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Addis Ababa University

THE MAGNITUDE AND ASSOCIATED FACTORS OF REPEAT INDUCED ABORTION AMONG WOMEN OF REPRODUCTIVE AGE GROUP WHO SEEKS ABORTION CARE SERVICES AT MARIE STOPES INTERNATIONAL ETHIOPIA CLINICS IN ADDIS ABABA, ETHIOPIA.

BY: - BETHELIHEM ALEMAYEHU (BSC)

ADVISORS

ADAMU ADDISSIE (MD, MA, PhD, Associate Prof)

WONDIMU AYELE (BSC, MPH)

Boardof Examiners:

1. ADAMU ADDISSIE (MD, MA, PhD, Associate Prof)(Prime advisor):.....
2. WONDIMU AYELE (BSC, MPH)(Co- advisor)…….
3. ……-(Examiner):……
4. .....(Examiner):……

December2015

AddisAbaba,Ethiopia

Contents

AKCNOWLEDMENT

First of all I would like to thank my Almighty God for keeping me strong and healthy throughout in all my activities including this paper work.

Also my deepest and heartfelt appreciation goes to my advisors AdamuAddissie (PhD) and WondimuAyele (MPH) for their unreserved guidance and comments and provision of materials since from the beginning of topic selection to the completion of this thesis.

I would like to acknowledge the cooperation of all the MSIE clinics staffs and record office for co-operation during data collection and some important information.

Lastly, I acknowledge the contribution of many people who were directly or indirectly involved with realization of this work.

List of tables

Lists of acronyms and abbreviations

AOR	Adjusted Odds Ratio
CI	Confidence Interval
ETB	Ethiopian Birr
MMR	Maternal Mortality Ratio
MDG	Millennium Development Goals
MSIE	Marie Stopes International Ethiopia
NGO	Non-Governmental Organization
PAC	Post Abortion Care
SDP	Service Delivery Point
WHO	World Health Organization

ABSTRACT

Background: Repeated induced abortion is important public health concern both in the developing and developed world that increases maternal morbidity and mortality. There is a no of research towards the magnitude and associated factors of repeat induced abortion in developing countries particularly in Addis Ababa, Ethiopia.

Objectives: The objectives of this study was to determine the magnitude and associated factors of repeated induced abortion among abortion care service seekers at Mare Stopes International Ethiopia (MSIE) clinics in Addis Ababa, Ethiopia.

Methods: A cross sectional study was conducted on 429 women seeking abortion care at Marie stopes international Ethiopia clinics. Simple random sampling technique was used to selectstudy participants. Data were collected by trained data collectors at one of Marie stopes international clinics by 22 mothers using structured questionnaires after that done the necessary correction. Data were checked for completeness, consistency, coded and entered and analyzed through SPSS version 20.Bivariate and multivariate logistic regression analysis was computed to test the strength of association and the p-value <0.05 was considered as statistical significant.

Result:The magnitude of repeat induced abortion is 33.6 %. Based on this study educational status of college diploma and above (AOR=9.2, 95%CI; 2.3-35.3), monthly income of ETB 1001-2000(AOR=3.7; CI: 1.7-7.8), and years in marriage of 2-5 years (AOR=3.3; 95%CI: 1.6-6.7) and of 5-10 years (AOR=2.6; 95% CI: 1.3-4.9)last abortion time of 1-2years (AOR=0.4;95%CI:0.2-97) and above three years last time abortion (AOR=0.35; 95%CI:0.13-0.9) significantly associated with the repeat induced abortion among reproductive age group of women at Maries topes international Ethiopia clinics in Addis Ababa, Ethiopia.

Conclusion and recommendation: The finding of this study showed that the magnitude of repeat induced abortion is similar with the reports from developing countries but it was lower than that of developed countries. Higher educationallevels, monthly income, years in marriage and time of last abortion were the associated factors for repeat induced abortion. Health promotion messages are needed to focus to improve the knowledge of women about contraceptives as a primary prevention of repeated induced abortion.

INTRODUCTION

1. Background

Abortion is a sensitive and contentious issue with religious, moral, cultural, and political dimensions. It is also a public health concern in many parts of the world. More than one-quarter of the world's people live in countries where the procedure is prohibited or permitted only to save the woman's life. Yet, regardless of legal status, abortions still occur, and nearly half of them are performed by an unskilled practitioner or in less than sanitary conditions, or both (1).

Abortions performed under unsafe conditions claim the lives of tens of thousands of women around the world every year, leave many times that number with chronic and often irreversible health problems, and drain the resources of public health systems. Often, however, controversy overshadows the public health impact (1).

The World Health Organization (WHO) estimates that worldwide 210 million women become pregnant each year and that about two-thirds of them, or approximately 130 million, deliver live infants. The remaining one third of pregnancies ends in miscarriage, stillbirth, or induced abortion (1).

Of the estimated 42 million induced abortions each year, nearly 20 million are performed in unsafe conditions and/or by unskilled providers and result in the deaths of an estimated 47,000 girls and women. This represents about 13 percent of all pregnancy-related deaths. Almost all unsafe abortions take place in developing countries, and this is where 98 percent of abortion-related deaths occur (1).

A 2000 study estimated that unsafe abortions were responsible for nearly one-third of maternal deaths in West Africa, and WHO reports that in the countries of sub-Saharan Africa unsafe abortions are responsible for as much as 50 percent of maternal deaths (1).

Women in developed and developing regions of the world turn to abortion at similar rates; annually, 29 abortions are performed per 1,000 women in developing countries, compared with 26 per 1,000 women in developed countries (2).

The ages at which women have unsafe abortions differ markedly across regions. Nearly 60 percent of women in sub-Saharan Africa who have unsafe abortions are younger than 25, and 25 percent are still in their teens (3). In Asia, 70 percent of unsafe abortions are among women 25 and older; many of them already have children and want to limit family size (3). In Latin America and the Caribbean, more than half of unsafe abortions occur among women who are in their 20s, suggesting that women in this region use unsafe abortion to space births and limit family size (3).

According to International Conference on Population and Development (ICPD), 1994 Cairo, declaration, "In no case should abortion be promoted as a method of family planning. All Governments and relevant intergovernmental and non-governmental organizations are urged to strengthen their commitment to women's health, to deal with the health impact of unsafe abortion as a major public health concern and to reduce the recourse to abortion through expanded and improved family planning services. Prevention of unwanted pregnancies must always be given the highest priority and every attempt should be made to eliminate the need for abortion. Women who have unwanted pregnancies should have ready access to reliable informationand compassionate counseling. Any measures or changes related to abortion within the health systemcan only be determined at the national or local level according to the national legislative process. In circumstances where abortion is not against the law, such abortion should be safe. In all cases women shouldhave access to quality services for the management of complications arising from abortion. Post-abortioncounseling, education and family planning services should be offered promptly, which will also help to avoid repeat abortions."

The terms repeat abortion and repeat aborter appear in the scientific literature from the early 1970s onwards. To begin with the pejorative terms "abortion recidivism" was used by some (3). Furthermore, there is no standard definition of repeat induced abortion; some studies count more than one abortion ever, others focused on multiple abortions within shorter intervals (4, 5).

A seminal 1984 Canadian study found more similarities than differences among first-time and repeat abortion clients (6). More recent research has identified an array of potential risk factors for repeat induced abortion including: age; socioeconomic status; parity; education; foreign origin; race; smoking; alcohol/drug abuse; physical abuse or violence; early sexual debut; previous contraceptive use; and type of contraceptives used(5).

