

**ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE ON
EMERGENCY CONTRACEPTIVE AMONG WOMEN SEEKING POST
ABORTION CARE IN HEALTH FACILITIES OF MEKELLE TOWN,
TIGRAY REGION, NORTH ETHIOPIA**

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**A THESIS SUBMITTED TO JIMMA UNIVERSITY FACULTY OF
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PUBLIC HEALTH**

May, 2011

JIMMA, ETHIOPIA

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Abstract

Background- Induced abortion is a frequent consequence of unintended pregnancy and can cause serious negative health effects, permanent disabilities and even maternal death. Regardless of the cause, unintended pregnancy and its negative consequences can be prevented by access to contraceptive services, including emergency contraception and by respecting the contraception conventions as well as by respecting the rights of women.

Objective- To assess the knowledge, attitude and practice on emergency contraceptive among women seeking post abortion care in health facilities of Mekelle town, Tigray region, Northern Ethiopia, 2011.

Methods- A cross sectional facility based study consisting of 279 individuals was conducted from March 1 up to April 15, 2011 supplemented with quantitative and qualitative studies in health facilities of Mekelle town. Purposively selected Clients seeking post-abortion care and health professionals in all the health institutions who are allowed to provide post abortion were included in qualitative study. Data were entered into a computer and statistical analysis was done using Statistical Package for Social Sciences (SPSS) version 16.0 statistical software. For all statistical significant test, the cutoff value set is $p < 0.05$ and binary and multinomial logistic regression was used to estimate the crude and adjusted odds ratio of KAP on emergency contraceptive.

Result – Among clients who ever heard about modern contraceptive, 57 (24.9) clients heard about emergency contraceptive. All study participants mentioned only pill type of emergency contraceptive. Form total study participants, only 45 (16.1%) were with good knowledge on emergency contraceptive. Among clients who ever heard about emergency contraceptive, 35 (61.4%) had positive attitude towards emergency contraceptive but only 9 (3.2%) had utilized it. Women with educational status of grade 9-12 were 3 times more likely to be non knowledgeable on EC than college or university students (AOR=3.42, 95% CI, 1.53-7.66).

Conclusion and recommendation- The study showed that, there is low level of knowledge and ever practice of emergency contraceptive method. So regional health bureau, NGO and should give especial attention to create awareness about emergency contraceptive.

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Acronyms

AOR	Adjusted Odds Ratio
COR	Crude Odds Ratio
COC	Combined Oral Contraceptives
EC	Emergency Contraceptive
ECPs	Emergency Contraceptive Pills
ESOG	Ethiopian society of Obstetrician & Gynaecologists
FGAE	Family Guidance Association of Ethiopia
FP	Family planning
GYN	Gynaecology
GYN/OBS	Gynaecology and Obstetrics
HI	Health Institutions
HRS	Hours
JU	Jimma University
IEC	Information Education and Communication
IPAS	International Project Assistance Service
IUCD	Intra Uterine Contraceptive Device
KAP	Knowledge, Attitude and Practices
LH	Luteinizing Hormone
MOH	Ministry Of Health
NGO	Non Governmental Organizations
OPD	Out Patient Department
PAC	Post Abortion Care
POP	Progesterone Pills Only
TRHB	Tigray Regional Health Bureau
SPSS	Statistical Package for Social Sciences
WHO	World Health Organization
WSPAC	Women Seeking Post Abortion Care

1 Introduction

1.1 Back ground

According to WHO definition, unsafe abortion is “a procedure for terminating an unintended pregnancy carried out either by persons lacking the necessary skills or in an environment that does not conform to minimal medical standards or both. It is one of the most easily preventable causes of maternal death and ill-health which causes about 13% of global maternal mortality and approximately 20% of overall burden of maternal deaths and long term sexual and reproductive ill-health. Every year nearly 42 million women faced with an unplanned pregnancy decide to have an abortion and about 20 million of them are forced to resort to unsafe abortion (1).

Eighty two percent of unintended pregnancies in developing countries occur among women who have an unmet need for modern contraceptives and women using modern contraceptives account for only 18%. The annual number of induced abortions in Africa rose between 1995 and 2003, from 5.0 million to 5.6 million respectively. In 2003, most abortions occurred 2.3 million in Eastern Africa, 1.5 million in Western Africa and 1.0 million Northern Africa. Of the 5.6 million abortions carried out in 2003, only 100,000 were performed under safe conditions (2).

Recognition of the need to introduce EC into the public sector began in 1997, when the national reproductive health needs assessment noted that emergency contraception could play a critical role in limiting unwanted pregnancy, reducing the need for unsafe abortion, lowering rates of maternal morbidity and providing an additional tool for rape management. The next year, Ethiopian delegates attended an international conference in Malawi on emergency contraception where they developed a framework for introducing EC services in their country. This framework called for the establishment of a multicultural advisory body and the integration of EC into ongoing training programs and national family planning guidelines. Shortly thereafter, the 1999 annual meeting of the Ethiopian Society of Obstetricians and Gynaecologists (ESOG) endorsed ECs ability to reduce dramatically the country’s soaring levels of unsafe abortion (3, 4).

