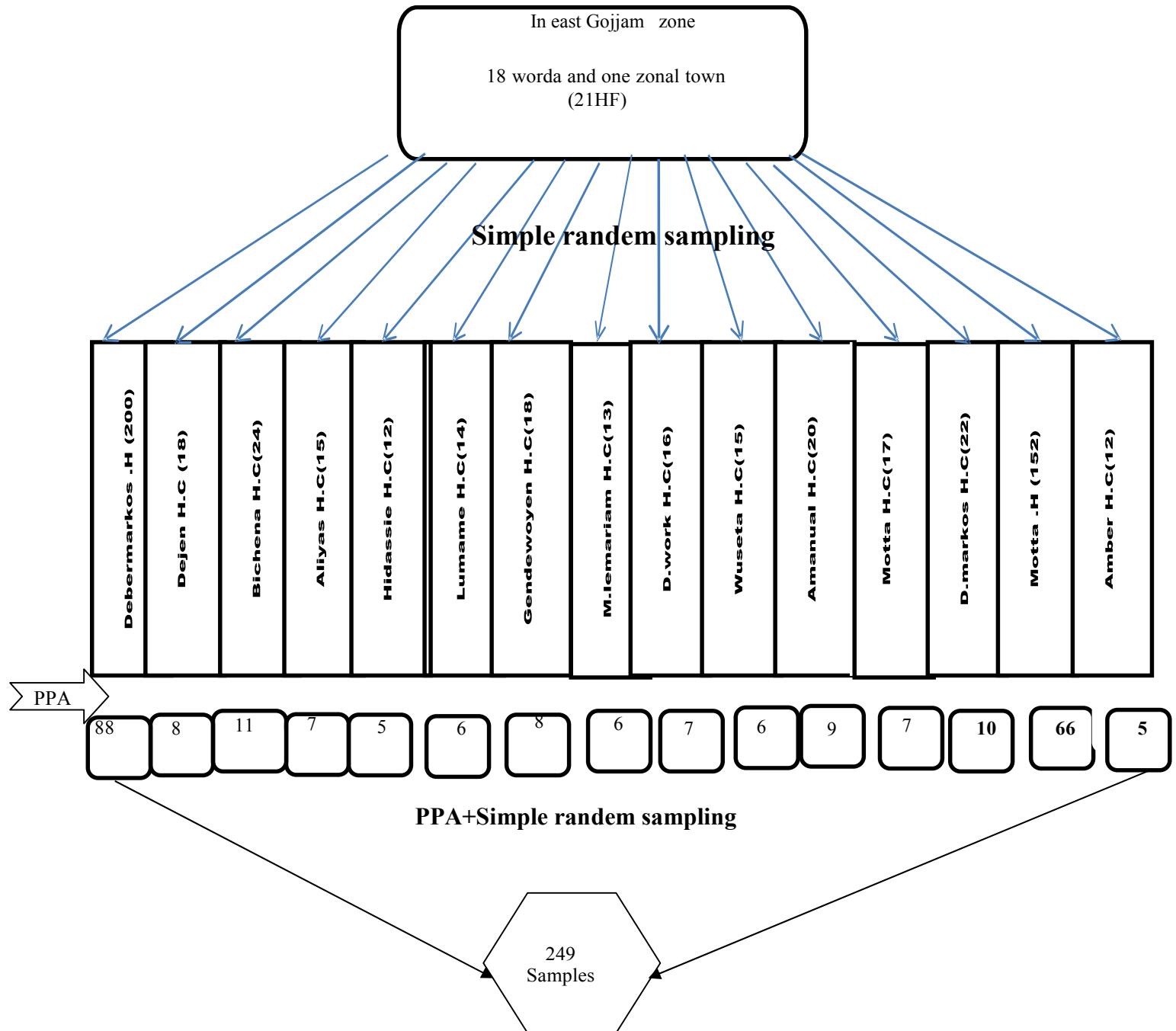


Figure 2 schematic presentation of sampling procedure.

4.8. Data collection Methods

In order to collect relevant data from respective respondents, self-administered questionnaire was administered. The questionnaire was prepared from the existing literature of attitudes towards safe abortion care. It included the main categories of socio demographic characteristic, attitudes and factor associated that affects attitude. Each item in the self-administered questionnaire was to be rated as **'_yes'** or **'_no'**; and **'_I agree'**, **'_I disagree'** and **'_uncertain'** accordingly.

4.9. Data Collection Procedure

Before the actual data was collected, to keep the quality of the data pretest was conducted 2week prior to the main data collection time on 25 health care providers' from different health facility atDeberemarkos town. Based on the response of the pretest questions, some modification on some items was made. In this regard only two questions were corrected by minimizing the choices to manageable size. In order to distribute the questionnaires, six data collector and two supervisors were recruited who had previous experience to collect data. Regarding this procedure self- administered questionnaire was conducted to the respondents of this study and the main data was collected from respective respondents of the study.

4.10. Variables

4.10.1. Dependent variable

-Attitudes of Health care provider towards safe abortion care.

4.10.2. Independent variables

- **Socio demographic factor:**

- Sex, age, marital status, religion,works Experience, unit of work, Profession

- **Institutional Factor**

-Type of health facility.

- **Individual Factor**

-Knowledge, practices, provider training.

- **Environmental Factor**

-Law(Policy), Socio cultural issue.

- **Maternal factor**

-Maternal age

-gestional age

4.11. Operational definition

Attitude: refers to the participants' response as favorable or unfavorable attitudinal statement towards safe abortion care. Favorable responses were agreeing with the positive statements, Unfavorable responses were disagreeing and uncertain for positive statement. The respondents could answer greater than 50% out of hundred was taken to have favorable attitude and those with a score below 50% as unfavorable attitude.

Knowledge: the response of the correct subjects towards safe abortion care was quantified out of hundred. Knowledge scores 50% or less was labeled as poor knowledge, knowledge scores above 50% as –good knowledge.

Abortion is defined as the termination of pregnancy before 28 weeks of gestational age by the removal or expulsion from the uterus of a fetus or embryo prior to viability.

Unsafe abortion is a procedure for terminating un-wanted pregnancy before 28 weeks of gestational age either by persons lacking the necessary skills or in an environment lacking the minimal medical safety standards or both.

Safe abortion is the termination of pregnancy before 28 weeks of gestational age by qualified and skilled persons using correct techniques in sanitary conditions.