However , no studies done on the magnitude and associated factors of repeat induced abortion in Ethiopia, so the aim of this study was to determine the magnitude and associated factors of repeat induced abortion among the reproductive age group of women at MSIE clinics who seeks abortion care services in Addis Ababa, Ethiopia.

1.2.Statement of the Problem

Repeat abortion, or having more than one pregnancy termination, is bound in a vicious cycle with repeat unintended pregnancy (8).

Repeat induced abortion seems to be a public health concern in many countries especially after liberalization of abortion laws (9). This practice can lead to many sexual, reproductive and health problems (10).

Previous research, mainly done in high income countries, showed that repeat induced abortion is common in women with higher age, higher parity, and lower socioeconomic status (9). However, there is no stronger evidence to suggest that women seeking repeat induced abortion are using it as a birth control method (11).

The incidence of women seeking induced abortion and especially those seeking repeated induced abortion is an important indicator of the frequency with which women experience unintended pregnancies, and it can point to gaps in contraceptive services and effective contraceptive use (12).

Despite the high incidence of repeat abortions and theirs consequences, research on it are scarce in low and middle income countries particularly in Ethiopia. Abortion is now legal in Ethiopia in cases of rape, incest or fetal impairment. In addition, a woman can legally terminate a pregnancy if her life or her child's life is in danger, or if continuing the pregnancy or giving birth endangers her life. A woman may also terminate a pregnancy if she is unable to bring up the child, owing to her status as a minor or to a physical or mental infirmitysince 2005 and the contraceptive coverage reached 27% in 2011. The abortion rate among childbearing age women was about 23 per 1,000 women aged 15-44 in 2008 (7).

However, data on repeat induced abortion and the profile of women seeking it are not available as other low and middle-income countries. Information's about factors associated with repeat induced abortion were also not available, so this study was aimed to determine the magnitude and associated factors of repeat induced abortion at MSIE clinics in Addis Ababa, Ethiopia.

1.3.Significance of the Study

Even some studies done some years back in Ethiopia, which shows the magnitude and associated factors for induced abortion at community and facility base, but still there is no studies done on the magnitude and associated factors for repeat induced abortion whether at community or facility level.

This study help women who are in the reproductive age group from 15-49 to reduce and to stop the consequence of abortion complication and to use proper family planning method as well as it help to their family from unnecessary cost.

In Ethiopia the prevalence of repeat induced abortion and its associated factors are not known, so this study will serve as a baseline data for the researchers. So, this study aimed in showing the magnitude and associated factors of repeat induced abortion at facility based data.

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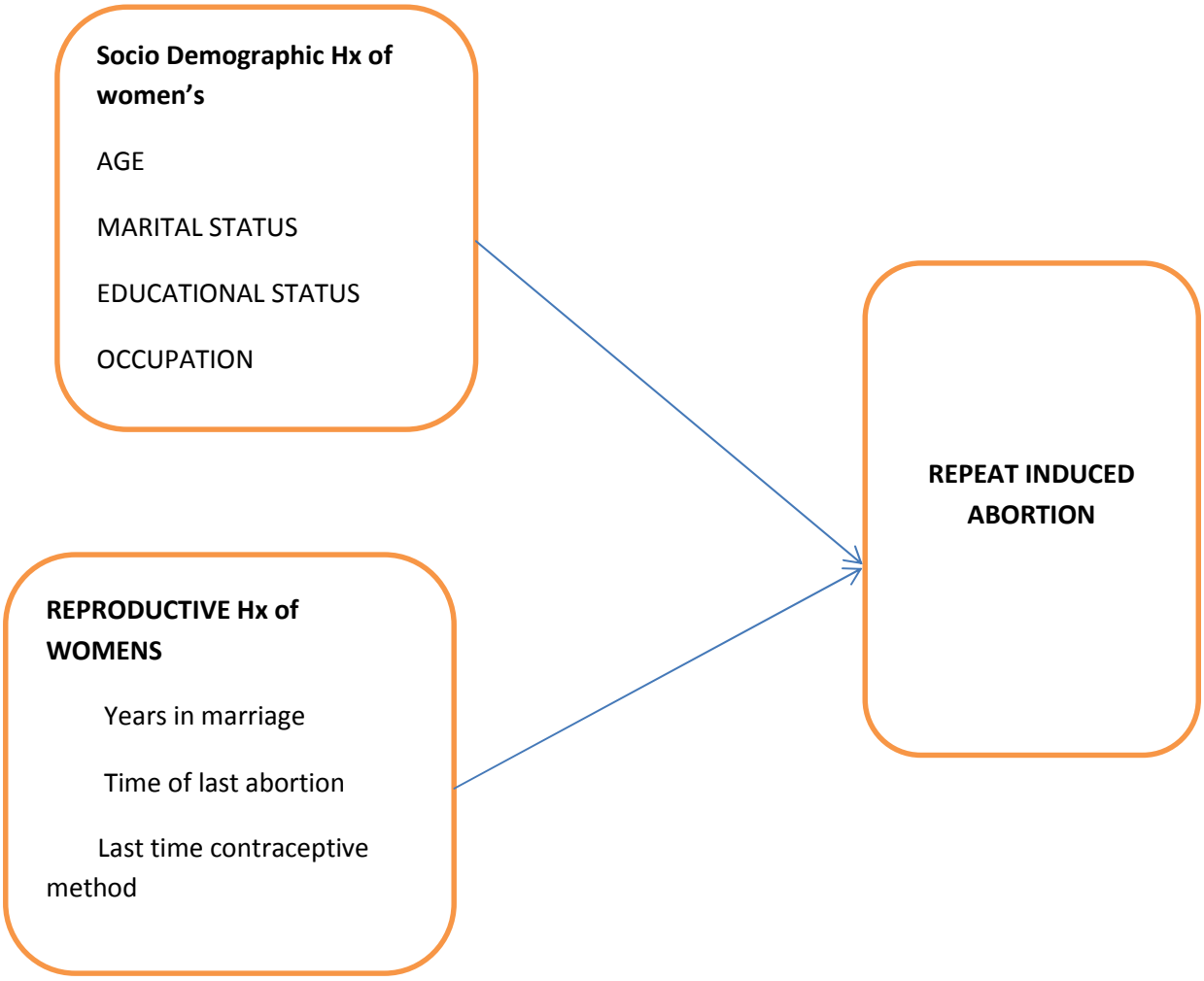
Secondly it will help for the policy makers and program implementers to consider the prevention of repeat induced abortion and its associated factors at facility and community based level therefore prevented the health sector from overwhelming.

1.31 Conceptual framework

Conceptual frame work of repeated induced abortion



The above conceptual frame work was adopted from different literatures in the above conceptual frame work there are factors that are not included in this study

This study revealed the associated factors of repeated induced abortion was age, monthly income, higher education, last abortion time, and years in marriage has significantly associated with repeated induced abortion.

2. Literature Review

Epidemiologically, repeat abortion is associated with low birth weight and preterm delivery (13), fetal loss (14), and ectopic pregnancy (15). Aside from the adverse effects on pregnancy outcomes, less is known about the socio-psychological costs to the women and the monetary costs of providing services. For these reasons, especially in countries with legalized abortion where the incidence of repeat abortion is a major public health issue.

Previous research mainly in high income countries has identified common risk factors for repeat abortions, including higher age, higher parity, and lower socioeconomic status (16, 17, 18). Evidence from the United States clearly showed that the women with repeat abortion were as highly as those with 1-time abortion to use contraception (16).