1.2 Statement of the problem

Abortion, whether spontaneous or induced, is one of the most common obstetric events in the world. Forty-six million women around the world have induced abortions each year, 78% of whom live in developing countries and 22% in developed countries (5).

Worldwide estimates for 1995 indicated that about 26 million legal and 20 million illegal abortions took place every year. Almost all unsafe abortions (97%) are in developing countries, Asia and Africa. Worldwide over 5 million women having an unsafe abortion are likely to face life threatening complications such as incomplete abortion, infection, heavy bleeding and uterine perforation that require prompt medical attention, putting heavy demands on scarce health resources (6).

Every year an estimated 600,000 women die from complications related to pregnancy and child-birth. Complications related to unsafe abortion account for 13%, or 78,000, of these deaths. It is estimated that 40% of these deaths take place in Africa (7).

A major cause of maternal death in Ethiopia is complications of unsafe abortion because treatment requires less accessible and low-quality medical services. Left untreated, complications of unsafe abortion can progress to life-threatening infection or haemorrhage. According to Ministry of Health statistics of 2000, abortion complications are the fifth leading cause of hospital admissions among Ethiopian women (8).

Ethiopia has the fifth highest number of maternal deaths in the world: One in 27 women die from complications of pregnancy or childbirth annually. In 2008, an estimated 382,500 induced abortions were performed in Ethiopia, for an annual rate of 23 abortions per 1,000 women aged 15–44. One hundred women die in Ethiopian health facilities each year from abortion-related complications, but many more suffer from injuries or illness related to unsafe procedures. Four out of 10 women seeking post abortion care show signs of infection or invasive injuries when they arrive at a health facility. Twenty-three percent of all women seeking post abortion care suffered from complications severe enough to require hospitalization. Ethiopian health professionals estimate that 58% of all women who have an abortion experience serious complications and that only about a quarter (14%) of these women receive treatment for these complications (9).

According to Guttmacher institute on worldwide induced abortion 2009 report, an estimated 215 million women in the developing world have an unmet need for modern contraceptives, meaning they want to avoid a pregnancy but are using a traditional family planning method or no method in Africa (2).

In 2010 a study done in Adigrat hospital showed that, of the total admitted patients to the hospital, 20.4% were gynaecological patients and from these 60.6% were abortion cases (10).

According to 2008 report of Tigray regional health bureau, abortion was the third ten top diseases among female admissions in Mekelle town health facilities. Additionally, the use of modern contraceptive prevalence rate in Tigray region was 16.2%, from this around 2.9% consists of pills (11).

Despite surprising technological advancements in modern contraceptive methods still induced abortion is a frequent consequence of unintended pregnancy and can cause serious negative health effects, permanent disabilities and even maternal death. Regardless of the cause, unintended pregnancy and its negative consequences can be prevented by access to contraceptive services, including emergency contraception and by respecting the contraception conventions as well as by respecting the rights of women (12, 13).

One solution to decrease unwanted pregnancy after the occurrence of unprotected sex secondary to contraception non-use, contraception method failure and rape is familiarizing clients and also providers about emergency contraception methods (3, 4). Making ECPs accessible to adolescents can help to prevent unintended pregnancy. In addition, providing ECPs can provide adolescents with a bridge to other reproductive health services. Emergency contraceptive pills (ECPs) have become more available in many developing countries including Ethiopia. However, limited provider knowledge and negative attitudes, as well as poor user awareness and access, have hindered adolescents in learning about and using ECPs (14).

Strategies to reduce unplanned pregnancies should include improving the knowledge, accessibility, and availability of contraceptive services, including emergency contraception. It is estimated that appropriate use of emergency contraception could reduce the number of unintended pregnancies each year by half and thereby similarly reduces the abortion rate (15).

One hypothesis developed by Tigray region health bureau on second five year strategic health plan from 2006-2010 for the region is, to reduce maternal mortality by half by increasing modern contraceptive prevalence from 9% in 2000 to 40% in 2010 (11).

2 Literature Review

Definition

Emergency contraception refers to all methods of contraception that are used after unprotected sexual intercourse within 72 hours (three days) or 5-7 days and before implantation (16).

Methods of emergency contraception

There are two types of emergency contraception methods; namely hormonal methods and insertion of an Intra Uterine Device (IUDs). Hormonal emergency contraception consists of a Short course of oestrogen-progestin combination (COC) pills or progestin only pills (POP) taken within 72 hours of unprotected intercourse. The ingredients in these pills are the same as those used in regular birth control pills, but in higher doses. They can be taken at any time during the menstrual cycle. The common emergency contraception pills brand in our set up is Postinor-2. It is an oral emergency contraceptive pill that can help to prevent pregnancy if taken within 72hrs of unprotected sexual intercourse or failure of contraceptive method. Each of the tablets contains levonorgestrel 0.75mg .It is one of the brand names for progestin-only emergency contraceptive pills. Its mechanism of action depends on when pills are taken during the menstrual cycle, it can be antioviulatory by reducing levels of luteinizing hormone (LH) and the steroid hormones, estradiol and progesterone, it may also inhibit fertilization by affecting tubal transport of the ovum or, after fertilization, they may interfere with implantation of the fertilized egg in the uterus (17,18,19,20).