Health care provider: referred to health care professional or group of health care professional who provide services to patient those professional are which includes, OBY and GYN specialists, GP, nurses(diploma & degree), midwife (diploma & degree), and, health officer.

More Legalization: refers Legalization to abortion which is open or unrestricted law as compared to the current legalization.

4. 12. Data completion and analysis

Epi data 2000 and SPSS version 21 were used for data entry, cleaning and analysis. The results was interpreted by employing frequency tables, percentages, odds ratio and 95% confidence limit. Moreover, to appreciate the association between variables, logistic regressions was computed.

4.13. Data presentation

The data was present by using different method words, table and different types of graph.

4.14. Ethical consideration

Ethical clearance was obtained from AAU, department of nursing and midwifery research committee and college of health science institutional review board. Then formal letter of cooperation was written to Amhara regional health Bureau, and selected east Gojjam public health institution. Each study participant was adequately informed about the purpose, method and anticipated benefit. Informed consent was obtained from study participants, all health providers to participate in the study were asked for their willingness to participate in the study. Additionally confidentiality of the data was seriously respected.

4.15. Dissemination and utilization of result

The finalized report will be disseminated to Addis Ababa University collage of health science school of allied department of Nursing and midwifery, Addis Ababa and Amhara national regional health bureau and also other non-governmental organizations working on reproductive health and abortion care services and also distribute to hospitals, health center and all concerned bodies. Hard and soft copy will be made available in the library of AAU, for graduate students as well as for other concerned readers or relevant bodies. Finally, an attempt will be made to present the thesis on various international and/ or local workshops. There will also be an attempt for publication on scientific journals of local and international publishers.

5. Results

5.1. Socio-demographic Characteristics of the respondents

The study attempted to analyze the attitudes of health care providers' towards safe abortion care and associated factors. To do so 249 questionnaires were distributed and from that 238 questionnaires were completed and returned with a response rate of 95.6 %. Of 238 respondent of health care providers, 132 (55.5%) were females and 106 (44.5%) were males. The majority (93.3%) respondents were Orthodox Christian. Regarding ethnicity, 95% were Amhara. Almost married and single respondent were equivalent with 49.2 and 48.3 % respectively.

Above half of the respondents were Nurse Professionals (58.8%) followed by Midwifery (16.4 %) and Health Officers (11.8 %), GP physicians (9.2 %) and GYN specialist (3.8 %). These professionals were involved in various unit of work such as in OPD (36.6%) which included greater number of respondents followed by MCH (26.5%). The majority of the respondents (30.7%) had work experiences between 5 and 10 years; and 23.1% of respondents had 3 up to 5 years of experiences.

Table 1: Distribution of Socio-Demographic Characteristics Health care Providers, East Gojjam Zone, Ethiopia, 2015 (n= 238).

Variables	Frequency	Percent (%)
Sex: male	106	44.5 %
female	132	55.5 %
Total	238	100.0
Age: 20-25	61	25.6 %
26-30	105	44.1 %
31-40	44	18.5 %
41-50	13	5.5 %
>50	15	6.3 %
Total	238	100.0
Religion: Orthodox	222	93.3 %
Muslim	8	4.6 %
Protestant	7	2.1 %
Total	238	100.0
Ethnicity: Amhara	226	95.0 %

	Oromo	6	2.5 %
	Tigre	1	.44 %
	Gurage	3	1.3 %
	other	2	.8 %
	Total	238	100.0
Marital Status	Married	117	49.2 %
	Divorced	5	2.1 %
	Widowed	1	.4 %
	Single	115	48.3 %
	Total	238	100.0
Profession:	Oby & Gyn Specialist	9	3.8 %
	Gp(Physician)	22	9.2 %
	Midwifery	39	16.4 %
	Nurse	140	58.8 %
	Ho	28	11.8 %
	Total	238	100.0
Unit of Work:	MCH	63	26.5 %
	OPD	87	36.6 %
	Medical ward	14	5.9 %
	Surgical ward	15	6.3 %
	Pediatric ward	27	11.3 %
	other	32	13.4 %
	Total	238	100.0
Work Experience	6mons-1yrs	23	9.7 %
	1yrs-3yrs	45	18.9 %
	3yrs-5yers	55	23.1%
	5yrs-10yrs	73	30.7 %
	>10yrs	42	17.6 %
	Total	238	100.0

5.1 Overall Attitudes of Health Care Providers' towards SAC East Gojjam Zone, Ethiopia, 2015 ((n= 238).

As shown in the pie chart below, the overall attitudes of health care providers' towards safe abortion care had been categorized as favorable and unfavorable. Of all respondents, 135 (56.7%) had favorable attitude towards safe abortion care; and 103 (43.3%) had unfavorable attitude towards safe abortion care.

