Nature and Science

Websites:
http://www.sciencepub.net/nature
http://www.sciencepub.net

Emails:
naturesciencej@gmail.com
editor@sciencepub.net

MARSLAND PRESS
Multidisciplinary Academic Journal Publisher

Preavalence And Factors Associated With Induced Abortion Among Womens Who Attend Woreda 9 Health Center Addis Ababa, Ethiopia, 2017

Abebe Feyissa* ,Dr. Worku Bedada**

School Of Health Science, Department Of Nursing, Salale University, Ethiopia, 2017
abebefeyissa21@gmail.com , wbwaktola@yahoo.com

Abstract: Background:-Unsafe abortion is one of the most medical and public health problems in developing countries including Ethiopia. Approximately 21.6million unsafe abortions are performed worldwide every `year. However, there is lack of up to date and reliable information on prevalence and associated risk factors of Induced Abortion in the Addis Ababa, Ethiopia. From the fragmented studies conducted in Ethiopia, we can see that the prevalence of induced abortion and its negative consequences are increasing from time to time in our country. Objective: - To assess the prevalence and associated risk factors of induced abortion among all women who receive induced abortion care service in woreda 9 health center Addis Ababa from November 30, 2016 up to May 30, 2017. Methods:-Institutional based cross sectional study was carried out on all women who receive induced abortion care service in woreda 9 health center Addis Ababa from November 30, 2016 up to May 30, 2017.Convenience non probability sampling technique was employed on daily visit of women who receive induced abortion care service in health center. The date was collected using pre tested questionnaire. The data was analyzed using tally sheet, scientific calculator and by spss version 16. Descriptive analysis was used also the data was frequencies, and cross-tabulation of the dependent and independent variable using chi-square and level of significance < 0.050. Results: from total participant 291, one hundred thirty-five women (46.4%) had abortions. A total of two hundred eighteen (74.9%) women reported to be current users of contraceptives. Most of the reason given to abort was socio-demographic (8.90%) followed by contraceptive failure (6.90%). Participants show that their first pregnancy was aged between20-24. This involve105 (36.10%) of them where the mean age for the first pregnancy was 19.74 (SD±8.579). 85(29.20%) of the respondent stated no child, 44(15.10%) of the respondent informed having one child and closely following 43 (14.80%) of the respondent informed having 2 children. Conclusion and recommendation: in this study, induced abortion was prevalent in 46.40% (135) of participant. About 102 (35.00%) of the participant reported unwanted pregnancy associated with induced abortion (p-value 0.000), contraceptive failure was related with this unwanted pregnancy in 29 (10.00%), the most failed method of contraceptive was found to be pill method 14(4.80%) with association in this study result of 5.999(p-value=0.050). The zonal health office should work in educating how to use contraceptive correctly, and school administrator have to give their student how to practice safe sexual practice.

[Abebe Feyissa* ,Dr. Worku Bedada. Preavalence And Factors Associated With Induced Abortion Among Womens Who Attend Woreda 9 Health Center Addis Ababa, Ethiopia, 2017. *Nat Sci* 2021;19(4):37-48, SSN 1545-0740 (print); ISSN 2375-7167 (online). http://www.sciencepub.net/nature. 6. doi:10.7537/marsnsj190421.06.

Keywords: Preavalence; Factor; Abortion; Women; Health; Ethiopia,

1. INTRODUCTION

1.1. Back Ground Information:

Abortion is the termination of a pregnancy by the expulsion of a fetus or embryo from the uterus either spontaneously or intentionally, before the fetus develops sufficiently to survive.In the context of human pregnancies, an abortion induced to preserve the health of the pregnantfemale is termed as therapeutic abortion, while an abortion induced for any other reason istermed as elective abortion. By convention, induced abortion is usually defined as pregnancytermination prior to 20 weeks (for developed countries) and 28weeks (for developing countries) gestation or less than 500-gm birth weight; it can be safe or unsafe abortion. [1]287,000 maternal deaths was estimated world widely where 284,000 of this accounted for the developing country [2]. The main controversies surrounding abortion is weather restrictive abortion laws prevent women from abortion or not. But ,today, Ethiopia has permit abortion in specific legal ground such as if the conception of the fetus is caused by rape, incest, when continuation of pregnancy endanger the mother's life ,if the fetus has incurable deformity or if the mother doesn't fit to give birth mentally or physically[3]. An estimated 42 million pregnancy terminate due to many reasons and it