In 2007 Russia one clinic based survey estimated that repeat abortion accounts for approximately 60% of all abortions(19) and another Russian community based study revealed that repeat abortions were associated with low education and alcohol use, and it is more common under 35 years of women (20).

Facility based cross sectional study at Nepal indicated that the magnitude of repeat abortion among abortion service care seeker is 32.3 %(95% CI 29.6-34.9) and this study determined that age and parity, and women with no intention of having a future child, with those attaining primary or secondary education level and those attending the non-governmental sector clinics were the main associated factors for repeat abortion among the abortion care seekers (21).

A facility based cross sectional study in Sweden outlined that parity, lack of emotional support, being unemployed or on sick leave, daily tobacco use, and compulsory school or high school as the highest educational level were the associated factors for repeat abortion among women aged 20-49 years (22).

Different studies showed that various risk factors for repeat abortion, for instance, the risk of repeat abortion has been found to be related to several socioeconomic factors, such as immigrant status and weak social networks (22, 24), low educational level and unemployment (23, 25).
A correlation between repeat abortion and a history of violence and sexual abuse has been found (26), and parity and smoking are more common among women with repeat abortions (27, 28).

Some countries are able to report on women having had previous abortions in their abortion statistics. Data for 2004/5 show proportions of 32% for Finland(28), 36% for New Zealand(30) and 37% for Sweden (31). Two of these countries break their figures down further. In Finland and New Zealand 10 and 11% respectively of women undergoing abortion had had more than one previous abortion. In Finland three per cent of women undergoing abortion had had more than two previous abortions.

In Canada in 1993, only two per cent of abortions were obtained by women who had had more than two previous abortions, suggesting that abortion was not being widely used as a primary method of fertility control at that time (32). A study from Hawaii confirms this finding(33). This is in contrast to former eastern bloc countries where contraception was not freely available and women had large numbers of abortions: around six in a reproductive career in the former Soviet Union(29).

Repeat pregnancy termination procedures are common in Canada (where 35.5% of all induced abortions are repeat procedures (34) and the United States (where 48% of induced abortions are repeat procedures) (35).

Some of the African studies also tried to determine the magnitude and associated factors for repeat induced abortions, in Sudan for instance, a study in five hospitals indicated that over 40 % of women seeking treatment for complications of unsafe abortion had at least one previous unsafe abortion (36).

Another study in public and private facilities in Ethiopia indicated that among women seeking abortion-related services, the incidence of repeat abortion was 30 % (37).Also one facility based cross sectional study at Kenya showed that the magnitude of repeat abortion is 16% out of 769 women and being separated or divorced or widowed, having no education, having unwanted pregnancy, having 1-2 prior births and using traditional methods of contraception were associated with a higher likelihood of a repeat induced abortion (37).

So, this study was aimed to determine the magnitude and associated factors of repeat induced abortion among reproductive age group of women who seeks abortion care at MSIE clinics in Addis Ababa, Ethiopia.

3. Objective of the study

3.1. General Objective

The general objective of this study was to assess the magnitude and associated factors of repeat induced abortion among the reproductive age group of women age from 15-49 who seeks abortion care services at Mare Stopes International Ethiopia clinics in Addis Ababa, Ethiopia.

3.2. Specific Objectives

3.2.1. To determinethe magnitude of repeat induced abortion among the reproductive age group of women who are in the reproductive age group from 15-49 seeks abortion care services at Mare Stopes International Ethiopia clinics in Addis Ababa, Ethiopia.

3.2.2. To identify associated factors of repeat induced abortion at Mare Stopes International Ethiopia clinics among the reproductive age group of women from 15- 49 who seeks abortion care servicesin Addis Ababa, Ethiopia

4 Methods and material

4.1. Study area and period

The study wasconducted at Marie Stopes International Ethiopia clinics in Addis Ababa, Ethiopia which is non-governmental nonprofit based organization providing reproductive health service to the community since 1990 E. C in four sub city which is Arada,Gulele,kirkos,lideta.

Generally MSIE working in thirty seven countries around the world in Ethiopia MSIE works by five regions which is Amhara,Oromia,Tigray,SNNP ,Aldiss Ababa,& Dire Dewa administrative city all over the country MSIE has twenty five clinics and four delivery centers.

The service of MSIE is including FP services, ANC, PNC, deliver, Abortion and post abortion care services in large.

Before one month of starting this study a total of 1,209 women received abortion services in all Addis Ababa branches of MSIE clinics (i.e. at Kirkose 399, Arada 360, Teklehaymenot 279 and Gulale 180) in Addis Ababa. This study was conducted at MSIE clinics in Addis Ababa, Ethiopia.

4.2 Study population

4.2.3 Source population

The source populations for this study were all women in the reproductive age group from 15-49 who were seeking routine care services of the Marie Stopes International Ethiopia clinics in Addis Ababa, Ethiopia.

4.2.4 Study population

All womenin the reproductive age group from 15-49whowereseeking abortion care services during the study period.

Inclusion criteria

- All womenin the reproductive age group from 15-49 who were received abortion care services from MSIE clinics were included in the study

Exclusion criteria

- Women who were not volunteer to participate in the study
- Women who were not available during the data collection period

4.3 Sample size determination

The sample size of the study was determined using the single population proportion based on the assumption that the prevalence rate of repeat induced abortion was 50% (since there is no previous studies done on the area), and 95% confidence interval was used with a marginal error of 5% and by taking the non-response rate as 15% due to sensitivity of the issue.

$$n = \frac{(Z_{\alpha/2})^2 \times P(1-P)}{d^2}$$

Where: n = sample size

P = proportion of repeat induced abortion

q = 1-p

d = desired degree of precision (5%)

Z= is the standard normal value at 95% confidence level, which is 1.96

$$n = \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.05)^2}$$

= 384.16

= 15% of non-response rate was assumed,the total sample size was **442.**

4.4 Sampling procedure

For each Mare Stopes service provision unit the allocated sample size was calculated using the monthly total number of women of all the service provision units, the monthly visiting number women from each unit and the total sample size. Finally simple random sampling methods were employed to select the study participants from each service provision units of Mare Stopes International clinics.

The proportion from each service provision units were calculated as follows:-

Proportion of KSPU = Total number of women visitingKirkos per month × Sample size
Total number of population in all MSIE clinics

$$=\frac{399\times442}{1,209}$$

= 146 women, KSPU= Kirkose Service Provision Unit

Proportion of ASPU = Total number of women visiting Arada per month × Sample size
Total number of population in all MSIE clinics

$$=\frac{360\times442}{1,209}$$

= 132 women, ASPU= Arada Service Provision Unit

Proportion of ThSPU = Total number of women visiting Teke.H per month × Sample size
Total number of population in all MSIE clinics

$$=\frac{270\times442}{1,209}$$

= 99 women, ThSPU= Tekelehaymanot Service Provision Unit

Proportion of GlSPU = Total number of women visiting Gulale per month × Sample size
Total number of population in all MSIE clinics

$$=\frac{180\times442}{1,209}$$

= 65 women, GlSPU= Gulale Service Provision Unit

4.5 Study design

Facility based cross-sectional study design was conducted

Study Variables

4.5.1. Dependent Variable

- Repeat induced abortion

4.5.2. Independent Variables

- Socio-demographic characteristics (age, marital status, educational status, economic status, residence)
- Years in marriage
- Family size
- Number of pregnancy
- Time of last pregnancy
- Number of previous abortion
- Time of last abortion
- Methods used for last abortion

4.6 Operational definition

Repeat induced abortion: - refers for the women who having more than one induced pregnancy termination.