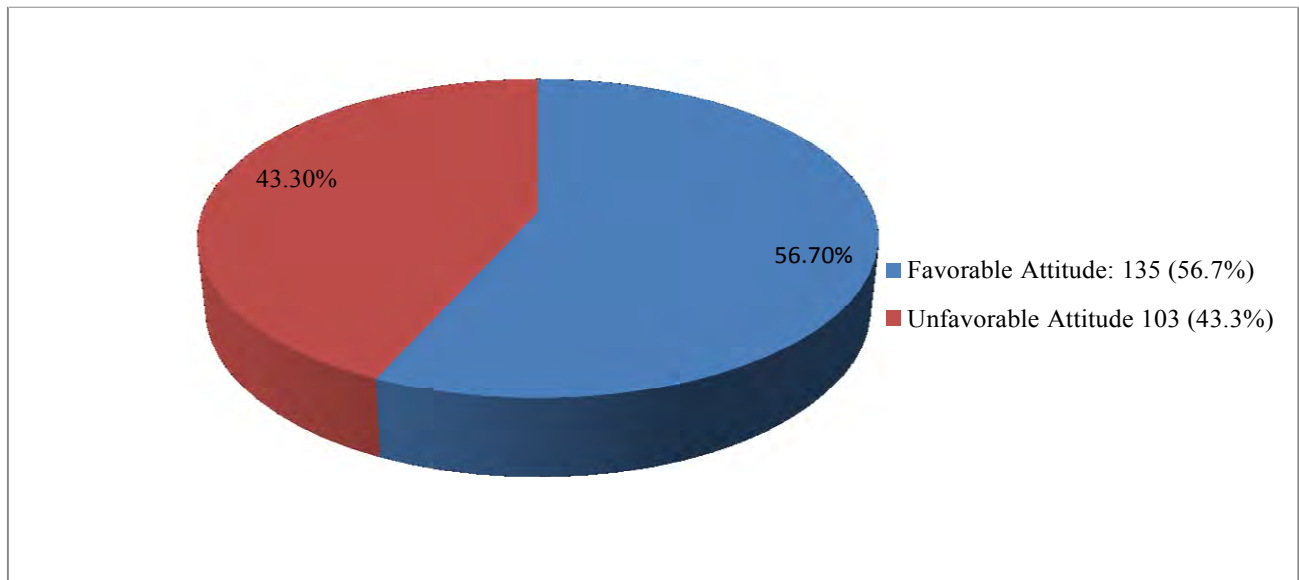


Figure 3 over all attitudeds of HCP towards SAC

Table 2 below depicts the frequency distribution of respondents attitudes and associated factor for each selected questions. Respondents of this research were asked whether they agreed or not for the question that do you concenter unsafe abortion would be the major problem in Ethiopia. Of 238, the majority respondents (92.4%) agreed that unsafe abortion was the major problem in Ethiopia, while only 7.6% of respondents showed their disagreement on the issue provided to them. These respondents were also asked whether the expansion of access to safe abortion services is a key step to reduce unsafe abortion or not. Above three fourth of respondents (78.6%) agreed that access to safe abortion services was a key step to reduce unsafe abortion.

The respondents of this study were asked that whether elective abortion should be legal and accessible at any circumstance or not. Of all respondents, 56.3 % agreed. They were further asked whether access to safe abortion termination would be demand based on the guideline to reduce maternal death. The majority of respondents (81.9%) agreed on the access of safe abortion termination

based on the guideline to reduce maternal death. The study attempted to find out respondents agreement to the acceptability of a woman to choose abortion because of a fatal anomaly or congenital disorder or not. The majority of respondents (81.9%) agreed on the acceptability of a woman to choose abortion for the stated case.

Regarding the legalization of safe abortion, respondents were asked whether they preferred to be more legalization or not. 71.0% of respondents agreed that there should be more legalization, The remaining respondents (29.0%) disagreed on the provided issue of abortion. These respondents stated their justification by saying that religion does not allow them (57.1%), their culture does not accept (35.5), they considered as homicide on the fetus (40.3%), they believed that it encourages having unwanted pregnancies (44.5%), and they felt that it encourages pre/extramarital sex (37.1%) and with no response (3.2%). The respondents of the study were asked whether the law should not penalize abortion or not. 62.6% of the respondents agreed that the law should not penalize abortion when the woman makes an autonomous decision. The respondents were asked their opinion towards when a woman under 18 years old with less than or equal to 12 weeks of gestational age if she requested termination of pregnancy. About 56.7 % of the respondents that they could to terminate the pregnancy while 43.3% of respondents did not agree with the provided case. These respondents ranked their reasons why they did not support such kinds of pregnant women at their health institutions. Some it was because of religion (28.3%), others due to culture (40.7%).

Table 2. Frequency distribution of respondents attitude and associated factor towards safe abortion care, East Gojjam Zone, 2015 (n= 238).

Characteristics	No (%)
Do you (think) that unsafe abortion is one of the major health problems in our country? 1.Disagree 2.Agree	18(7.6) 220(92.4)
Do you think that elective abortion should be legal and accessible under any Circumstances 1.Disagree 2.Agree	104(43.7) 134(56.3)
Do you think that it's acceptable for a woman to choose abortion because of a fetal anomaly or congenital disorder 1.Disagree 2.Agree	43(18.1) 195(81.9)

<p>Do you think expansion of access to safe abortion services is a key step to reduce unsafe abortion?</p> <p>1.Disagree 2.Agree</p>	<p>51(21.4) 187(78.6)</p>
<p>Do you think access to safe abortion termination on demand based on the guideline would reduce maternal death?</p> <p>1.Disagree 2.Agree</p>	<p>43(18.1) 195(81.9)</p>
<p>Do you feel comfortable working in site where termination of pregnancy is being performed?</p> <p>1.Disagree 2.Agree</p>	<p>133(55.9) 105(44.1)</p>
<p>Do you agree with more legalization of safe abortion?</p> <p>1.Disagree 2.Agree</p>	<p>69(29.0) 169(71.0)</p>
<p>Reason don't agree more legalized</p> <p>1.My religion doesn't allow (abortion is against God's will) 2.Culturally not accepted 3.It is homicide on the fetus 4.Encourages having unwanted pregnancies 5.Encourages pre/extra-marital sex 6.No response</p>	<p>102(42.9) 22(35.5) 25(40.3) 106(44.5) 23(37.1) 2(3.2)</p>
<p>The law should not penalize abortion when the woman makes an autonomous decision.</p> <p>1.Disagree 2.Agree</p>	<p>89(37.4) 149(62.6)</p>
<p>What is your opinion as solution for women with less than or equal 12 weeks gestational age following a rape case requesting terminating pregnancy at your health facility?</p> <p>1. I don't support the pregnancy to be terminated. 2. I support the pregnancy to be terminated</p>	<p>105(44.1) 133(55.9)</p>
<p>What is your opinion as solution when the age of the woman is under 18 requesting termination of pregnancy for less than or equal to 12 weeks gestational age at your health facility</p> <p>1. I don't support the pregnancy to be terminated. 2. I support the pregnancy to be terminated</p>	<p>103(43.3) 135(56.7)</p>

Opinion as solution to decrease unsafe abortion

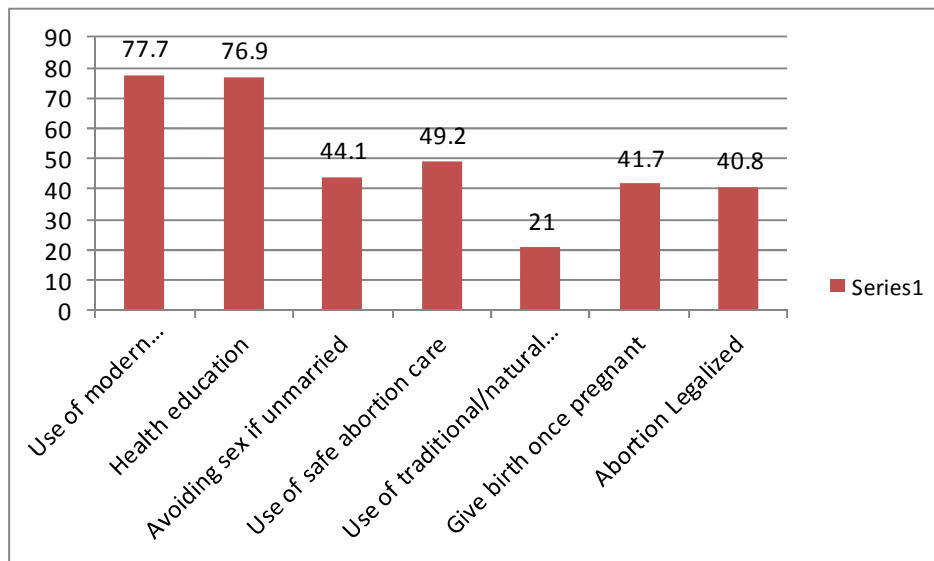


Figure 4 frequency distribution of respondent's opinion as solution to deacers' unsefe abortion