is also the top 10 reasons for mother to seek hospital admission in Ethiopia [4]. Low usage of contraceptives lead to unintended pregnancy, which result in abortion. [5] Abortion is not only problem in single women society but also in married family due tovarious related problems mainly early age marriage in females aged between 10-14 at least experience unintended pregnancy twice than those whose age is greater[6]. Even if, increasing in modern contraceptive use, Ethiopia mothers still have unmet contraceptive need especially in single and young women; where contraceptive use is far lower [7]. Contraceptive failure or low access for contraceptives was the main reason for unintended pregnancy in Addis Ababa [8]. Ethiopia has the 5thlargest maternal death, where 32% of the case accounts for unsafe abortion [9]. Economically disadvantage women are more likely to experience abortion than those of wealth women [10]. Mothers in Ethiopia have low knowledge about the legalization of abortion that unsafe abortion contributes half of 20,000 maternal deaths annually. In which health care provider's knowledge about legalization of abortion was contributing factor too [11]. In Ethiopia the major causes of maternal mortality are hemorrhage,sepsis and unsafe abortion [12].

1.2. Statement of the problems

Abortion have major public health problem that is not only affect the mother's life but also the people around her. Abortion related complication such as anemia, shock, genital tract infection, incomplete evacuation, peritonitis, renal failure accounts for increased maternal morbidity and mortality,where it affect the family economical privilege[13].Ethiopians' women are suffering from increase risk of abortion related complication, due to various problems such as unmet contraceptive need, rape, early sexual practice etc[14]. The top three causes of maternal deaths are post-abortion complication (29%), eclampsia (21%) and ruptured uterus (16%) [15].

In Ethiopia maternal mortality rate were estimated to be 673 deaths per 100,000 live births [10]. From the total population in Ethiopia 15.2(20.6%) youths are venerable for unintended pregnancy due to low knowledge to ward contraceptive use and early sexual practice leading them to wards induced abortion [17]. As induced abortion has multiple factors and also it is prevalent at present time in the study area, the study aim to identify associated factors of induced abortion, why abortion is chosen as a solution and clarify how much induced abortion is prevalent in the study area.

1.3. Significance of the study

Nowadays abortion predominates, despite a number of organizations striving to reduce it. The significance of the study is to describe the determinants of induced abortions in the study area that enables to reduce unwanted pregnancy, and contributes bases for reduction of maternal mortality. It can be used as a base line by policy makers and significant others to explore the way to reduce risks of induced abortion and prevention of determinants. This study aims to provide scientifically sound data on the prevalence of induce abortion and associated risk factors in Woreda 9 Health Center Addis Ababa, Ethiopia. The finding of this study will provide information for program coordinators, policy maker, key stakeholders for better planning and implementing of maternal health care services; which could lead to reduced morbidity and mortality in the study area. Finally, the study will also provide information for other researchers who have an interest to conduct further studies in the study area.

Chapter 3
. Objectives
3.1. General objective

- To assess the prevalence and associated risk factors of induced abortion among all women who receive induced abortion care service in Woreda 9 Health Center Addis Ababa from November 30, 2016 up to May 30, 2017.

3.2 .specificobjectives

- To determine the prevalence of abortion in general and induced abortion in particular.
- To identify the most important determinantfactors of induced abortion.
- To investigate the health seeking behavior of women in relation to abortion.

CHAPTER 4
4. METHODS AND MATERIALS.
4.1 Study Area and Period

This study was conducted in Addis Ababa, the capital city of Ethiopia which is categorized in to 10 sub city and ninety nine woreda. Lafto is of the sub city found in Addis. Lafto sub city woreda health center is located around Kadisko, saris. The health center was established in 1976 E.c. It have 2 medical doctors, 14 public nurses, 4 public health officers,5 Pharmacy technician, 1 pharmacy technologist, 5 lab technician, 8 midwifes, and 1 psychiatrist. Mean annual rain fall ranges from 1200-1300 mm and average annual temperature ranges from 11 -35 degree centigrade with "weinadega" climate condition. The study will be conducted from November 30, 2016 up to May 30, 2017.

4.2.Study Design

Facility-based cross –sectional survey was used.

4.3. Population

4.3.1.Source of population

The source population was total number of women in reproductive age who received health care in Woreda 9 Health Center Addis Ababa during the study period.

4.3.2.Study Population

The study populations were all women who receive induced abortion care service in Woreda 9 Health Center Addis Ababa during the study period and willing to participate on the study.

4.4. Sample size and sampling procedure

4.4.1. Sample size

Individuals are selected by systematic sampling. Sample size was calculated

$$n=\frac{Z\alpha^2 P(1-P)}{D^2}=\frac{1.96^2 * 0.436(1-0.436)}{0.05^2}=377$$

Though this true for larger population, the minimum sample size required was determined using the following correctional formula was applied with p-value of 0.436. five percent was also added for non-response and other contingencies. Accordingly the required sample size was computed as 277 after adding 5% of non-respondent, it become 291.