4.7 Data collection tools and procedures

The data collection instruments were structured questionnaires which contain closed ended questions. It was first prepared in English version and later on translated to Amharic version.The translators were who have PHD in foreign language and communication the second one who have doctorate degree and MPH.

The data collectors were eight diploma nurses who were working outside of MSIE clinics, and additional three BSc nurses were recruited for supervision. Full one day training was given for

data collectors and supervisors on the methods of collecting data through interviewing the clients. How to fill the information on questionnaire, the ethical aspect in keeping the confidentiality of their information were another focus of the training.

The supervisors had monitored the data collection process of the data collectors and taken corrective measures with consultation of principal investigator.

4.8 Data quality control

To ensure the quality of the data, the questionnaire was prepared using simple and easily understandable language and also translated in to local language (Amharic), and one day training was given for data collectors prior to data collection.

Pre-test was done outside the study areain another MSIE center in kirkos sub city on 5% questionnaires and modifications were done accordingly. During data collection, the supervisors monitored the collection process by checking completeness of the data and took the correction on the spot of data collection site when any problem happened and the principal investigator rechecked the completeness of the data.

Data were checked again for its completeness during data entry and the cleaning process was done by running simple frequency after data entry for its consistency. When inconsistency happens to the data, it was checked again by referring the hard questionnaire. Finally, data analysis was begun after completion of the cleaning process.

4.9 Data processing and analysis

Data was collected from the respondents; entry and analysis were done using SPSS, version 20. Descriptive statistics such as frequency, proportion, means and standard deviation (SD) were computed. To estimate the magnitude of the association between associated factors and repeat induced abortion, odds ratio (OR) with 95% confidence intervals (CIs) was used.

A logistic regression model was used for both bivariate and multivariate analysis in order to identify associated factors of repeat induced abortion among groups of independent variables. Variables which were significantly associated ($p<0.05$) with repeat induced abortion in the binary logistic regression analysis were entered in to the multivariate logistic regression analysis model.

The findings were expressed in AOR with 95% CIs and significant threshold was declared at $p<0.05$.

5 Ethical Consideration

This study was done after getting ethical clearance from Research and ethical committee of the school of public health, Addis Ababa University. Written permission was also secured from Mare Stopes International Ethiopia clinics and verbal consent was obtained from the participants during the data collection.

5.1 *Dissemination of the result*

The result of this will be presented to Addis Ababa University, school of public health and documents' will be disseminated to the study area including Addis Ababa health bureau, MSIE and other organization working on reproductive health.

4 Result

5.1. Socio-demographic characteristics of the study participants

A total of 429 participants with a mean age of 26 years were included in this study, of these 41% of them were at the age interval of 25-29 years. Response rate was 97%(i.e. thirty study participants were not voluntary to participate on this study). Ninety one percent (393) of the study participants were from urban areas. Regarding to marital status 55% of them married and 37.5% were never married (see table 1).

Table 1. The socio-demographic characteristics of the reproductive age group of women with history of repeat induced abortion care services at MSIE clinics in Addis Ababa, Ethiopia, from April 1 to April 20, 2015.

Variables	Number (N=429)	Percent
Age		
15-19	20	4.7
20-24	133	31.0
25-29	176	41.0
30-34	88	20.5
35-39	12	2.8
Residence		
Urban	393	91.6
Rural	36	8.4
Educational status		
Illiterate	36	8.4
Elementary	92	21.4
Secondary	138	32.2
College diploma	163	38.0

&above		
Religion		
Orthodox	330	76.9
Muslim	71	16.6
Protestant	24	5.6
Others	4	0.9
Ethnicity		
Amhara	213	49.7
Oromo	88	20.5
Tigre	46	10.7
Gurage	66	15.4
Others	16	3.7
Marital status		
Married	236	55.0
Never married	161	37.5
Divorced	28	6.5
Widowed	4	0.9
Occupational status		
House wife	83	19.3
Student	39	9.1
Government employee	46	10.7
Private employee	233	52.0
House made	24	5.6
Others	14	3.3
Monthly income(ETB)		
<500	149	34.7
501-1000	67	15.6
1001-2000	59	13.8
2001-3000	44	10.3
>3001	110	25.6

ETB= Ethiopian Birr, < =less than, > = more than

4.6 Past and current reproductive history of the study participants

All respondents were assessed for age at marriage, years in marriage, family size, number of pregnancy, time of last pregnancy, age of last pregnancy, number of previous abortion, reasons of abortion and time of last abortion(see table 2).

Table 2. Past and current reproductive history of the reproductive age group of women who seek abortion care services at MSIE clinics in Addis Ababa, Ethiopia, from April 1 to April 20, 2015.

Variable	Frequency	Percent
Marital status		
married	236	55
Never married	161	37.5
divorced	28	6.6
widowed	4	0.9
Age at marriage		
15-19	112	41.8
20-24	96	35.8
25-29	52	19.4
30-34	8	1.9
Years in marriage		
≤1 year	73	28.0
1-2 years	41	15.8
2-5 years	42	16.3
5-10 years	51	19.6
≥ 10 years	53	20.3
Family size		
1-2	140	32.6
3-4	152	35.4
5-6	105	24.5
≥ 7	32	7.5
Number of pregnancy		
1	116	27.0
2	140	32.6
3	78	18.2
4	63	14.7
5	16	3.7
≥ 6	16	3.7
Time of last pregnancy		
< 1year	265	61.8

1-2 years	127	29.6
2-3 years	23	5.4
≥ 3years	14	3.3
Was the last pregnancy wanted		
Yes	119	27.7
No	310	72.3
Age of the last pregnancy		
< 1 year	59	24.2
1-2 years	58	23.8
2-3 years	34	13.9
≥ 3 years	93	38.1
Number of previous abortion		
1 time	285	66.4
2 times	144	33.6
Reason of abortion		
Being single	135	35
Schooling	75	17.5
To space	16	3.7
Economic problem	144	33.6
Separation	39	9.1
Others	20	4.7
Time of last abortion		
Below 1 year	245	57.1
1-2 years	92	21.4
2-3 years	41	9.6
Above 3 years	51	11.9
Abortion was performed by		
Trained person	421	98.1
Untrained person	4	0.9
Self-abortion	4	0.9
Methods used for abortion		
Medications	283	66.0
MVA	146	34.0

MSIE= Mare Stopes International Ethiopia

4.7 Factors associated with repeat induced abortion at MSIE clinics

After controlling for potential confounder on multiple logistic regression analysiseducational status of the women, monthly income and years in marriage were positively associated.where as time of last abortion were negatively associated factors of repeat induced abortion among abortion service care seekers at Mare Stopes International Ethiopia clinics in Addis Ababa, Ethiopia.

Respondents who were with educational level of college diploma and above were 9 times (AOR=9.2, 95%CI; 2.3-35.3) more likely to had had repeat induced abortion than those whowereilliterate. Women those with the monthly income of 1001-2000ETB were 3 times (AOR=3.7, 95%CI; 1.7-7.8) more likely to have repeat induced abortion than those who had monthly income of more than 3000ETB, and women those with years in marriage of 2-5years were 3 times (AOR= 3.3, 95% CI; 1.6-6.7) more likely to have repeat induced abortion than those with less than one year.

Participants with the last time of abortion of 1month-1 year were 60% and 65% less risky than those with 1-2 years and above three years of last time abortions respectively (see table 3).