Table 3 shows the frequency level of respondents' knowledge on some selected knowledge based questions. Respondents were asked define what is abortion in developing countries. Although respondents replied in diverse ways, the answers were categorized on two bases for the possible correct and not correct answers. In this regard, the majority of respondents (82.8%) replied the correct definition of abortion in developing countries which means the termination of pregnancy with less than 28 weeks; whereas 17.2% of respondents did not reply correctly or said I do not know'. The respondents were asked whether they knew the current condition of abortion which can be un punishable in accordance with Ethiopian criminal law. The majority (86.1%) of respondents show their chance of ranking that yes they knew that while the remaining respondents (13.9%) reported that they do not know about the current conditions of un punishable abortion laws in Ethiopia.

The study tried to assess whether the respondents of this study knew the drugs used for the woman to terminate a pregnancy in medical abortion 91.6 % of respondents rated the correct answer which said Misoprostol and Miferpriston', Besides, the respondents of this esearch were asked to rank the possible best time for safe termination of pregnancy, 87.3% respondents replied the correct answer which said less than 12 weeks' of GA.

Table 3. Frequency distribution of respondents knowledge, practice and training towards safe abortion care ,East Gojjam Zone, 2015 (n= 238)

Characteristics	No (%)
How do you define abortion in developing countries 1.≤20weeksTerminate of pregnancy 2.≤28weekTerminate of pregnancy	41(17.2) 197(82.8)
Do you know the condition currently abortion is un punishable according to Ethiopia criminal law? 1. NO 2. YES	33(13.9) 205(86.1)
What are the drugs that are provided for the woman to terminate a pregnancy in medical abortion? 1.In correct (Ampiciline, Gentamicine, Quinien....) 2. Correct (Misoprostol and Mifepriston)	20(8.4) 218(91.6)
When do you think the best time for safe termination of Pregnancy? 1. >12 weeks 2. Less than 12 weeks	30(12.6) 208(87.4)
Do you know the components of PAC/SAC? 1.NO 2. YES	89(37.4) 149(62.6)
If the continuation of the pregnancy endangers the life of the woman or the child in which state should be safe abortion permitted? 1. The woman should necessarily Be in a state of ill health at the time of requesting safe abortion services. 2. The woman should not necessarily be in a state of ill health at the time of requesting safe abortion services	140(58.8) 98(41.2)
Do you have a formal training to perform termination of pregnancy? 1.NO 2. YES	162(68.1) 76(31.9)
Have you Ever perform safe abortion care? 1 NO 2. YES	159(66.8) 79(33.2)

5.2 Socio-Demographic Characteristics of the Respondents Cross Tabulated with Attitude Category

Table 4 below shows that among 106 male respondents, above half percent of them (57.5 %); and of 132 female respondents, almost equal percentage of males (56.1%) had a favorable attitude towards safe abortion care. Those respondents whose age was greater than 30 years old had fifty-fifty (50 – 50 %) percent of both favorable and unfavorable attitudes towards safe abortion care; and those whose age was less than 30 years old had 59.6 % favorable attitude and 40.4 % of them had unfavorable attitude towards safe abortion. 59.9 % of Orthodox had favorable attitude while 90 % of Muslime had unfavorable attitudes towards safe abortion care. Those greater than five years of work experiences had 57.4% of favorable attitude which is fairly equal (56.1%) with those work experiences had been less than five years.

Table 4 Socio-Demographic Characteristics of the Respondents Cross Tabulated with Attitude Category in East Gojjam Zone, 2015 (n= 238)

Variables	Attitudes		Total
	Favorable	Unfavorable	
Sex- Male	61(57.5%)	45(42.5%)	106
female	74(56.1%)	58(43.9%)	132
Age- <30	36(50.0%)	36(50.0%)	72
>30	99(59.6%)	67(40.4%)	166
Religion :			
Orthodox	133(59.9%)	89(40.4%)	222
Muslim	1(9.1%)	10(90.9%)	11
Protestant	1(20.0%)	4(80.0%)	5
Work experience- <5yrs	69(56.1%)	54(43.9%)	123
>5yrs	66(57.4%)	49(42.6%)	115

5.3 Environmental Factors Cross Tabulated

The table below shows the percentage of environmental factors (legalization and Law of penalization) towards safe abortion care. Accordingly, the majority of respondents 169 (71.0%) who had shown their interest to the improvement of legalization of this 114(67.5%) had favorable attitudes towards safe abortion care. Those who agreed law should not penalize abortion when the woman makes an autonomous discion 149(62.6) of this (76.4%) had greater favorable attitudes.

Table 5: Environmental factors of the Respondents Cross Tabulated with Attitude Category in East Gojjam Zone March, 2015 (n= 238)

Variables	Attitudes		Total
	Favorable	Unfavorable	
More Legalization:			
Agree	114(67.5%)	55(32.5%)	169
Disagree	21(30.4%)	48(69.6%)	69
Law Not to penalize:			
Agree	68(76.4%)	21(23.6)	89
Disagree	67(45.0%)	82(55.0%)	149

5.4 Individual Factors of the Respondents Cross tabulated With Attitude Category.

The table below depicts the attitudes of respondents who had or not formal training of safe abortion; who had or not getting in practices of safe abortion; and who had or not knowledge about safe abortion. Those who had taken formal training (81.2 %) had better attitudes. Regarding safe abortion practices, those who had an opportunity to practice (81.9%) had greater favorable attitudes. The same is true that those who had good knowledge (59.1%) about abortion had favorable attitudes.

Table 6 Individual Factors of the Respondents Cross tabulated With Attitude Category in East Gojjam Zone, 2015 (n= 238).