Sample size will be determined based on Woreda 9 Health Center Addis Ababa average number of induced abortion care service provided per Month.

Correction formula was used

NF = n/1+ (n/N) = 377/(1+377/1050) =277 (corrected sample size)

$Z\alpha^2$ is the confidence level of 95%= 1.96

P =43.6 %.....(reference 20)

D = margin of sampling error tolerated 5%

n =total sample size

NF= Total sample size adjusted

N= total number of women in reproductive age group who came to Hospital within month.

4.5. Sampling procedure

Systematic random sampling was used. From those presented female the first respondent was selected randomly and keep spacing by using the K^{th} unit starting from the first participant the data was collected. This was calculated using the formula

K =N/n = 1050/291= 3.6

N =total number of women in reproductive age group who came to Hospital within month

n=Total sample size adjusted

4.6. Variables

4.6.1. Independent Variables

- Demographic Variables: age, education, marital status, income, occupation.
- Determinants: awareness's of complication, contraceptive failure, knowledge, number of children living, number of pregnancy, and reason for abortion.

4.6.2. Dependent Variables

- Prevalence of induced abortion

4.7. Inclusion and exclusion criteria

4.7.1. Inclusion criteria

- All women who receive induced abortion care service in Woreda 9 Health Center Addis Ababa during the study period

4.7.2. Exclusion criteria

- Women who are too ill to talk,
- Women who are mentally ill.

4.8. Operational definitions

- **Abortion**: the termination of pregnancy before 28 weeks gestational age
- **Contraceptive failure**: the used contraceptive yields in pregnancy
- **Determinants** : factors that contributing for the occurrence of abortion
- **Incest** : sex between close relatives
- **Induced abortion** : an abortion performed intentionally , weather therapeutics or without any medical background
- **Maternal and child health clinics**: a clinic either in hospital or separate health institution comprises ANC , family planning and delivery services
- **Rape** : having sexual intercourse by force

4.9. Data collection procedures

The data was collected using structured questioners which were adopted from study done in Guaraghe zone, Ethiopia in 2014.Self administer questioner was used after explaining the aim of the study to the participant; the data was collected by 2 BSc Nurses. The data collector had had proper training about the study on the prior week. All information regarding socio-demographic characteristics was acquired from direct information the participant gave.

4.10. Data quality control measure

Questioner has been prepared in English and was translate into Amharic the back to English on order to avoid any language barrier. To keep the quality of data completeness, each questioner was seen. After checking for the completeness, questioner was coded and entered to the computer. The coded questioner was rechecked to avoid any error during coding and entrance. After that the response of each participant was entered based on the coded questioner.

4.11. Data analysis and processing

Data entry and analysis were performed using spss version16.0 statistical tests such as Chi-square was

used. Results are present in the form of figures, tables, graphs and text.

4.12. Ethical Consideration

Ethical clearance was obtained from Salale University department of nursing research committee and college of health science institutional review board. Each study participant was adequately informed about the purpose,method and anticipates benefit and risk of the study by their data collector.Informed consent was obtained from study participants for protecting anonymity and ensuring confidentiality.

5. Results

5.1. Socio demographic characteristics

Those women participate in the study 55 out of 291 (18.90%) were illiterate who did not read and write and according to the study most of the participant are married 141(48.50%). Also 80 out of 291 (27.50%) were housewife. Majority of the respondent earns monthly income between 500-1000 this account about 64 out of 291 (22.00%). (Table 1)

Table 1: Distribution of the study subjects by socio demographic characteristics, of women's who attend at fiche hospital

No.	variable	category	frequency	Percentage (%)
1	Age	15-19	30	10.30
		20-24	41	14.10
		25-29	64	22.00
		30-34	53	18.20
		35-39	56	19.20
		40-44	26	8.90
		>45	21	7.20
		Total	291	100
2	Ethnics	Oromo	88	30.20
		Tigray	70	24.10
		Amhara	50	17.20
		Others	83	28.50
		Total		100
3	Religion	Orthodox Christian	127	43.60
		Muslim	94	32.30
		Catholic	17	5.80
		Protestant	42	14.40
		Other	11	3.80
		Total	291	100
4	Marital status	Single	95	32.60
		Married	141	48.50
		Divorced	39	13.40
		Widow	16	5.50
		Total	291	100
5	Occupation	House wife	80	27.50
		Employee (Gov/Privet)	98	33.70
		Daily worker	49	16.80
		Student	64	22.00
		total	291	100
6	Level of education	Can't read and write	55	18.90
		Can read and write	47	16.20
		Primary	62	21.30
		Secondary	50	17.20
		Diploma	34	11.70
		Degree	36	12.40
		Other	7	2.40
		Total	291	100
7	Income	Not responded	40	13.70