Another non-hormonal method of emergency contraception involves inserting a copper IUCD in to the uterus. This method prevents implantation of fertilized egg and can be used to prevent pregnancy up to five to seven days after unprotected intercourse. Because of the possible increased risk of pelvic inflammatory disease and the possible subsequent infertility related to IUCDs use, it isn't suitable for nulliparous women and also for those who are susceptible for STI (21).

The need for emergency contraception

Studies of the relationship between behaviour and abortion illuminate the fact that almost all patients suffering from complications of an unsafe abortion do not use an effective or any method of contraception prior to becoming pregnant. The high number of women who resort to unsafe abortion is a powerful reminder that women need access to a wide range of family planning methods to help them safely control their own fertility (22).

The need for emergency contraception is clearly demonstrated by the occurrence of unwanted pregnancies and induced abortion, and by the high rates of unwanted pregnancy among adolescents. Approximately 50% of all pregnancies are unintended. Of these, 50% are unwanted, often ending in abortion. No method of contraception is 100% effective, thus demonstrating the need for an emergency back-up method. About half of unintended pregnancies occur because of some type of contraceptive failure; either failure of the method or a mistake on the part of the user. For example, roughly 24% of unintended pregnancies occur because of oral contraceptive failure. Emergency contraception gives these women practical option and a critical last chance to prevent unwanted pregnancy and the associated hardships (17 18, 23).

Effectiveness and safety

Different studies elaborated emergency contraception to be effective in the prevention of unwanted pregnancy. One study done in India in 2009 on KAP of EC among survivors of intimate violence partner revealed that, among 66% of women who had awareness and knowledge of EC, the vast majority(87.3%) perceived EC to be effective and 61.8% perceived to be safe (24).

Side effects

Even though emergency contraceptives are effective in the prevention of unwanted pregnancy and abortion, it has also its own side effects. Based on the study done in Mahidol university among vocational students on assessment of knowledge, attitude and use of emergency contraceptive pills in 2002, 33% of the students experience side effects. Most of them were nausea and vomiting. Additionally there were weight gain, rash and menstrual disorder (25).

In a study coordinated by WHO at some period of time on 2000 women, about 20% of women taking the combined ECP experienced vomiting and 50% had nausea, compared to only 6% with vomiting and 20% with nausea among those taking the progestin-only pill. The pills sometimes cause nausea, vomiting, headaches, dizziness, cramping, fatigue, or breast tenderness. The pills also may cause irregular bleeding until a woman menstruates again, and menstruation may begin early or late (26).

The other study done in United States in 2003/4 on EC use among female adolescents indicated that, EC has its own side effects. These includes nausea is experienced by approximately half and emesis by 17% to 22% of oestrogen containing pills. Others including fatigue, breast tenderness, headache, abdominal pain and dizziness are also explained as side effects (27).

Information for the Client

Women should be provided with basic information about ECPs before receiving emergency contraceptive pills. ECP information for the client should include:

- How and when to take the pills.
- What to expect once the pills are taken.
- Possible side effects and what the woman should do.
- Failure rates.
- Importance of using ongoing contraception.
- Information regarding services for regular contraceptive use should also be provided if desired by the client (28).

The American College of Obstetricians and Gynaecologists, American Academy of Paediatrics, Society for Adolescent Medicine, and other reputable medical organizations recommend: 1) giving young women emergency contraception or a prescription in advance of need so that they will have EC on hand in an emergency; 2) prescribing/recommending EC without concern regarding repeated use; and 3) responding immediately without exams or tests of any kind to a young woman's need for emergency contraceptive pills. Finally, ensuring that services are welcoming, affordable, and confidential can encourage young

women to seek the reproductive health care they need to prevent unintended or unwanted pregnancy (29).

A study done in Turkey particularly university hospital of Aydin in 2009 among students of reproductive age group showed that, the majority of the participants (65%) reported that they would be more likely to use emergency contraception if health care providers were to furnish them with information about contraception and its safety and about the fact that the pills are not abortion inducing (30).

Barriers to more widespread use of emergency contraception

UNDP/UNFPA/WHO/WORLD BANK special programme of research development and research training in its research training showed that, adolescents, especially young women, are particularly vulnerable to sexual and reproductive ill-health. Lack of knowledge about family planning and inability to negotiate about safe sex, and cultural demands for marriage at a young age combine to yield alarming incidences among adolescents of sexual coercion, especially at first sexual intercourse which leads to unwanted pregnancy (31).

A study conducted among female students in Lesotho university (Roma) in 2010 on assessment of barriers to effective use of family planning showed that, 30 (8.6%) of the respondents have been denied services in the past. The common reasons for these are; not menstruating at the time of seeking for service, too young to start contraception, not been married, too many clients or coming late. To majority of the service users, the hours of services are convenient (44.3% of all respondents) but not to about 13.4% of respondents (32).