Variables	Attitudes		
	Favorable	Unfavorable	Total
Formal Training:			
Yes	69(81.2%)	16(18.8%)	76
No	66(43.1%)	87(56.8%)	162
Ever Performing SAC:			
Yes	68(81.9%)	15(18.1%)	79
No	67(43.2%)	88(56.8%)	159
Knowledge:			
Good	107(59.1%)	74(40.9%)	181
Poor	28(49.1%)	29(50.9%)	57

5.5 Maternal Factors cross tabulated

Maternal factors such as gestational age with rape case and less than 18 years had been one of Factors affecting attitude questions. Table 7 below shows the attitude of health care providers as follow.

Those respondents who support termination of pregnancy on the request of women under age 18 years old had greater (71.4%) favorable attitudes. In the same way, those respondents who supported the termination of pregnancy of rape case with less than or equal to 12 weeks(77.7%) had better favorable attitudes towards safe abortion care .

Table 7: Maternal Factors Cross Tabulated With Attitude Category in East Gojjam Zone,2015 (n= 238)

Variables	Attitudes		
	Favorable	Unfavorable	Total
Opinion for under age(18yrs) termination:			
Support	95(71.4%)	38(28.9%)	103
Not Support	40(38.1%)	65(61.9%)	135
Opinion for Rape Case:			
Support	80(77.7%)	23(23.3%)	133
Not Support	55(40.7%)	80(59.3%)	105

5.6 Institutional factor of cross tabulated

The table below shows the frequency distribution of respondents across institutions such as health centers and hospitals respondents. Of these respondents, 57.9 % of hospital respondents had positive attitudes towards safe abortion. To the contrary, 42.1 % of health care providers showed unfavorable attitudes towards safe abortion.

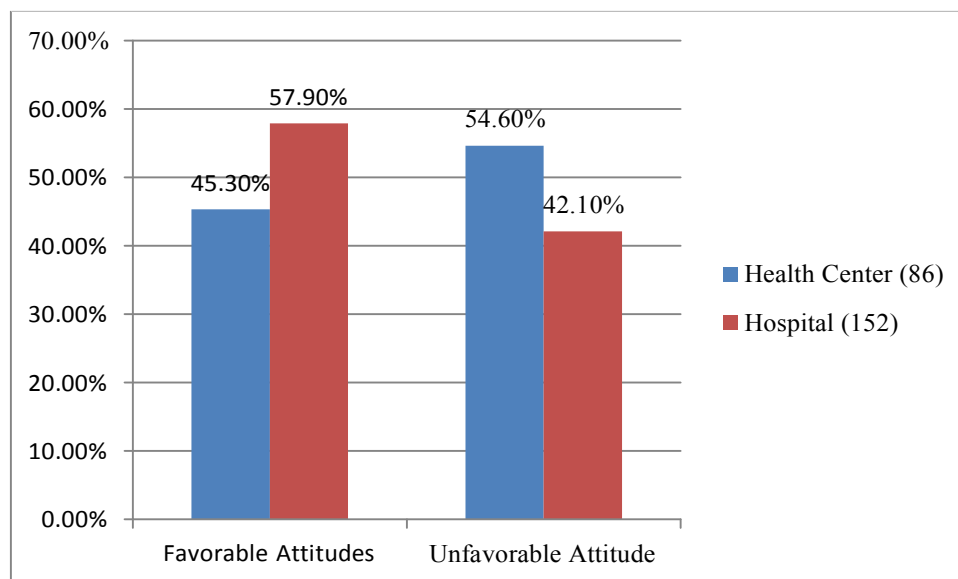


Figure 5 Institutional factors of HCP attitudes

5.7 Factors associated of Health Care Providers towards Safe Abortion Care

Using logistic regression, the relationship among different factors had been computed. The following table (Table 9) shows significant relationships of factors which affect the attitude of health care providers towards SAC. Therefore, the table below only includes those factors which had significant relationships. In order to get the significant relationship among factors, bivariate and multivariate analysis had been computed with an alpha level of < 0.05 . Hence, independent variables which are significant are shown below on the table. Using binary logistic regression, all socio-demographic variables (sex, age, work experience, marital status, profession, ethnicity and others) had no significant relationships.

The result from the fitted regression shows that those who had taken formal training of safe abortion were 3.740 [95% CI 1.728-8.094] times more likely to have a favorable attitude towards SAC than those who had no formal training. Those who had performed safe abortion were 2.457 [95% CI 1.131-5.338] times more likely to have a favorable attitude towards safe abortion care than those who had never performed safe abortion before. The analysis shows that those who had the interest of better legalization of abortion were 2.243 [95% CI 1.059-4.752] times more likely to have favorable attitudes than those who had no interest in the improvement of legalization. Those who support that law should not penalize abortion if women made autonomous decisions were 2.857 [95% CI 1.418-5.756] times more likely to have a favorable attitude towards SAC than those who disagree for the same case. Those who had supported the termination of pregnancy of a rape case less than 12 weeks GA were 2.280 [95% CI 1.112-4.676] times more likely to have favorable attitudes towards SAC than those who did not support the termination of pregnancy with less than GA rape case. Similarly, those who support the termination of pregnancy with less than 12 weeks GA under 18 years were 2.293 (1.115-4.715) times more likely to have favorable attitudes towards SAC than those who did not support the same case.

Table 8: Factors associated with Health Care Providers towards Safe Abortion Care in East Gojam Zone,2015 (N=238).

Variables	Attitude		Ratio	
	Favorable (%)	Un Favorable(%)	COR(95%CI)	AOR(95%CI)
Formal Training: YES	69(81.2%)	16(18.8%)	5.685(3.025-10.684)* 1	3.740(1.728-8.094)*
NO	66(43.1%)	87(56.8%)		
Ever Perform SA: YES	68(81.9%)	15(18.1%)	5.954(3.130-11.327)* 1	2.025(1.050-3.905)*
NO	67(43.2%)	88(56.8%)		
More Legalization: YES	114(67.5%)	55(32.5%)	4.738(2.586-8.679)* 1	2.243(1.059-4.752)*
NO	21(30.4%)	48(69.6%)		
Law Not to Penalize: Agree	68(76.4%)	21(23.6%)	3.963(2.205-7.122)* 1	2.857(1.418-5.756)*
Disagree	67(45.0%)	82(55.0%)		
Opinione for <12wks GA with rape case:				
Support	95 (71.4%)	38(28.6%)	4.062(2.356-7.004)* 1	2.280(1.112-4.676)*
I don't Support	40(38.1%)	65(61.9%)		
Opinion for <12 wks GA with < 18yrs:				
Support	80(77.7%)	23(22.3%)	5.059(2.841-9.009)* 1	2.293 (1.115-4.715)*
I don't Suppor	55 (40.7%)	80 (59.3%)		