Table 3; Factors associated with the repeat induced abortion among reproductive age group of women who seeks abortion care services at MSIE clinics in Addis Ababa, Ethiopia, from April 1 to April 20,2015

Variables	Induced abortion		COR,95% CI	AOR,9 %CI	P-value
	Aborted once N (%)	**Repeat abortion** N (%)			
Age					
15-19	20(7.0)	0(0.0)	0.00	0.00	0.998
20-24	89(31.2)	44(30.6)	0.2(.07-0.8)	0.2(0.03-1.2)	0.076
25-29	120(42.1)	56(38.9)	0.2(0.06-0.8)		**0.022**
30-34	56(19.6)	44(30.6)	1.0	1.0	
Educational status					
Illiterate	28(9.8)	8(5.6)	1.0	1.0	
Elementary	64(22.5)	28(19.4)	1.5(0.6-3.7)	2.9(0.8-10)	0.103
Secondary	106(37.2)	32(22.2)	1.1(0.4-2.5)	2.3(0.6-8.9)	0.228
College diploma & above	87(30.5)	76(52.8)	3.1(1.3-7.1)	**9.2(2.3-35.3)**	**0.001**
Monthly income					
<500	97(34.0)	52(36.1)	1.1(0.6-1.8)	1.5(0.7-3)	0.263
501-1000	55(19.3)	12(8.3)	0.4(0.2-0.9)	0.94(0.37-2.3)	0.898
1001-2000	271(9.5)	32(11.2)	2.4(1.2-4.4)	**3.7(1.7-7.8)**	**0.001**
2001-3000	32(11.2)	12(8.3)	0.7(0.3-1.6)	0.6(0.26-1.3)	0.218
≥ 3000	74(26.0)	36(25.0)	1.0	1.0	
Years in marriage					
Less than 1 year	92(32.3)	36(25.0)	1.0	1.0	
1-2 years	48(16.8)	11(7.6)	0.5(0.2-1.2)	0.6(0.27-1.4)	0.245
2-5 years	42(14.7)	31(21.5)	1.8(1.0-3.4)	**3.3(1.6-6.7)**	**0.001**
5-10 years	42(14.7)	39(27.1)	2.3(1.3-4.2)	**2.6(1.3-4.9)**	**0.005**
Above 10 years	61(21.4)	27(18.8)	1.1(0.6-2.0)	1.5(0.7-3)	0.261
Time of last abortion					
1month-1year	149(52.3)	96(66.7)	1.0	1.0	
1-2 years	69(24.2)	23(16.0)	0.5(0.3-0.8)	**0.4(0.2-0.97)**	**0.043**
2-3 years	32(11.2)	9(6.2)	0.4(0.2-0.9)	0.4(0.13-1)	0.079
Above 3years	35(12.3)	16(11.1)	0.7(0.3-1.3)	**0.35(0.13-0.9)**	**0.04**

5 Discussion

Repeat inducedabortion, or having more than one pregnancy termination, is bound in a vicious cycle with repeat unintended pregnancy (37). Women who have had a recent abortion are more likely to discontinue contraceptive use during a 1-year follow up period and both recent and other previous abortion clients have been found to be more likely to have a (repeat) unintended pregnancy during that time period (37).

This study revealed that the magnitude of repeat induced abortion among abortion care service seekers at Mare Stopes International Ethiopia clinics was 33.6%. This is similar with study done in Ethiopia Addis Ababa (Prata et al, 2013) with the magnitude of 30%.effect on repeat induced abortion risk such that women faced 10 %($p<0.001$) greater risk of repeat abortion for every one year increase in age, education significantly increased the adjusted odds of repeat abortion .primary education more than doubled ($p<0.001$)the risk of repeat abortion compared to women with no education adjusted odds of repeat abortion also varied significantly according to occupation or employment status (37)

It is consistent with the facility based cross sectional study from Nepal with the magnitude of repeat induced abortion of 32.5% among the reproductive age group of women who seeks abortion care.Increasing age, parity and education were all associated with higher odds of having a repeat abortion.(23).

Also it is similar with study done both in developed and developing countries. For instance, this finding is similar with facility based cross sectional study's results of Canada (35.5%) the result revealed that age below 35 year illiterate and being migrants were the associated factors of repeat induced abortion (34), Finland (32%) (29), New Zealand (36%) (30) and Sweden (37%)questionaries' was answered by 798 abortion seeking women in Sweden regression model was used to assess risk factors for repeat abortion were parity (OR 2.57) lack of emotional support (OR 2.09) unemployment or sick leave(OR 1.65) low education level (OR 1.5) (31).

Also this result is comparable with the findings from developing countries such as facility based study from Sudan (40%) (36). But greater than from Kenya a facility based cross sectional study the result was 16 %(38).This is may be because of the women in developed and developing regions of the world turn to abortion at similar rates; annually, 29 abortions are performed per 1,000 women in developing countries, compared with 26 per 1,000 women in developed countries.

Several studies have identified different factors which affect the rate of repeat induced abortion among the reproductive age group of women in both developed and developing countries.

Russian clinic based cross sectional study revealed that low educational status and age below 35 years were the associated factors of repeat induced abortions (20), the present study supports this study findings, here in this study all the participants under the age of 35 years were statistically significantly associated for the repeat induced abortion with different values of (adjusted) odds ratio and p-values.

This study showed that age under 35 years, higher educational status and middle economic status were the main associated factors of repeat induced abortion among the abortion care seekers, and this finding is supported by the study from Nepal for the factor age and low educational status (23).

A study from Kenya showed that being separated or divorced or widowed and using traditional contraception methods were associated with a higher likelihood of a repeat abortion (38), however, in this study the majority of the participants who had repeat induced abortions were married (58.3%) and single (33.3%) but they are not statistically significant.

This may be because of the fact that , at present study the participants were only taken from the Mare Stopes International Ethiopia clinics which is a nonprofit based non-governmental organization, so this samples may not be representative of the whole population as like that of Kenya which was done in five public different hospitals with large sample size.

6 Strength and Limitation

6.1 . Strength

- Strength of this study was that,the data was collected by female data collectors; also the respondents were females it makes the interview essay and this gives the study more strength.
- Adjustment was done for potential confounders..
- Careful data management and processing was used.

6.2 Weakness

- Being cross sectional study couldn't establish the causal relationship between the dependent and independent variables.
- There may be under reporting of the past abortions, this may under estimate the magnitude of the result.
- Since it was a facility based study, it couldn't be generalized for the population.
- Scarcity of the national references towards repeat induced abortion and associated factors on it.
- Recall bias (they may forgotten their past abortion activity if there is any)

7Conclusion

Based on this finding the magnitude of repeat induced abortion is similar from the reports of developing countries but it is lower than the reports from the developed countries. Thepresent study showed that many factors were interwoven to affect the occurrence of the repeat induced abortion. Differences in educational status, monthly income, years in marriage and time of last abortion of women, were found to be significantly associated with repeat induced abortion.

8 Recommendation

Based on the finding of this study the following important recommendations are forwarded for the respective bodies' such as clinicians, patients, health educators, policy makers, program implementers and researchers who will engage on sexual and reproductive areas as of one main public health concern.

For organizations and institutions

- ✓ The ministry of health should have undertaken the survey studies either at facility based or community based level to determine the prevalence of repeat induced abortion and its associated factors, Since we did not have the identified prevalence of repeat abortion at national level .

For health workers

- ✓ Health promotion messages are needed to focus to improve the knowledge of women about contraceptives as a primary prevention of repeat induced abortion.