A 2002 survey in Albuquerque, New Mexico found that just only 20% of the pharmacies stocked EC. The most common reason cited for not stocking the product was “perceived lack of need” such as the response that customers did not ask for EC or past stock had expired on the shelves (33).

A study conducted among Addis Ababa university female students in 2007 on KAP of EC showed that, 17% of respondents was explained their response as follow. It causes health problems and unpleasant side effects, if a woman is already pregnant, that EC will cause an abortion and almost half (49.0%) thought taking EC may cause problems getting pregnant

later, it could fail and will be completely useless after having sexual contact, it is very expensive and few respondents reported that its use is objected for religious reasons (34).

A study carried out in Jimma University on KAP of EC among female students in 2010 showed that, the possible reason for low EC practice rate in this study could be lack of awareness of the place where it is available, lack of correct information, low promotion and availability of the methods in most health institutions (35).

Improving access to emergency contraception

Based on the studies done in U.S in 2004, at least one form of EC has been available in U.S for several years now and there have been a number of efforts to broaden women's access to and awareness of EC, particularly since its effectiveness is time-limited (36).

A study done in Jimma University on KAP on EC among female students showed that, there is a need to educate adolescents about emergency contraceptives, with emphasis on available methods and correct timing of use. There should be promotion of emergency contraceptives to enhance their use and making them easily accessible in hospital, pharmacies and student clinic with moreover, health education program should be set up to the university students to avail accurate information about emergency contraception (35).

A study done in Arsi zone Asella town in 2007 on assessment of level of awareness and utilization of EC among female college students showed that, of the total 2167 students, 228 (27.4%) have heard about EC. Of those who have heard, Source of information about emergency contraceptives were 126 (55.3%) from health education given by health workers; from teachers education in the schools 40 (17.5%) and from mass media 30 (13.2%) (37).

Studies from evaluation of an emergency contraception introduction project in Kenya 2002 showed that, the majority of study participants had some education. Twenty percent had ever heard of EC. Women with more education were more likely to have heard of EC. Most of the evaluation respondents received EC information at a clinic (35%) or friends & relatives through word of mouth (47%). Only 7% of women in the evaluation reported that news or women's magazine were their source of EC information (38).

Knowledge, attitude and Practice of Emergency Contraception

In a study done in 2001 in South Africa to assess the knowledge, use and attitude of Emergency contraception among female public sector primary health care 1068 clients, only 22.8% of the clients had heard of emergency contraception. Awareness was lower among older, less educated women & knowledge of EC was superficial. Forty seven point one percent of those who have heard about EC were unsure of the appropriate interval between unprotected intercourses and starting EC, 56.6% not knowing where it is available. Few (9.1%) of those who knew of EC had used it. After explaining EC attitude towards its use were found to be positive with 90.3% indicating that they will use it if need arises (39).

A study carried out to assess awareness and attitude towards hormonal emergency contraception in Kuwait among married women at obstetrics/gynaecology government maternity hospital outpatient department in 2006, Only 7.8% of the respondents said they would be willing to use ECPs or inform friend or relative about ECPs in an appropriate situation with 33% unsure (40).

In a study done in India in 2005 in the family planning clinic of a tertiary teaching hospital in New Delhi India a total of 623 women seeking contraceptive advice and/or termination of pregnancy were interviewed. Greater than 99% of the respondents knew about modern methods of contraception whereas only, 37(5.9%) of the respondents knew about emergency contraception and none of them had ever used it (41).

A study done in Addis Ababa in 2006 on KAP of EC among women seeking post abortion care in health institutions showed that, about 59 (14.1%) of the study subjects know about emergency contraception and 358 (85.9%) of them do not have awareness about emergency contraception methods and of post abortion care seekers those who had awareness of EC and practiced it were 15 (3.6%) and 13 (87%) of ever used were between age group of 15-29. The literates account 14 (93%), varying from primary education to college though their number in each category was very small. The unmarried and married ever used women were 6 (40%), 9(64%) respectively. Of 275 responses 100 (36%), said emergency contraception affect the health of the woman, 33 (12%) hurt the baby in case it doesn't work, 15 (5.5%) causes sterility in the future, 34 (12%) make women to suffer from STI and even HIV/AIDS, 10 (3.6%) if men know its presence they would force women to use it, 21 (7.6%) some women

may use it frequently instead of using regular contraceptives methods, 51 (18.55%) not have enough information about emergency contraception (42).

Role of Health Care providers in Promotion of Emergency Contraception

Based on studies done in Sweto and Johannesburg Pharmacists' Knowledge and Perceptions of Emergency Contraceptive Pills in 2005 Central Business District, South Africa: One-fifth of the pharmacists provided clients with written materials on emergency contraceptives and nearly two-thirds counseled clients on pregnancy prevention. Pharmacists thought the best ways to distribute information about emergency contraceptives were through media advertisements, patient education and pamphlets. Four out of five were willing to display promotional materials. A few said that counseling clients at pharmacies and antenatal clinics would be an effective means of disseminating information (43).