6. Discussion

The study attempted to assess the overall attitudes of health care providers' towards safe abortion care and associated factors which may affect the attitude of these research respondents in East Gojjam Zone at public health institutions (both hospitals and health centers). Research findings showed that the attitudes of health care providers and various factors affect the successful services of safe abortion. Providers' attitudes bring about an impact on unsafe abortion which may also facilitate maternal mortality and morbidity. Similarly, different factors associated with abortion are supposed to have an impact on the attitudes of health care providers, and this in turn affects the overall safe abortion care. Therefore, dealing with the attitudes of health care providers and understanding the impacts of associated factors is an essential step to minimize or possibly to stop maternal death and morbidity (17, 18). With this assumption, the present study tried to assess the overall attitudes of health care providers and associated factors towards safe abortion care. In order to achieve the objective, 238 health care providers were involved. 135 (56.7%) out of 238 respondents had favorable attitudes towards safe abortion care. This indicates that fairly greater number of health care providers had favorable attitudes towards safe abortion care. The respondents were asked about whether they took formal training about safe abortion care or not. Of the total respondents (238), the majority (64.3 %) rated that they did not take formal training about safe abortion care, while only 35.7 % assured that they had formal training opportunity. This frequency distribution was fairly similar with the study done at Mekelle region in 2014; that among the total of the research respondents the majority (83%) had no formal training opportunity. In contrast, in the study done in Latin America and Caribbean country in 2003/4, 79 % received both surgical and medical method of abortion training. This gap reveals that lack of training in our country may be because of socio economic status of the country, religion and cultural impacts (15, 17). Above all in the current study, there was an attempt to see the relationship between health care providers and formal training. Accordingly, the regression AOR showed that there was significant relationship between formal training and attitude. The finding of the study showed that those who had formal training of safe abortion were 3.4740 [95 % CI 1.728-8.094) times more likely to have favorable attitudes towards safe abortion care than those who did not. Those who perform safe abortion were 2.457 [1.131-5.338] times more likely to have favorable attitudes than those who did not perform safe abortion.

This regression result was nearly similar with the study done at Addis Ababa in 2008. The result of the study claimed that those who had performed safe abortion were 2.57[1.49-1.44] times more likely to have favorable attitudes than those who did not perform. In contrast, the findings of the research outcome done at Mekelle public health institutions in 2014 showed that among the respondents of 81 % who had never performed safe abortion, the majority (94.6%) had favorable attitudes towards safe abortion(17.18). The gap may be because of the experiences in which the providers had developed for they had an opportunity to perform in their health institutions and training may also be another reason to have favorable attitude in the current study. The respondents were asked whether they had knowledge about safe abortion or not. Out of 238 respondents, the majority (76.1%) had good knowledge about abortion, and only 23.9 % had poor knowledge about abortion. Of those who had good knowledge about abortion, above half percent of respondents (59.1%) had favorable attitude toward safe abortion care. This result was fairly similar with the study done at Mekelle region public health institutions in 2014 . The study claimed that the majority (90.6 %) of respondents who had good knowledge about abortion had favorable attitudes towards safe abortion. This consistency on both studies may be that good knowledge about abortion encouraged the health providers to have clear understanding about abortion and this in turn enhances the attitudes of the providers. In the above discussion, the overall individual factors have been computed to find out the relationship between them and attitudes. Accordingly, while formal training about abortion and ever able to perform had significant relationships, knowledge did not show statistically significant relations.

It was attempted to find out the associations between respondents' attitudes and their interest to have more legalization of abortion. The result of the study illustrated that 169(71.0%) of the respondents out of 238 had an interest to get more legalization, while only 69 (29.0 %) of these respondents did not prefer to have more legalization. Of 71.0 % of respondents who preferred to have more legalization, 67.5 % had favorable attitudes towards safe abortion care. The result revealed that those who preferred to have more legalization were 2.243[95% CI 1.059-4.752] times more likely to have favorable attitudes towards SAC than those who did not prefer to have more legalization of abortion. To the contrary, of 29.0 % of respondents who did not prefer to have more legalization, 46.6% had unfavorable attitudes towards safe abortion. These respondents ranked their reasons why they did not prefer more

legalization. Accordingly, 44.5% of respondents believed that it encourages unwanted pregnancy; 42.9% of respondents believed that religion norm did not allow them to do that, 40.3% of the respondents felt that it is homicide on the fetus, 37.1% of respondents believed that it encourages pre/extra marital sex, and 35.5 % of respondents rejected full legalization because of cultural impact. A couple of studies done in Nigeria & Zambia, and Latin America attempted to get the health care providers' preferences to have more legalization. In this regard, in Nigeria and Zambia study in 2006, 41% of health care providers showed an interest to have more legalization; where as in the study done in Latin America in 2003/4, 71 % of health care providers showed their preference of more legalization (13,15). This current study and the result of the study done in Latin America shared equal outcome on the interest of more legalization. To the contrary, the study done in Nigeria and Zambia showed that lower result of more legalization which is below fifty percent. The interest to prefer to have more legalization in both countries may be the current law of abortion was restricted and did not bring accessibility of safe abortion care for the clients. The other reason may be that safe abortion is one of the major problems in our country.

The study attempted to recognize the relationship between health care providers' attitudes and their opinion for the termination of pregnancy with those under 18 years old GA. Of 103(43.3 %) of respondents who supported this case, 77.7 % had favorable attitudes towards SAC. The result of the relationship showed that those who had a desire to support those under 18 years of pregnant women of less than 12 weeks GA were 2.293 [1.115-4.715] times more likely to have favorable attitudes than those who did not show interest to help such clients. The current study was similar with the study done at Tigray region in 2011 that the result showed that 84.5 % of the respondents had an interest to help those clients of under 18 of less than 12 weeks GA (19).

In a similar case, respondents were asked whether they need to support or not those less than 12 weeks GA rape case abortion. Of all respondents, 133(55.9%) had a need to support such clients while the remaining 105(44.1%) had no interest to support such clients at their health institutions. Of those who showed interest to support rape case pregnant women less than 12 weeks GA, almost three fourth (77.7 %) had favorable attitudes towards safe abortion care.