		<100	24	8.20
		100-500	53	18.20
		500-1000	64	22.00
		1000-1500	62	21.30
		1500-2000	26	8.90
		2000-2500	12	4.10
		>2500	10	3.40
		Total	291	100

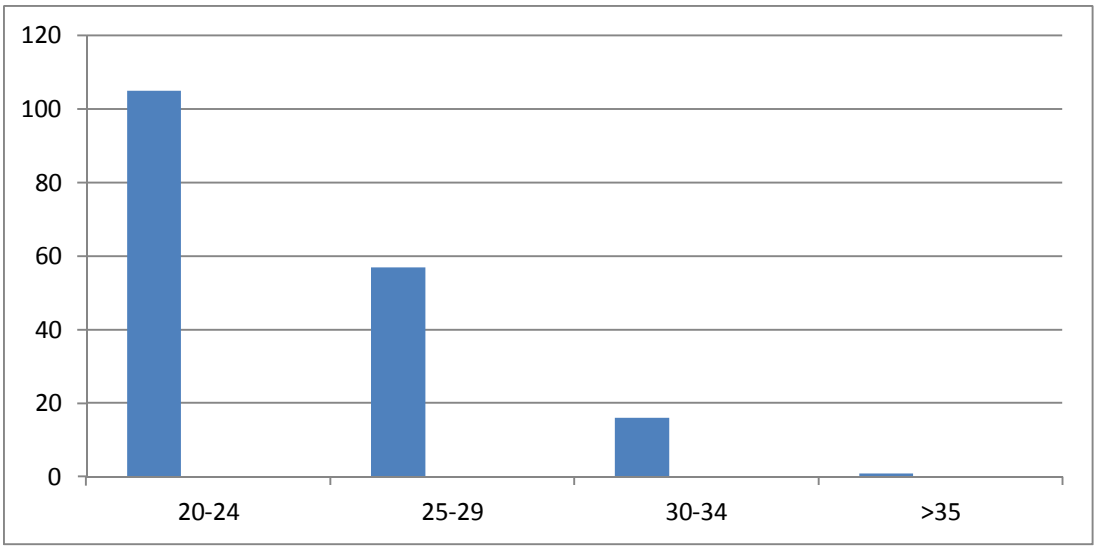
5.2. Reproductive characteristics

The reproductive history of the participant shows that their first pregnancy was at age between 20-24. This involve 105936.10%) of them where the mean age for the first pregnancy was19.74 (SD± 85 (29.20%) of the respondent informed having one child and closely following 43(14.80%) of the respondent informed having 2 child. Out of these respondents 64(22.00%) of them have been pregnant once.

Table 2: Reproductive study participant in woreda 9, Addis Sefer, Addis Ababa, Ethiopia

No.	variable	category	frequency	Percentage (%)
1	Number of child	0	85	29.20
		1	44	15.10
		2	43	14.80
		3	41	14.10
		4	29	10.00
		5	25	8.60
		6	11	3.80
		7	11	3.80
		8	1	0.30
		9	1	0.30
		Total	291	100
2	Number of pregnancy*	None	34	11.70
		1	64	22.00
		2	44	15.80
		3	44	15.80
		4	22	7.60
		5	30	10.30
		6	24	8.20
		7	13	4.50
		8	9	3.10
		9	6	2.10
		10	1	0.30

*current pregnancy is included



X-axis =age at first pregnancy
Y-axis= frequency
Fig 1: age at first pregnancy study participant I woreda 9, Addis Sefer, Addis Ababa, Ethiopia

5.3. Contraceptive knowledge and contraceptive use

Majority of the respondent informed to know condom, pill, inject able and lest known method was calendar accounting for 253(86.90%), 252(86.60%), 232(79.70%) and 98(33.70%). In which 219(75.30%) of the participant uses contraceptive 77(26.50%) of the participant used pill method about 122(41.90%) of the respondent used contraceptive from one up to five year.