Some studies done in USA in 2004 have indicated knowledge of emergency contraception among providers increased by 53% which was 13.2% prior to the implementation of training program of emergency contraception for providers and clients. Nurses and midwives who work in family planning services can help women in selecting appropriate and effective methods of contraceptives (36).

A study done in Addis Ababa in 2006 showed that, the unit heads of family planning claimed that, at present the public lacks awareness about the availability of the service and the number of clients demanding for ECPs were very low, ranging from 10-20 clients per month while on the other hand clients seeking Post abortion care due to unplanned pregnancy ranges from 2-3 per day on average. They asked for training of more staffs on provision of emergency contraception and also to increase public awareness using mass Medias. Some of the unit heads have shown concerns about the sustainability of the service because the supplies at present are from NGOs and professional association and they also need additional training (42).

Based on studies done on tertiary schools in Anambra state of south east Nigeria in 2009, from a total of 454 participants, 222 (50.3%) of the respondents felt that doctors prescription is necessary before the dispensation of emergency contraceptive drugs (44).

Based on studies on emergency contraception in Addis Ababa on practice of service providers in 2009, from the total of service providers interviewed, 90.0% provided EC to their clients, and they accurately explained how they would advise their clients on the dosing schedule for the progesterone-only pill. Though the regular combined oral contraceptives are widely available without prescription in pharmacies and drug shops of Addis Ababa, the majority of respondents have never dispensed these pills as EC. The progesterone-only type pill is widely used in pharmacies and drug shops of Addis Ababa as EC. Of the respondents who practiced EC, more than half tended to limit repeated EC use for their unfounded concern: “EC has side-effects when used repeatedly; not to encourage unsafe sex; and some of them believed that in order to enforce the use of regular contraceptive pills, repeated use should be discouraged”(45).

CONCEPTUAL FRAME WORK

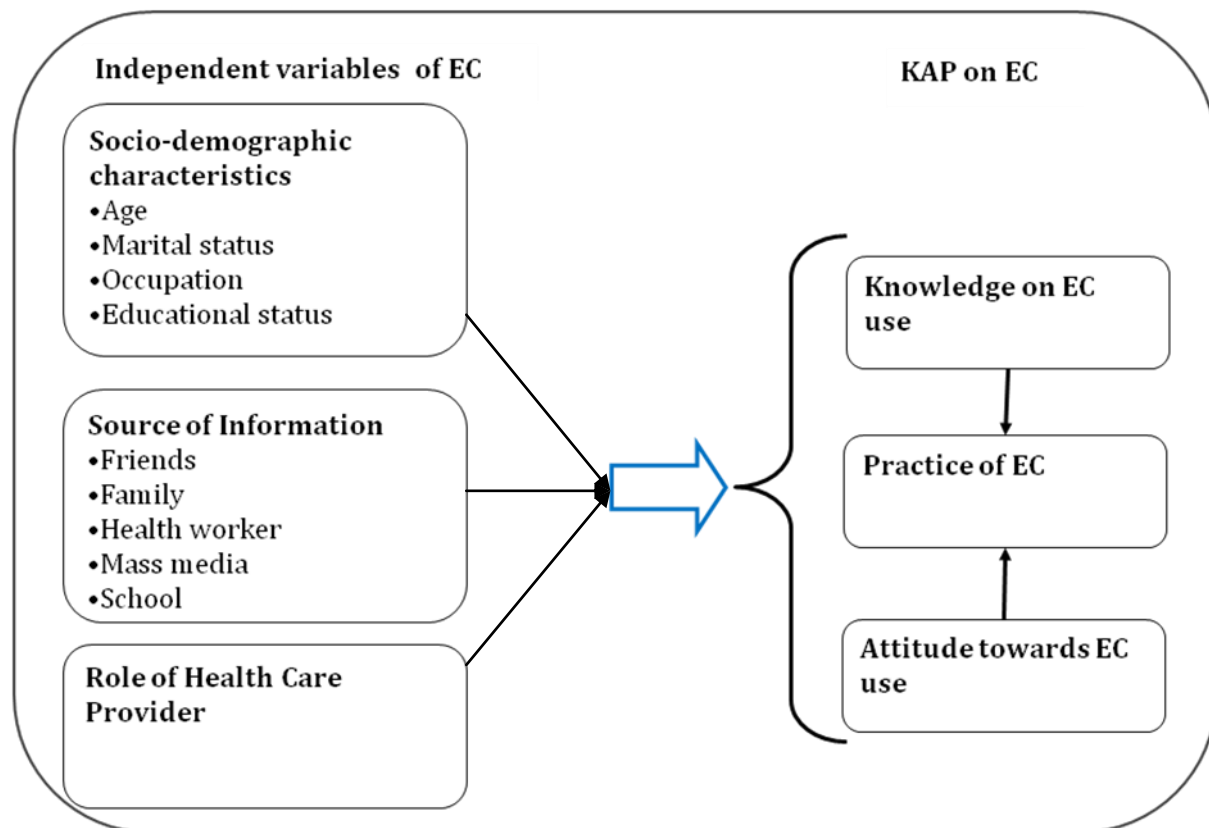


Figure 1: Conceptual frame work for assessment of KAP on emergency contraceptive among women seeking post abortion care (42).