This was similar with the study done at Tigray región in 2011 that 83% supported the idea of pregnancy termination for a woman with rape case (19).

The adjusted statistics of the current study has shown that those health care providers who had interest to help those pregnant with GA less than 12 weeks of rape case had favorable attitudes towards safe abortion care which were 2.280 [95% CI 1.112-4.676] times more likely than those who did not have interest to support those pregnant with GA less than 12 weeks of rape case. The finding revealed that there were statistically significant relationships between the maternal factors (under 18 years and rape case) and the attitudes of health care providers. Favorable tendency of providers in these maternal factors may be because of free legalization to these factors. The law does not punish for the possible termination of such cases; hence providers can have good reaction to such cases.

7. Strength and Limitation

Strength: The sample size of the study was representative. In order to check the quality of data, pre test was done before the main data was collected. The response rate of the questionnaire was 95.6 % which was the highest level of rating.

Limitation: The study would bring a different result if it were conducted in diverse religion and ethnicity. Orthodox religion and Amhara were the dominant in this study. This can be taken as the limitation of the study. Rural health institutions were not included for financial and time constraints.

8. Conclusion and Recommendations

Conclusion

The study tried to assess the overall health care providers' attitudes and the impact of associated factors on their attitudes in East Gojjam public health institutions (both in hospitals and health centers). In order to achieve the objective, descriptive statistics and logistic regression were computed. Based on the analysis made on the result and discussion chapter, the following conclusions were made.

- 92.4 % of providers believed that abortion was one of the major health problems in Ethiopia.
- 135 (56.7%) of health care providers had favorable attitudes towards SAC as compared to those 103 (43.3%) who had unfavorable.
- Socio demographic characteristics had no significant relationship with the health care providers' attitudes.
- Environmental factors such as getting more or full legalization of abortion and the action of penal code were found to be significant.
- Maternal factors such as rape case and under 18 years old were significant to affect the attitudes of health care providers
- Individual factors such as formal training and able to carry out safe abortion had significant impact on the attitudes of health care providers while knowledge had no significant impact.

Recommendations

Based on the above conclusions, the following recommendations are suggested:

- Since unsafe abortion is the major problem of the country, Ministry of health should identify the factors which increase unsafe abortion.
- In order to enhance the attitudes of health care providers towards SAC, training should be given to providers.
- In order to enhance the quality of safe abortion care, liberalized legalization and unrestricted penal code should be induced in such kind of health institutions.
- Health care providers should get an opportunity to carry out safe abortion in the institution they belong.
- Providers had favorable attitudes towards rape case and under 18 years old termination pregnancy for their unrestricted legalization, hence there should be more legalization in order to advance the attitudes of providers towards SAC.

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Annex I: Information Sheet

Information sheet and consent form is prepared for health care provider who are participated in research project, a cross-sectional study assessing attitude and associated factor of health care providers towards safe abortion care.

Name of Principal investigator: Meskerem Abebe

Name of the organization: Addis Ababa University, College of Health Sciences, Department of Nursing and Midwifery.

Name of the Sponsor: Addis Ababa University

This information sheet and consent form is prepared to explain the study you are being asked to join. Please listen carefully and ask any questions about the study before you agree to join. You may ask questions at any time after joining the study. The investigator is final year MSN graduate student from Addis Ababa University, college of health science, department of nursing, and one advisor from Addis Ababa University.

Purpose of Research Project

I am hopeful that this research will contribute for reducing maternal mortality and morbidity by assessing their attitude of health care provider and associated factor that affects safe abortion care.

Procedure

To assess attitude and associated factor of health care providers toward safe abortion care in east Gojjam, Ethiopia. You are invited to take part in this project. If you are willing to participate in this project, you need to understand and tick yes the agreement form. Then after, you will fill the question by the data collector to give your response. Your name don't write on the questionnaire and all your responses and the results obtained will be kept confidentially by using coding system whereby no one will have access to your response.

Risk/ Discomfort

By participating in this research project, you may feel that it has some discomfort especially on wasting time about 30 minutes. We hope you will participate in the study for the sake of the benefit of the research result. There is no risk in participating in this research project.

Benefits: If you participate in this research project, there may has no direct benefit to you. Your participation to help us in assessing attitude and associated factor towards safe

abortion care Ultimately, this will help us to identify the gap and take the appropriate intervention.

Incentives: You will not be provided any incentive or payment to take part in this project.

Confidentiality: The information collect from this research project will be kept confidential and information about you that will be collected by this study will be stored in a file, without your name, but a code number assigned to it. In addition, it will not be revealed to anyone except the principal investigator and will be kept locked with key.

Right to refuse or withdraw:

You have full right to refuse from participating in this research. You can choose not to respond to some or all questions if you do not want to give your response. You have also the full right to withdraw from this study at any time you wish, without losing any of your right.

Persons to contact: If you have any question to ask, please contact

Name: **Meskrem Abebe**

Tel: **+251-913797345.**

Email = **mesku2015@gmail.com**

ANNEX II: CONSENT FORM

How are you, I am _____. This is an interview to be done with you for a study that is being done by Addis Ababa University, school of Allied health sciences department of nursing and midwifery. I would like to ask you few questions and your willingness in the study. This study is prepared to obtain relevant information about the attitude of health care providers and associated factor towards safe abortion care in selected health facilities at east Gojjm. Your participation in the study is very important in reducing the maternal morbidity and mortality rate, which is caused by unsafe abortion and its complication. Your name & address will not be written in this form and will never be used in connection with any information you tell us. All the information given by you will be kept strictly confidential and only used for this study. Your participation is voluntary and you are not obligated to answer any question which you do not wish to answer. If you fill discomfort to respond to any of the question, please fill free to drop it any time you wish to do so. Thank you in advance for your participation in the study. I have read all the process and the objective of the study and I have understood the same as written. I understood that the research imposes no risk and no compensation would be provided to me.

Could I have your permission to continue?

1. Yes
2. No Stop the interview and thank the respondent.

Witness's signature certifying that the informed consent has been given.

Witness: Signature _____ Dated _____

Data collector: Name _____

Signature _____ Dated _____

Result: Questionnaire completed _____

Questionnaire partially completed _____

Participant refused _____

Others (please Specify) _____

Checked by Supervisor: Name _____

Supervisor's Signature _____ Date _____

ANNEX III Questionnaire

Title: Assessment of health care provider attitude and associated factor towards safe abortion care at selected public health facility in east Gojjam Zone.