Table 3: contraceptive knowledge, use characteristic study participant in woreda 9, Addis Sefer, Addis Ababa, Ethiopia

No.	Variable	Category		Frequencies	Percentage %
1	Contraceptive known by participant	Calendar rhythm	Yes	98	33.70
			No	193	66.30
		Pill	Yes	252	86.60
			No	39	13.40
		Condom	Yes	253	86.90
			No	38	13.10
		Injectable	Yes	232	79.70
			No	59	20.30
		Implantation	Yes	185	63.60
			No	106	36.40
		IUCD	Yes	185	63.60
			No	106	36.40
2	Ever use of contraceptive	Yes		219	75.30
		No		72	24.70
3	Method used currently	None		65	22.30
		Calendar rhythm	Yes	14	4.80
		Pill	yes	77	26.50
		Condom	yes	15	5.20
		Injectable	yes	50	17.20
		Implantation	yes	46	15.80
		IUCD	yes	24	8.20

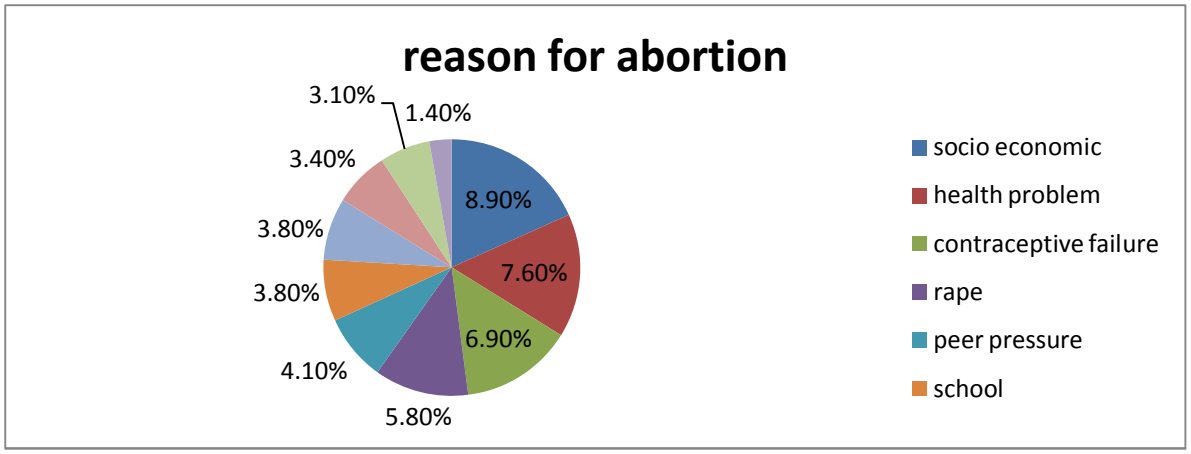
4	For how many years participant use contraceptive	None	71	24.40
		<year	22	7.60
		1-5	122	41.90
		6-10	49	16.80
		11-15	19	6.50
		>15	7	2.40
		Total	291	100

5.4. Pregnancy and abortion related

From the total respondent 135(46.40%) reported an induced abortion. Unwanted pregnancy was reported in 102 (35.00) of the respondent, of this, cause of pregnancy was resulted from contraceptive failure on 29 (8.90%) women's. (Table 3, pie chart 1)

Table 4.pregnancy and abortion related study participant in woreda 9, Addis Sefer, Addis Ababa, Ethiopia

No.	Variable	Category	Frequency	Percentage %
1	Did the respondent ever induced abortion	No	156	53.60
		Yes	135	46.40
		Total	291	100
2	Was the pregnancy wanted	None	145	49.80
		Yes	44	14.80
		No	102	35.00
		Total	291	100
3	Cause for induced abortion?	None	158	54.30
		Lack of contraceptive	22	7.60
		Contraceptive failure	29	10.00
		Child spacing	23	7.90
		Health related	24	8.20
		Rape	21	7.20
		Other	14	4.80
		Total	291	100



Pie chart 1: reason for induced abortion study participant in woreda 9, Addis Ababa, Ethiopia

5.5. Cause of pregnancy and history of termination

From those who reported contraceptive failure 14(4.80%) was caused from pill and 4(1.40%) of them from calendar. At least 110(37.80%) of them terminate once. Reason of socio demographic problem was in front having 26(8.90%) followed by contraceptive problem 20(6.90%) leading women's to abort.

Table 5: cause of pregnancy and history of abortion study participant in woreda 9, Addis Sefer, Adddis Ababa, Ethiopia

No	Variables	Category	Frequency	Percentage %
1	Type of method failed	None	259	89.00
		Calendar rhythm	4	1.40
		Pill	14	4.80
		Condom	8	2.70
		Injectable	6	2.10
		Implantation	0	0.00
		IUCD	0	0.00
		Total	291	100
2	How many pregnancy was terminated?	None	147	50.50
		One	110	37.80
		Two	30	10.30
		Three	4	1.40
		>three	0	0.00
		Total	291	100

5.6. Place of abortion, method used

76(27.10%) of the reported abortion was performed in health institution, 91(31.30) initiated by medication, 78(26.80) performed by health professional (table 5).