2.1 Significance of the Study

Unsafe abortion is a major medical and public health problem with high maternal morbidity including infertility and maternal mortality in Ethiopia.

Regardless of the cause, unintended pregnancy and its negative consequences can be prevented by access to contraceptive services, including emergency contraception and legal abortion services. And to my knowledge no similar research has been conducted on this title in the study area before.

So conducting of this study shows the scope of knowledge, attitude and practice on EC in health facilities of Mekelle town. So information gathered from this study will provide baseline data for further study and to assist policy planners and makers in developing appropriate evidence based strategies to promote the use of emergency contraceptive methods in the prevention of unwanted pregnancy and complication of unsafe abortion.

3 Objective

3.1 General objective

To assess the knowledge, attitude and practice on emergency contraceptive among women seeking post abortion care (PAC) in health facilities of Mekelle town, Tigray region, Northern Ethiopia, 2011.

3.2 Specific objectives

- To assess the knowledge of women seeking post abortion care on emergency contraceptives.
- To assess attitude of women seeking post abortion care towards emergency contraceptives.
- To assess magnitude of ever utilization of emergency contraceptive among women seeking PAC services.
- To assess factors associated with KAP on emergency contraceptive among women seeking post abortion care.

4 Methodology

4.1 Study Area and Study Period

Mekelle, the capital city of the Tigray National Regional State, lies 776 km north of Addis Ababa. The city has a total population of 233,012 with 113,247 males and 119,765 females. There are two governmental hospitals with one regional referral hospital, three governmental health centers and other private health facilities and NGOs. The study was conducted from March 1 up to April 15, 2011 (46).

4.2 Study Design

Facility based cross sectional study design triangulated with qualitative data collection method was conducted.

4.3 Populations

4.3.1 Source population

All women who were seeking post abortion care in health facilities Mekelle town.

4.3.2 Study population

Women seeking post abortion care in health facilities of Mekelle town at the time of data collection period.

4.3.3 Study unit

A woman seeking post abortion care who was admitted to gyn/obs ward and /or taking care at OPD level in the selected health institutions of Mekelle town at the time of data collection period.

4.4 Eligibility criteria

Inclusion criteria

Women who were seeking post abortion care in health facilities of Mekelle town at the time of data collection period.

Exclusion criteria

- Women seeking post abortion care at data collection time but who had hearing problem.
- Women in post abortion care at data collection time but who were severely sick and unable to respond.

4.5 Sample Size Determination and Sampling Technique

4.5.1 Sample size

For quantitative study: the sample size was calculated using proportion of 55.2% positive attitude towards EC among women seeking post abortion care based on a study done in Addis Ababa health facilities in 2006. Then the sample size was calculated by applying the formula of single population proportion.

Given values

n= Number of the study subjects

Z= Standardized normal distribution curve of 95% confidence interval (1.96) at 0.05 level of significance

p = The proportion of women who had positive attitude towards EC among post abortion seekers was 55.2%.

d = The margin of error taken (0.05 taken), Non response rate=10%

$$\begin{aligned}n &= \frac{(Z\alpha/2)^2 p(1-p)}{d^2} \\ &= \frac{(1.96)^2 \times 0.552(0.448)}{(0.05)^2} \\ &= 380\end{aligned}$$

Since the number of source population for two months was 769 which was less than 10,000 population, correction formula was used. So the total sample size including 10% non response rate was 279 of women seeking post abortion care.

For qualitative study: Eleven Health professionals working in gyn/obs ward or gyn OPD and 11 clients admitted in gyn/obs ward or at OPD level were included in the study until the idea was saturated.

4.5.2 Sampling technique/procedure

For quantitative studies: First all those health facilities both public and private which are legally allowed to provide post abortion care were identified. The total sample size were allocated to each facility both public and private proportionally after taking the prior two month daily case load then calculating average two month number of women getting post abortion care at each facility so as to determine the proportion of women to be taken from each health facility.

Systematic random sampling technique was used to select and approach study subjects who get post-abortion care during data collection time. The sampling fraction (K^{th}) was three ($769/279 = 3$), every third women at each health facility until the allocated sample size for that health facility obtained was included in the study. The first client was selected randomly from the first three clients who came for PAC based on their card number and it continued every 3rd client.