Patients

- ✓ Awareness creation on the patients on the impact of induced abortion and repeat induced abortion for their future health.
- ✓ IEC for the clients' towards family planning during post abortion care time.

For researchers

- ✓ Finally, it is better to conduct further large scale epidemiological research with large sample size at population level (using both qualitative and quantitative methods).

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ANNEX

Annex-I: -English version consent form

Title of research: - Magnitude and Associated factors of Repeat Induced Abortion among reproductive age group of women who seek abortion care services at Marie Stopes International Ethiopia Clinics in Addis Ababa, Ethiopia.

My name of principal investigator: - BetelhemAlemayehuBeyene

This study will be conducted with the objective of determining the magnitude and associated factors of repeat induced abortion in Addis Ababa, Ethiopia.

Therefore you are kindly requested to participate in this study and provide the information's required from you.

This study is approved by ethical review board at collage of health science AAU. Your participation in this study is completely on voluntary basis. I am going to ask some very personal question and you have the right to refuse from participation. Your response will be kept confidential and there will be no way of leaking your individual response to the final result of the study findings. The will be no incentives to participate in this study I would like to inform you that the responses that you provide to the questions are very essential not only for the successful l accomplishment of the study but also for producing relevant information which will be helpful in reproductive health programs.

Would you be willing to participate in this study (indicate by ticking the appropriate response)
Yes___ No____
Investigators contact address:-Cell phone Number: - +251 913 61 73 43
Email Address: - Betelhemalemayehu.11@gmail.com
Questionnaires'' code no: - _____
Name of interviewer _____ date of interview_____ sig_____
Name of the supervisor,_____date of interview_____ sig_____

Annex-II: - English version data collection tool

I. Socio-demographic characteristics of respondents

Sr. No	Questions	Options/answers
101	Age	_____in years
102	Place of residence	1. Urban
		2. Rural
103	Educational status	1. Illiterate
		2. Elementary
		3. Secondary
		4. College diploma & above
104	Religious status	1. Orthodox
		2. Muslim
		3. Protestant
		4. Catholic
		5. Other/specify/
105	Ethnicity	1. Amhara
		2. Oromo
		3. Tigre
		4. Gurage
		5. Other /specify/
106	Marital status	1. Married
		2. Single(never married)
		3. Divorced
		4. Widowed

107	Age during marriage	_____ in years
108	Year in marriage	_____in years
109	Occupation	1. House wife
		2. Student
		3. Gov. employee
		4. Private employee
		5. House made
		6. Other
1010	Monthly income	_____in ETB
II.	**Reproductive health history of the respondent**	
201	Did you ever had pregnancy before this one	1. Yes
		2. No If the answer is yes ⟹Q202-204
202	How many times did you had pregnant before this one	_____in numbers
203	When was your last pregnancy	_____in years
204	Was the last pregnancy wanted	1. Yes
		2. No
205	How many times you had abortion?	_____in numbers
206	How many of it induced	_____in numbers
207	Why you had abortion	1. I am single
		2. I am in school
		3. I am not employed
		4. I want to space
		5. Economic problem
208	When was your last abortion	_____in years
209	Who did the abortion	1. Trained person

		2. Untrained person
		3. Yourself
		4. Other/specify
210	What method did you used	1. Medication
		2. MVA
		3. Herbes
		4. Other/specify/
211	Where did you get the service?	1. Private clinic
		2. Public health centers
		3. Hospital
		4. Individual house
		5. Other specify
212	How much was its cost	_____in ETB
213	Was this pregnancy isplanned?	1. Yes
		2. No
		3. I am not sure If the answer is yes for Q1013,please answer Q 1014-1016
214	Was this pregnancy is for the first time?	1. Yes
		2. No
215	How it happened?	1. Casual
		2. Raped
		3. Pregnancy by relatives
		4. Contraceptive failure
216	Why did you come for abortion now?	1. I don't want another child
		2. Economic problem
		3. To continue my education
		4. I want to space
		5. I am separated

		6. Health problem
		7. Others / specify
217	Did you have unplanned pregnancy before this?	1. Yes
		2. No
		3. I am not sure
218	What did you done for the unplanned pregnancy?	1. Nothing
		2. Try to abort but not work
		3. I did abortion

knowledge about modern family planning		
3.1	did you ever heard about modern FP methods	1 yes
		2 no
3.2	who tell you	1 family
		2 school
		3 church/ mosque
		4 mass media
		5 health institution
		6 other /specify/
3.3	do you think it is accessible	1 yes
		2 no
3.4	which type do you know	1 pill
		2 injectable
		3 loop
		4 condom
		5 implants

		6 male sterilization
		7 female sterilization
		8 other/specify/
3.5	you or others from where get the FP methods	1 hospital
		2 health centers
		3 FGEA
		4 Mariestopes
		5 pharmacies
		6 other/specify/
3.6	have you ever used family planning method	1 yes
		2 no
3.7	3.7 for question number 42 answer is no why	1 am minor to use f/p
		2 I am not aware about f/p
		3 not accessible to me
		4 fear of side effects
		5 other specify
3.8	for question number 42 answer is yes did you use for this pregnancy	1 yes
		2 no
3.9	for question number 42 answer is yes which type of you used	1 pill
		2 injectable
		3 loop
		4 condom
		5 implants

		6 male sterilization
		7 female sterilization
		8 other/specify
3.10	for question number 42 answer is yes did you use correctly	1 yes
		2 no
		3 am not sure
3.11	how many times did you use continuously before pregnancy	1 year
		2 month
3.12	did you heard about emergency contraceptives	1 yes
		2 no
3.13	Forquestion number 48 the answer is yes which type do you know ----------	
3.14	how it work	1 Immediately after sexual intercourse
		2 by 24 hours
		3 by 72 hours
		4 4-6 days
		5 after miss my menstruation
		6 other /specify/
3.15	what is the use of emergency contraceptives	1 prevent pregnancy
		2 induced abortion
		3 prevent pregnancy and abortion
		4 I don't know
		5 other /specify/
3.16	did you ever used emergency contraceptives	

		1 yes
		2 no

Questioner code No._____

Name of center _____

Name of interviewer _____Supervisor's name _____

Date in Ethiopian calendar _____ Date in Ethiopian calendar_____

Annex-III: - Amharic version consent form

ስለተደጋጋሚውርጃመጠንናምክንያታቸውስለሚደረግጥናትለጥያቄተሳታፊዎችየተዘጋጀማብራሪያናየስምምነትቅጽ

የዋናውተመራማሪስም :- ቤተልሄምአለማየሁ

ማብራሪያስለተደጋጋሚውርጃመጠንናምክንያታቸውበሚደረገውጥናትእርስዎእንዲሳተፊተጋብዘዋል፡፡በመሆኑጥቂትጊዜወስደ ውስለጥናቱበቂግንዛቤእንዲኖርዎትያስፈልጋል፡፡ከዛበኋላለመሳተፍካልፈለጉአይገደዱምእንዲሁምመሳተፍከጀመሩበኋላበማንኛ ውምጊዜአቋርጠውመውጣትይችላሉ፡፡ይህንንበማድረግዎክሊኒኩየሚያደርግልዎትንየህክምናወይምየምክርአገልግሎትበምንም አያስተጓጉለውም፡፡

ይህየጥናትዕቅድበአዲስአበባዮኒቨርስቲየሥነምግባርቅኝትኮሚቴተገምግሞተፈቅዷልእንዲሁምጥናቱየሚካሄደውየሥነምግባርኮ ሚቴባስቀመጠውየምርምርስነምግባርመሠረትይሆናል፡፡