Table 6 place of abortion, method used study participant in woreda 9, Addis Sefer, Addis Ababa, Ethiopia

No	Variables	Category	Frequency	Percentage %
1	Place of interference	None	152	52.20
		Health institution	79	27.10
		Traditional birth attendant house	35	12.00
		Patients house	25	8.60
		Total	291	100
2	Method used to interference	None	152	52.20
		Medication	91	31.30
		Herb	31	10.70
		Plastics	17	5.80
		Total	291	100
3	Who induced the abortion	None	152	52.20
		Health professional	78	26.80
		Self	27	9.30
		Traditional birth attendant	34	11.70
		Total	291	100

5.7. Knowledge of abortion complication

On the study 146(50.20%) females know the complication related to abortion of which 82(28.10%) of the respondent reported ill condition after procedure most of the experienced fever 44(15.10%), heavy bleeding 42(14.40%), foul smelling vaginal discharge 25(8.60%), sweating and chilling 27(9.30%). (Table 7)

Table 7 knowledge of abortion complication study participant in woreda 9, Addis Sefer, Addis Ababa, Ethiopia

No	Variables	Category		Frequency	Percentage %
1	Knowledge about abortion related complication	None		11	3.80
		Yes		146	50.20
		No		134	46.00
		Total		291	100
2	Condition after procedure	None		156	53.60
		Good		53	18.20
		Ill		82	28.10
		Total		291	100
3	If ill	Fever	None	207	71.10
			Yes	44	15.10
			No	40	13.80
		Heavy bleeding	None	206	70.80
			Yes	42	14.40
			No	43	14.80
		Foul vaginal discharge	None	207	71.10
			Yes	25	8.60
			No	59	20.30
		Sweating and chilling	None	209	71.80
			Yes	27	9.30
			No	55	18.90

5.8. Chi-square associations between induced abortion and selected socio-characteristics

This study has tried to describe factor associated with induced abortion, in this study majority of the respondent 64 (22.00%) are aged between 25-29. With the mean age of 30.89 (SD± 8.368).49 of the respondent aged between20-24 have had induced abortion with association 20.439(p-value 0.025).Also describing that young female are at risk for induced abortion. Number of pregnancy have association in this study where 34.518(p-value=0.023) .25 of the respondent have got pregnant once. The respondent who knows pill method 124 out of 135 of the respondent had an induced abortion this also associated with induced abortion 5.999 (p-value=0.050). Unwanted pregnancy have association with induced abortion with 1.564(p-value=0.001). Also the method used for contraception has association with induced abortion most failed method used was pill reported by 12 participant and condom follow reported by 7 participant, Where 26.695(p-value=0.001). The number of termination that the respondent had also associated with induced abortion 1.395(p-value=0.001). The reason given to induce abort also has associated with induced abortion 1.689(0.001) about 25 of the respondent complain socio-demographic problem, health problem and contraceptive failure.

Table 8.Chi-square test for association between induced abortion and some of the selected socio-demographic and related question about pregnancy and contraceptive among women in reproductive age, in lafto sub city woreda 9, health center, Addis Ababa, may, 2016. (n=291)

Variable		Induced abortion		X^2	P-Value
		Yes (%)	No (%)		
Age	15-34	82(60.74%)	156(67.94%)	12.782	0.385
	>35	53(39.26%)	50(32.06%)		
Marital status	Married	66(48.90%)	75(48.08%)	6.342	0.386
	Single/divorced/ widowed	69(51.10%)	81(51.92%)		
Education	Literate	26(19.26%)	29(18.59%)	12.389	0.415
	Illiterate	109(80.74%)	127(81.41%)		

Income	<1500	115(47.33%)	20(41.67%)	9.941	0.767
	>1500	128(52.67%)	28(58.33%)		
Occupation	House wife/student	59(43.70%)	85(54.49%)	14.911	0.021*
	Private/government employee/daily worker	76(56.30%)	71(45.51%)		
No. of pregnancy	<5	83(72.81%)	134(85.90%)	34.518	0.023*
	>5	31(27.19%)	22(14.10%)		
No. of children	<4	109(80.74%)	144(92.31%)	13.497	0.761
	>4	26(19.26%)	12(7.69%)		
Reason for abortion	Not respond/time/peer pressure/age/rape/school	66(48.89%)	144(92.31)	1.689	0.000*
	Contraceptive failure/socio-economic/absence of spouse/incest/health problem	69(51.11%)	12(7.69%)		

*= shows statistically significance

6. Discussions

This study has tried to assess the prevalence and risk associated with induced abortion in Addis Ababa, saris, woreda 9 health center, in women in reproductive age(15-49) from total sample of291womens.An estimated 382,000 induced abortions were performed in Ethiopia, and 52,600 women were treated for complications of such abortions. According to this study conducted on 291 women's who attended at woreda 9 health center the prevalence of induced abortion was 135(46.39%). This is consistent with the study conducted in different parts of Ethiopia the prevalence of unintended pregnancy were showed 27.9% in kersa district east hararge in 2010, 34% in hosanna town in 2011 and 42.4% in demote gale woreda respectively [27-29]. These result might have varied due to those studies were conducted in different part of Ethiopia also in separated particular time and sample size. These results might have varied again, due to different level of education, on contraceptive use, not knowing complication of abortion.