PART I: SOCIO DEMOGRAPHIC CHARACTERISTIC OF HEALTH CARE PROVIDERS.

Ser. No	Question/variables	Response	Skip
101	Name of the health facility	-----	
102	Sex	1. male 2. female	
103	Age in year	_____	
104	What is your Religion?	1.Orthodox 2.Muslim 3.Protestant 4.Catholic 88.Others specified	
105	What is your Ethnicity?	1.Amara 2.Oromo 3.Tigrie 4.Gurage 88.Other specify _____	
106	What is your current Marital status?	1. Married 2. Divorced 3. Widowed 4. Single	
107	What is your Profession?	1.Oby and Gyn specialist 2.GP(Physician) 3.Midwifery 4.Nurse 5.HO	
108	What is your unit of work?	1.MCH 2.OPD 4.Medical ward 5.Surgical ward 6. Pediatric OPD 88.Other specify _____	
109	How long you have been working?	Specify _____	

PART II: KNOWLEDGE, PRACTICE AND TRAINING OF HEALTH PROFESSIONALS
IN RELATED WITH SAC

Ser. No	Question/variables	Response	Skip to
201	How do you define abortion in developing countries	1. ≤28week Terminate of pregnancy 2. ≤20weeks Terminate of pregnancy 99. I Don't know	
202	Do you know the condition currently abortion is un punishable according to Ethiopia criminal law?	1. Yes 2. No	If no skip Q205
203	If your answer is yes What are they? (more than one choice is possible).	1. The pregnancy is due to incest 2. Rape 3. Congenital malformed baby 4. If mother or baby condition is at risk due to the pregnancy 5. If mother is physically or psychologically unable to raise the child 6. In emergency condition 88. Other Specify _____	
204	What type of abortion procedure do you know? (more than one choice is possible).	1. E&C 2. D&C 3. MVA 4. Using Oxytocin 5. Using prostaglandins 6. Using Misoprostol 88. Other (Specify) _____ 99. I don't know	
205	What are the drugs that are provided for the woman to terminate a pregnancy in medical abortion?	1. Ampicillin and chloroquine 2. CAF and gentamycin 3. Quinine and sulphamethexazoid 4. Misoprostol and Mifepriston 88. Others (specify) _____	
206	When do you think the best time for safe termination of Pregnancy?	1. Less than 12 weeks 2. Between 12-24 weeks 3. Greater than 24 weeks 88. Other (Specify) _____	
207	Do you know the components of PAC/SAC?	1. Yes 2. No	If no Skip Q210

208	Your answer is yes Which components do you Know? (more than one choice is possible).	1.Community and service provider partnership 2.Counciling 3.Treatment of incomplete and complication of unsafe abortion 4.Contraceptive and FP service 5.Integration of Reproductive and other health Service	
209	What are the complications of abortion? (more than one choice is possible).	1.Uterine perforation 2.Bleeding 3.Infection 4.Loss of fertility 5.Death 88.Other specify_____	
210	If the continuation of the pregnancy endangers the life of the woman or the child in which state should be safe abortion permitted?	1. The woman should necessarily Be in a state of ill health at the time of requesting safe abortion services. 2.The woman should not necessarily be in a state of ill health at the time of requesting safe abortion services 99.I don't know	
211	Do you have a formal training to perform termination of pregnancy?	1. Yes 2.No	
212	Have you Ever perform safe abortion care?	1. Yes 2.No	

Part III Attitude and factor that affects attitude towards SAC question

Ser. No	Question	Response	Skip
301	Do you think that unsafe abortion is one of the major health problems in our country?	1.disAgree 2.Uncertain 3.Agree	
302	Do you agree with more legalization of safe abortion?	1.disAgree 2.Uncertain 3.Agree	
303	If you don't agree to question 303, why don't you prefer safe abortion to be legalized? (more than one choice is possible).	1.My religion doesn't allow (abortion is against God's will) 2.Culturally not accepted 3.It is homicide on the fetus 4.Encourages having unwanted pregnancies 5.Encourages pre/extra-marital sex 6.No response	
304	Do you think that elective abortion should be legal and accessible under any circumstances	1.disAgree 2.Uncertain 3.Agree	

305	Do you think that it's acceptable for a woman to choose abortion because of a fetal anomaly or congenital disorder	1. Agree 2. Disagree 3. Uncertain	
306	Do you think expansion of access to safe abortion services is a key step to reduce unsafe abortion?	1. disAgree 2. Uncertain 3. Agree	
307	Do you think access to safe abortion termination on demand based on the guideline would reduce maternal death?	1. disAgree 2. Uncertain 3. Agree	
308	The law should not penalize abortion when the woman makes an autonomous decision.	1. disAgree 2. Uncertain 3. Agree	
309	Do you think this facility is ready to give safe abortion?	1. disAgree 2. Uncertain 3. Agree	
310	Do you feel comfortable working in site where termination of pregnancy is being performed?	1. Yes 2. No	
311	What is your opinion as solution for women with less than or equal 12 weeks gestational age following a rape requesting terminating pregnancy at your health facility?	1. I support the pregnancy to be terminated. 2. I don't support the pregnancy to be terminated. 3. Uncertain	
312	What is your opinion as a solution for a woman with less than or equal to 12 weeks gestational age if the conception endangers the life of the woman and requests termination of pregnancy at your health facility?	1. I support the pregnancy to be terminated 2. I don't support the pregnancy to be terminated 3. Uncertain	
313	What is your opinion as solution when the age of the woman is under 18 requesting termination of pregnancy for less than or equal to 12 weeks gestational age at your health facility	1. I support the pregnancy to be terminated 2. I don't support the pregnancy to be terminated 3. Uncertain	
314	For question 313 if your answer is code 2 what are your reasons? (more than one choice is possible)	1. Due to religious impact 2. Due to cultural impact 3. It is not accepted by the society (out of norms) 88. Others (specify) _____	
315	What is your opinion as solution to decrease un safe abortion?		
315.1	Using modern contraceptives	1. disagree 2 uncertain	

		3.agree	
315.2	Health education	1.disagree 2 uncertain 3.agree	
315.3	Avoiding sex if unmarried	1.disagree 2 uncertain 3.agree	
315.4	Use of safe abortion care	1.disagree 2 uncertain 3.agree	
315.5	Use natural family planning method	1.disagree 2 uncertain 3.agree	
315.6	Give birth once pregnant	1.disagree 2 uncertain 3.agree	
315.7	Abortion legalization	1.agree 2 uncertain 3.disagree	

THANK YOU!!