አላማውተደጋጋሚውርጃዎችንምክንያቶውንማወቅነው

የጥናቱተሳታፊዎችአሁንእርጉዝየሆኑናወደክሊኒኩለሌላውርጃየመጡደንበኞችናቸው

ስጋትናጉዳትበዚህጥናትሲሳተፉመረጃውየሚወሰደውየሙያውሥነምግባርበሚፈቅደውመሠረትይሆናል፡፡ይህጥናትሊወስድየ ሚችለውጊዜ 30 ደቂቃአካባቢነው፡፡

ጥቅሞችበዚህጥናትበመሳተፍዎየሚያገኙትቀጥተኛየሆነልዩጥቅምየለምነገርግንወደፊትየተደጋጋሚውርጃዎችንመንስኤለማወቅና ለመከላከልለሚደረገውጥረትየበኩሉዎንአስተዋጽኦእያደረጉነው፡፡

ማባበያ፡- በዚህጥናትእንዲሳተፉለማድረግምንምአይነትማባበያአይደረግም

ሚስጢራዊነትከዚህጥናትየምንሰበስበውመረጃበሚስጥርይያዛልከእርስዎየሚገኘውመረጃየተሳታፊውንስምበማይጠቅስመልኩ በቁጥርወይምበኮድይመዘገባል፡፡የኮድቁጥርወይምኮድየትኛውተሳታፊግለሰብእንደሆነበማይታወቅበትሰነድበተቆለፈቦታይቀመ ጣል፡፡

ይህየጥናትዕቅድበአዲስአበባዮኒቨርስቲየሥነምግባርቅኝትተገምግሞፀድቋል፡፡ጥያቄካለዎትአሁንወይንምሌላጊዜሊጠይቁይችላ ሉ፡፡ሌላጊዜለመጠየቅቢፈልጉከዚህበታችየተጠቀሱትንግለሰቦችማነጋገርይችላሉ፡፡

የዋናውተመራማሪውስምቤተልሔልአለማየሁ, ስልክቁጥር:- 0913 61 73 43

የፈቃደኝነትመጠየቂያቅጽ, እኔስሜወ/ሮወይምወ/ሪት ……
ይባላል፡፡የሰጠነውመረጃአንብበዋልወይምሰምተዋል፡፡ስለዚህእርስዎበዚህጥናትለመሳተፍፈቃደኛነትዎ

እሳተፋለሁ 2.አልሳተፍም የመጠይቁመለያኮድቁጥር ……

Annex-IV: - Amharic version data collection tool

ክፍልአንድ

ከፍልአንድየተጠያቂውአጠቃላይማህበራዊናኢኮኖሚያዊመረጃዎችንየተመለከተመጠይቅለምርጫጥያቄዎችየተጠያቂዋንመልስ ይክበቡእንዲሁምለሌሎችጥያቄዎችበተሰጠውክፍትቦታላይይሙሉ።።

ነ.ነ	እድሜዎስንትነው ?	በአመት	
ነ.2	ነዋሪነትዎየትነው ?	ነ. ከተማ 2. ገጠር	
ነ.3	የትምህርትደረጃዎምንያህልነው?	ነ. ማንበብናመፃፍየማይችሉ 2. የመጀመሪያያደረጃያጠናቀቁ 3. ሁለተኛደረጃያጠንቀቁ 4. ኮሌጅዲፕሎማእናከዚያበላይ	
ነ.4	ኃይማኖትዎምንድነው ?	1. ኦርቶዶክስ 2. ሙስሊም 3. ፕሮቴስታንት 4. ካቶሊክ 5. ሌላ /ይግለፁ/	
ነ.5	ብሔረሰብዎምንድንነው?	1. አማራ 2. ኦሮሞ 3. ትግሬ 4. ጉራጌ 5. ሌላካለ /ይገለጽ/	
ነ.6	አሁንያሉበትየጋብቻሁኔታ	ነ. በጋብቻላይ 2. ያላገባች 3. የተፋታች 4. ባሏየሞተባት 5. ሌላይግለጹ	
ነ.7	በስንትዓመትዎነውያገቡት?	ዓመት	

1.8	በጋብቻወይምበጓደኝነትምንያህልጊዜቆይተዋል?	1. በዓመት 2. በወር	
1.9	ሥራዎምንድንነው?	1. የቤትእመቤት 2. ተማሪ 3. የመንግስትሠራተኛ 4. የግል መ/ቤትሠራተኛ 5. የቤትሠራተኛ 6. ሌላሠራተኛ	
1.10	የወርገቢዎትስንትነው ?	..... ብር	
1.11	እርስዎንጨምሮስንትቤተሰብአለዎት	ብዛት	
1.12	ሬዲዮያዳምጣሉ	1. አዎ 2. አይ	
1.13	ቴሌቭዝንይመለከታሉ	1. አዎ 2. አይ	

ክፍልሁለትየተጠያቂዋየሥነተዋልዶታሪክመጠየቅ

ተ.ቁ	ጥያቄ	አማራጭናመለያኮድ		
2.1	ከዚህእርግዝናበፊትአርግዘውያውቃሉ?	1 አዎ 2 አላውቅም		
2.2	ለጥያቄቁጥር 2.1 መልስዎአዎካለችከዚህእርግዝናበፊትስንቴአርግዘዋል?	ብዛት		
2.3	የመጨረሻአርግዝናዎመቸ**ነበረ**			
2.4	የመጨረሻውአርግዝናዎየተፈለገነበር	1 አዎ 2 አይ		
2.5	**በህይወት የተወለዱ ልጆች ብዛት**	የልጅብዛት		
2.6	የመጨረሻልጅዎእድሜስንትነው?	ዕድሜ		
2.7	ከዚህበፊትውርጃኖሮዎትያውቃል?	1. አዎ 2. የለኝም		
2.8	ጥያቄነጥብ 2.7 መልስአዎከሆነከዚህበፊትስንትጊዜአስወርደዋል?			
2.9	ከዚህበፊትከነበርዎትውርጃዎችስንቶቹየተቀሰቀሱወርጃዎች ናቸው?			
2.10	ለምንነበርማስወረድየፈለጉት	1 አላገባሁም 2 አየተማርኩስለሆነ 3 ስራየለኝም 4 ማራራቅስለፈለግኩኝ 5 ለማሳደግአቅምስለሌለኝ 6 ከባሌ /ጎደኛዬጋርስለተለያሁ 7 ሌላከለይጠቀስ		
2.11	ለመጨረሻግዜውርጃያደረጉትመቼነው			
2.12	ውርጃውንያደረገውማነው	1 የሰለጠነባለሞያ 2 ስልጠናየሌለውሰው 3 ራስዎት 4 ሌላካለይጠቀስ		
2.13	የትኛውንየማስወረጃዘዴተጠቅመውነበር	1 በመድሀኒት 2 ማህፀንበማስተረግ 3 በባህላዊመድሀኒት 4 ሌላካለጠቀስ		