In this study about 135(46.40%) of the respondent have induced abortion where in study conduct in Wolita Sodo University about 96.9% had an induced abortion this difference might resulted due to sample size difference also the study was conducted in university where almost large part of the participant might be sexually active.

In this study female at their first pregnancy has mean age of 19.74 year with standard deviation of 8.579 year; in study conducted in north west Ethiopia the mean age of the study group during their first pregnancy was 17.4 years {21] this difference might be due to large sample size showing that most of the them had had an early sexual practice and lack of knowledge about contraceptive also should be considered.

In study conducted in Tanzania, where most unintended pregnancy resulted from unmet contraceptive provision[24].In this study most of the unintended pregnancy was caused by contraceptive failure this difference might be caused that this study was done in urban area where contraceptive is well provided nut knowledge how correctly to use it is not assured.

Contraceptive failure or low access for contraceptives was the main reason for unintended pregnancy in Addis Ababa [8]. This study has the same finding in this study that it might result from low knowledge and unsafe way of sexual practice.

An estimated 382,500 induced abortions were performed in Ethiopia; the main reasons for induced abortion were fear of the family and the community 31.3%, not to interrupt school 26.6% and financial problem 14.1% [19]. This also true for this studies that socio-demographic reasons (8.90%) was given. This might be due to mal use of contraceptive there is also sample size difference between those two studies [20].

Association related to induce abortion was found in this study; some of this is age at first pregnancy with p-value of 0.025 where it might be due to early sexual activity, lack of knowledge about contraceptive.

Number of pregnancy was found associated with p-value of 0.023 to induced abortion. In study conducted in Mekelle showed that child spacing determinant, showed significant association with second pregnancy induced abortion, and it was with highest proportion. This is the same result that might show the respondent has engaged in to continuous sexual activity might have lack of knowledge how to prevent unwanted pregnancy.

A pill method that is known by the participant was found to be associated with induced abortion with p-value of 0.050. In same study lack of contraceptives (only 1.5%) and lack of awareness were not associated with induced abortion. This difference might be due to forgetfulness to take contraceptive.

Unwanted pregnancy was found to be associated with induced abortion, this might be due to unsafe sexual practice also rape, and incest can be considered. Place where the induced abortion is performed , method used to induce it, and also who perform the procedure are associated with induced abortion most of the participant has practiced it in health institution, performed by health professional using medication this show more safer way of abortion is practiced this times. This might be due to past experience of complication of abortion, or seeing someone with complication. Also the legalization of induced abortion in some legal grounds might support.

7. Conclusions

In this study 291 female participated in a reproductive age group were involved in the study and induced abortion was prevalent in 46.4% (135) of the participant. About 102 (35.00%) of the participant reported unwanted pregnancy associated with induced abortion (P-value 0.000), contraceptive failure was related with this unwanted pregnancy in 29(10.00%), the most failed method of contraceptive was found to be pill method 14(4.80%) with association in this study result of 5.999(p-value=0.050). even if there is no association between induced abortion with knowing condom method there is 120 of the participant had had an induced abortion. Women admitted induced abortion have given reason socio-demographic 26(8.90%) and on contraceptive problem 9 (3.10%).

8. Recommendations

To reduce the associated factor of induced abortion, the following recommendations are given from the above result.

- The federal health bureau and also the policy maker have to give education how contraceptive can fail and how properly to use contraceptive for women in reproductive age group
- Recommendation for school administrators, to have an organized program to teach their student to practice safe sexual practice
- Governmental and nongovernmental organization club and parties have to focus on reproductive health of youngster who are in more risk of abortion

9. Reference

[1]F.GaryCunningham,MD,Kenneth J. Leveno,MD, Steven L. Bloom, MD***, WILLIAMS OBSTETRICS, The McGraw-Hill Companies,2007,22th ed

[2]WHO,UNICEF,UNFPA,and the world Bank. Trends in Maternal Mortality: 1990 to 2010 Geneva; World health organization,2012.

[3]Federal democratic republic Ethiopia. The criminal code of the Federal Democratic Republic of Ethiopia, Proclamation Number 414/2004, Article, 551, 2004.