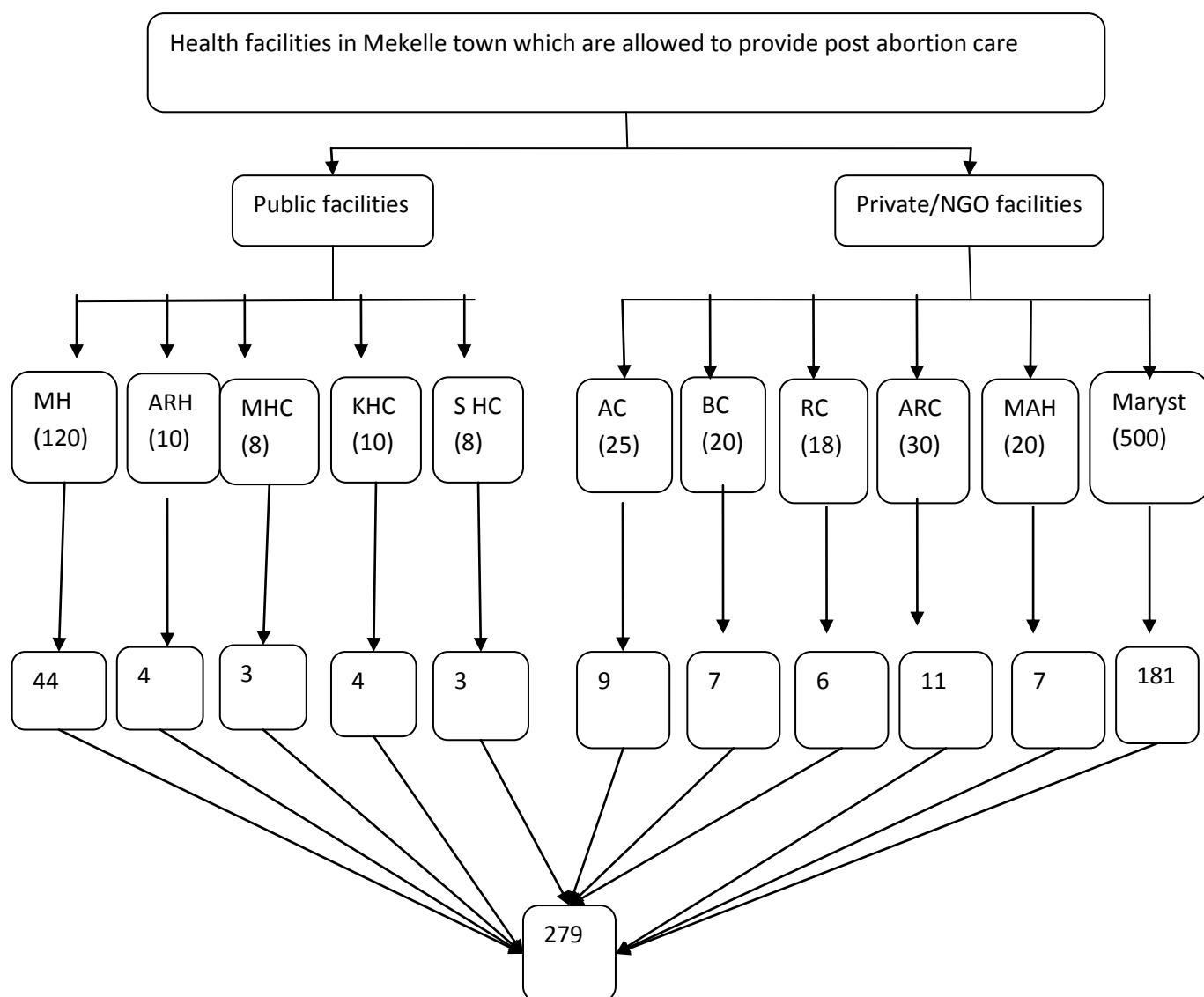


Figure 2: Pictorial presentation of sampling procedure for Quantitative technique

Foot Note:

ARH= Ayder Referral Hospital

BC= Beza clinic

MHC= Mekelle Health Center

ARC= Arsema clinic

KHC= Kassech Health Center

SHC= Semen Health Center

MHL= Markos Hospital

Maryst= Marie stopes

RC= Robel clinic

MH= Mekelle Hospital

AC= Amanuel clinic

For qualitative studies: Purposive sampling technique was used to select those health professionals who were experienced and trained in working on PAC in gyn/obs ward or gynaecology OPD b/c they had better contact and were more experienced on post abortion care than other health professionals.

Clients were selected using purposive sampling technique for in-depth interview who occurred at the time of data collection period and who were not participated in quantitative questionnaires were included until the idea saturated.

4.6 Measurements and Study variables

4.6.1 Instrument

The questionnaire was developed after different literatures were reviewed based on the objective of the study. It consists of both qualitative and quantitative parts.

The quantitative part consists of four parts. The socio-demographic characteristics, knowledge of EC, attitude towards EC and practice of EC which consists a structured (closed ended) questions was used where as the qualitative part contains open ended questions supported by in-depth interview.

4.6.2 Study variables

Independent variables

Socio-demographic characteristics

Age, marital status, educational level and occupation status.

Source of information

Friends , family, health personnel, mass media and school

Role of health care provider

Dependent variables

Knowledge, attitude, practices on emergency contraceptive.

4.7 Data collection procedure

4.7.1 Data collection method

For quantitative studies: A structured questionnaire type was used for quantitative data to interview study units. The data collectors were health professionals (diploma nurses and midwives) who were 11 in number and who can speak both Amharic and Tigrigna. The clients were interviewed after the discharge decided and just before the client left the respective health institution.

For qualitative study: Data were collected purposively from all the selected health professionals working on PAC and clients by in depth interview by the principal investigator and the information obtained through interview was recorded on notebook and tape recorder.