2.14	አገልግሎቱንየትነውያገኙት	ነ የግልክሊኒክ 2 መንግስትጤናተቋም 3 ሆስፒተል 4 ከሰውቤት 5 ሌላ ካለይጠቀስ		
2.15	ውርጃውንአንዲካሂዱየረዳዎትሰው	ነ አናቴ 2 አክስቴ 3 አህቴ 4 ጎደኛዬ 5 ባለቤቴ 6 የወንድጎደኛዬ 7 ማንም 8 ሌላካለይጠቀስ		
2.16	ስንትነበርየከፈሉት	ብር ----------		
2.17	ይህንእርግዝናከማርገዝዎትበፊትለመውለድያስቡነበር ?	1. አዎ 2. አላሰብኩምነበር 3. እርግጠኛአይደለሁም		
2.18	ለጥያቄቁጥር 2.17 መልስዎአዎከሆነየአሁኑእርግዝናዎልክበፊለጉትጊዜነውያረገ ዙት ?	1. አዎ 2. አይ 3. እርግጠኛአይደለሁም		
2.19	ለጥያቄቁጥር 2.17አና 2.18 መልስዎአይከሆነአርግዝናውአንዴትተከሰተ	1. በአጋጣሚ 2 ተደፍሬ 3 ከዘመድነውያረገዝኩት 4 የምወስደውመከላከያስላልሰራ 5 ሌላካለይጠቀስ		
2.20	ዛሬለምንጽንሱንለማቋረጦጡ	1 ሌላልጅመውለድስለማልፈልግ 2 የማሳደግአቅምስለሌለኝ 3 ትምህርቴንላለማቋረጥ 4 አራርቄመውለድስለፈለኩኝ 5 ከባሌ /ጎደኛዬጋርስለተጣላሁ 6 ለጤናዬችግርስላለው 7 ሀይማኖቴከጋብቻውጭመውለድስለማይፈቅድ		

		8 ቤተሰቦቼንስለፈራሁ 9 ስላላገባሁ 10 ሌላካለይጠቀስ		
2.21	ከዚህእርግዝናበፊትሳያቅዱአርግዘውያውቃሉ?	1. አዎ 2. አይ 3. እርግጠኛአይደለሁም		
2.16	ለጥያቄቁጥር 2.21 ምለሱአዎከሆነከዚህበፊትሳያቅዱለተከሰቱእርግዝናዎችምን ድንነውያደረጉት	1. ምንም 2. እርግዝናውንለማቋረጥሞከር ኩግንአልተሳካም 3. እርግዝናውንአቋረጥኩት 4. ሌላ		
2.17	አንድሴትሳትፈልግብታረግዝምንማድረግያለባትይመስልዎ ታል?	1. ማስወረድአለባት 2. መውለድአለባት 3. አላውቅም ሌላ		

<u>ክፍልሶስት</u>

ስለዘመናዊእርግዝናመከላከያዘዴዎችግንዛቤወይምእውቀትመጠየቂያ

ተ.ቁ	ጥያቄ	አማራጭናመለያኮድ		
3.1	ስለቤተሰብመመጠኛዘዴዎችሰምተውያውቃሉ ?	1. አዎ 2. አይ		
3.2	ስለዘመናዊየእርግዝናመከላኬዎችማንነገረዎት	1 ቤተሰብ 2ከ ት/ቤት 3ቤተክርስቲን/መስጂድ 2 ከሬድዮ/ቴሌቪዥን/ጋዜጣ 3 ከጤናተቋም 4 ሌላካለይተቀስ		
3.3	ለጥያቄቁጥር 3.1 መልስዎአዎከሆነይህንንዘዴማግኘትይቻላል	1. አዎ 2. አይ		
3.4	የሚያውቋቸውየእርግዝናመከላከያዘዴዎችምንድንናቸው ?	1 ኪኒን		

		2 መርፌ 5 በማህፀንውስጥየሚቀመጥ /ሉፕ/ 6 ኮንዶም 7 በክንድውስጥየሚቀመጥወይምኖር ፕላንት 8 የወንድዘርቧንቧማስቋጠር 9 የሴትዘርቧንቧማስቋተር 10 ሌላካለይገለጽ		
3.5	እርስዎወይምሌሎችሰዎችየእርግዝናመከላከያዘዴዎችንበዋነ ኝነትየሚያገኙትከየትነው ?	1. ሆስፒታል 2. ከጤናጣቢያ 3. ከቤተሰብመምሪያ 4. ከሜርስቶበስ 5. ከመድኃኒትመሸጫቤቶች 6. ሌላካለይገለጽ		
3.6	የእርግዝናመከላከያዘዴተጠቅመውያውቃሉ? ኣይደለምከሆነለምን	1. አዎ 2. ኣይ		
3.7	ለጥያቄቁጥር 3.6 መልስዎኣይከሆነለምንኣልተጠቀሙም	**1 አድሜዬ ገና ነው መከላከያ ለመጠቀም** **2 ስለ ወሊድ መከላከያ አላውቅም** **3 መከላከያ ስላላገኘሁ** **4 የጎንዮሽ ጉዳቱን ስለፈራሁ** **5 ሌላ ከለ ይጠቀስ**		
3.8	ለጥያቄቁጥር 3.6 መልስዎኣዎከሆነይህንንኣርግዝናበሚያረግዙበትጊዜየእርግዝ ናመከላከያይጠቀሙነበር ?	1. አዎ 2. ኣይ		
3.9	ለጥያቄቁጥር 3.8 መልስዎኣዎከሆነየትኛውንየእርግዝናመከላከያዘዴሲጠቀሙ ነበር? ለጥያቄቁጥር 3.8 መልሱኣይከሆነወደጥያቄቁጥር 312 ይለፉ	1 ኪኒን 2 መርፌ 3በማህፀንውስጥየሚቀመጥ /ሉፕ/ 4 ኮንዶም 5በክንድውስጥየሚቀመጥወይምኖርፕ ላንት 6 የወንድዘርቧንቧማስቋጠር 7 የሴትዘርቧንቧማስቋተር 8 ሌላካለይገለጽ		

3.10	ይጠቀሙበትየነበረውንየእርግዝናመከላከያዘዴበትክክልይጠቀሙነበር?	1 አዎ 2 አይ 3 እርግጠኛአልነበርኩም		
3.11	ከማርገዝዎትበፊትሲጠቀሙበትየነበረውንየእርግዝናመከላከያዘዴሳያቋርጡለምንያህልጊዜተጠቅመዋል?	1. ዓመት ..... 2. ወር		
3.12	ስለድንገተኛየወሊድመከላከያሰምተውያውቃሉ	1 አዎ 2 አይ		
3.13	ለጥያቄቁጥር 3.12 መልስዎአዎከሆነምንአይነትየድንገተኛየወሊድመከላከያዘዴነውየሚያውቁትይጠቀስ			
3.14	አጠቃቀሙአንዴትነውበትክክልአርግዝናንለመከላከል	1 ወዲያውኑከግንኙነትበሃላ 2 በ 24 ሰአትውስጥከግነኙነትበሃላ 3 በ 72 ሰአትውስጥከግነኙነትበሃላ 4 ከ4- 6 ቀናትውስጥከግነኙነትበሃላ 5 የወርአበባዬከቀረበኃላ 6 ሌላካለይጠቀስ		
3.15	የድንገተኛአርግዝናመከላከያዘዴዎችስራቸውምንድንነው	1 እርግዝናንመከላከል 2 ውርጃንመቀስቀስ 3 አርግዝናንአናውርጃንመከላከል 4 አላውቅም 5 ሌላካለይጠቀስ		
3.16	ድንገተኛየአርግዝናመከላከያተጠቅመውያውቃሉ	1 አዎ 2 አይ		

የመጠየቂያውመለያቁጥር_____

የጠያቂውስም_____ የተቆጣጣሪስም_____

ቀን_____ቀን_____

ፊርማ_____ ፊርማ_____