[4]Geregizherburuh, assessment of determinant of induced abortion among women's in reproductive age group, Addis Ababa University, June 2010.

[5]Allan Guttmacher Institute. Facts abortion in Ethiopia .available from: http://www.guttmacher.org/pubs/IB_AWW-ethiopia.pdf. AaccessedApril, 2010.

[6]TadeleKebede L, Nigaturegassa G, unintended pregnancy among married women in Ethiopia; Journal of research in peace, Gender and Development Vol. 1(3) pp.111-120, April 2011

[7]Central statistical Agency [Ethiopia] and ICF International, 2012. Ethiopia demographic and health survey 2011. Addis Ababa, Ethiopia and Calverton, Maryland: central statistical Agency and ICF International.

[8]Wakbulcho M, Moller B. 1994. Attitudes toward pregnancy among women attending an antenatal clinic in Ethiopia. International J of Gynec and Obstet. Vol.46:61-61.

[9]Kumbi S, Melkamu Y, Yeneneh H, quality of post abortion care in public health facilities in Ethiopia, ethiop J health dev 2008,22(1):26-33.

[10]Amhaadmasie, Kalemelekotnugussietaye, tesfamekonen Magnitude and risk factor of abortion among regular female student in wolaitasodo university, Ethiopia, Gelaye et al. BMC Women's Health 2014, available from: http://www.biomedcentral.com/1472-6874/14/15

[11]WorkuAnimaw, BinyamBogale, Awareness and attitude to liberalized safe abortion services among female students in university and colleges of Arba Minch Town, Ethiopia, science journal of public health 2014;2(5):440-446

[12]Ahmed Abdella a, Tamara Fetters b, Janie Benson b, Erin Pearson; Meeting the need for safe

abortion care in Ethiopia: Results of a national assessment in 2008 Global Public Health, 2013 Vol.8, No.4,417434

[13]Yusuf L, Zein ZA. 2001.Abortion at Gondar College Hospital, Ethiopia. East AfrMedJ.Vol.978(5):265-268.

[14]Ipas ,working with communities to help Ethiopia women access safe, legal abortion, www.ipas,org accessed on December 2014

[15]Allan GuttmacherInstitute.Annotated Bibliography –Abortion Research in Ethiopia, 23 July 2009

[16]Allan Guttmacher Institute. Facts on abortion in Africa. Available from: http://www.guttmacher.org/pubs/IB_AWW-ethiopia.pdf. Accessed June 18, 2014.

[17]World Health Organization. Unsafe abortion: Global and Reginal Estimates of the Incidence and mortality in 2008. 6th ed. Geneva, Switzerland: Department of Reproductive Health and Research, World Health Organization; 2011. Available from: http://www.who.int/ reproductive health /publications/unsafe abortion.Accessed June 18,2014.

[18]Ministry of health of reproductive of Kenya , incidence and complications of unsafe abortion in Kenya , August 2013

[19]Yirgu G, Solomon T, Takele G, et al. caring for women with abortion complications in Ethiopia. International Perspectives on Sexual and Reproductive Health. 2009;36(1):20-45.

[20]GezahegnTesfaye, MitikuTeshomeHambisa, and AgumasieSemahegn; induced abortion and associated factors in health facilities of Guraghe Zone, Southern Ethiopia, Journal of pregnancy Volume 2014, article ID 295732

[21]Susheela S, Tamara F, Hailemichael G, Ahmed A, The estimated incidence of induced abortion in Ethiopia,2008, international perspectives on sexual and reproductive health,2010,36(1):16-25.

[22]Oye-Adeniran BA, Adewole IF, Umoh AV, Fapohunda OR, Iwere N. Characteristics ofabortion seekers in Southwestern Nigeria. Afr J Reprod Health. 2004;8:81-91.)

[23]Central Statistical Agency. Ethiopia demographic and health survey 2011, Addis Ababa, Ethiopia,2012

[24]Allan Guttmacher Institute 2013, No.1. Facts on unsafe abortion in Tanzania, availablehttp://www.guttmacher.org/pubs/IB unsafe-abortion-tanzania.pdf

[25]World Health Organization. Unsafe abortion: Global and Regional Estimates of the Incidence of unsafe abortion and associated mortality in 2008.World Health Organization: Geneva, 2011.

[26]AlemayehuBogale and AssefaSeme; Premarital sexual practices and its predictors among in school youths of shendi town, west Gojjam zone, North western Ethiopia, biomed central,2014.doi:10.1186/1742-4755-11-49

*[27]*Kozinisky Z, Boda K, Bartifai GY: determinants of abortion among womens undergoing artifial termination of pregnancy. *Eur J contraceptreprod health care 2001, 6(3):145-152*

4/23/2021