4.7.2 Data quality management

Quality of data was managed by accomplishing different activities before, during and after data collection period. Before data collection period, data collectors and supervisors were trained for one day by the principal investigator on the objectives of the study, how to interview, fill the questionnaire and handle questions asked by clients during interview to avoid bias.

The questionnaire was pre- tested one week before the main data collection time on 5% of study population in Wukro hospital outside of the town and necessary modification was made based on the nature of gaps identified on the questionnaire. The pre-test helped to assess the clarity, sensitivity, reaction and interview time to the study instrument. For the qualitative and quantitative studies to keep the quality of the data a questionnaire was developed then English Version was translated in to Tigrigna and Amharic and then retranslated back to English independently by health professionals who were familiar with the terms and languages to maintain its consistence for actual data collection purpose.

During data collection period, strict supervision was carried out by three supervisors who have bachelor degree in nursing and the questionnaire was reviewed and cross checked for its completeness, accuracy and consistency by the supervisors twice a week and daily by the investigator by considering the required budget. After data collection period data were edited, entered in to computer and cleaned finally.

4.8 Operational definition

- **Post abortion care** - A care given medically to women after abortion is done legally or after induced abortion is done by non professional persons.
- **Induced abortion**- Termination of pregnancy as a result of external interference.
- **Unwanted pregnancy**- Is a pregnancy that has occurred when the woman doesn't want to have children, which may be because she already had the desired number of children or it mayn't be time.
- **Knowledge**- Knowledge on EC were assessed by asking 5 questions and each question corresponds with one correct answer and with a total of 5 correct answers. Clients were considered as having good knowledge if they scored 4 and 5 ($\geq 80\%$), little (poor) knowledge if scored 3 and below ($< 60\%$) and no knowledge if never heard about EC (46).
- **Attitude** - Clients attitude was measured using five point likert scale measures (strongly agree, agree, neutral, disagree and strongly disagree). Five questions were presented and their mean score were computed. Those who scored the mean and above were categorized in to positive attitude and below the mean score as negative attitude (46).
- **Practices**- Practice refers to clients ever utilization of EC with in 72 hrs for pills or 5-7 days for IUCD after unprotected sexual intercourse. Those clients who tried to use it to prevent unwanted pregnancy after unprotected sexual intercourse were classified as EC utilizers (42).

4.9 Data processing and analysis

For quantitative data: After data collection, each questionnaire was edited and checked for completeness and codes were given then data has entered, cleaned and analyzed by using SPSS version 16 statistical packages. Descriptive statistics such as percentage, frequencies, tables and graphs were used to describe variables. Chi square test was used to assess the association b/n categorical variables. Both binary and multinomial Logistic regression was performed to assess the effect of each independent variable on the outcome variables. Then those variables that show significant

association with the outcome variable ($P < 0.05$) with CI 95% were included in a single model.

For qualitative data: First, all the verbal speeches of the clients and health professionals were recorded on note book and tape recorder. Then coding, recoding and categorization of the ideas was done and finally analysis of the idea was accomplished thematically.

4.10 Ethical clearance

Ethical clearance and permission was obtained from ethical committee of college of public health and medical science of Jimma University and official permission letter was also obtained from Tigray regional health bureau and the respective health institutions included in the study before the data collection process started.

The study participants were made to be participant in the study by getting written informed consent which includes about the purpose of the study and the importance of their participation in the study by contributing information that may help in assessing the awareness (knowledge), attitude and practices of women seeking post abortion care toward general contraceptives and in particular towards emergency contraceptives. Also the study subjects were informed about the participation in the study was voluntary and as they can skip question or questions that they did not want to answer fully or partly and also to stop the interviewing process at any time if they want to do so. Obtaining informed consent from the study subjects, exit interviewing was conducted with strict privacy by not writing the name and address of the clients. Since the study involves special group of the population, there may be some potential risks like bleeding, headache etc during interview but these risks were minimizing by collecting the data inside the health facility by health professionals which give care for post abortion care at any time and during training adequate information was given for data collectors how to minimize other risks by not writing the name and address of the clients with strict privacy.

4.11 Dissemination of the study Results

After the data has been analyzed based on the findings obtained, Conclusions and Recommendations was made and the results of the study will be presented and submitted to the school of public health and medical science of Jimma University. Also submitted to Tigray region health bureau and health facilities of Mekelle town which participated in the study and other organizations that need the result. Moreover, efforts will be made on the findings of the study to be published.

5 Results

Socio-Demographic Characteristics

Full response was obtained from a total of 279 women seeking post abortion care from health facilities of Mekelle town making the response rate 100%. The mean age of study subjects were 23.68 (± 5.6) years. Two hundred seven (74.2%) of respondents were followers of Orthodox Christian followed by Muslim which accounts 38 (13.6%). Hundred sixty three (58.4%) of clients were not married. Two hundred twelve (76%) of the respondents ethnicity were Tigre followed by Oromo and Amhara each accounts 24 (8.6%). Regarding Educational level of the study subjects, 79 (28.3%) were with non-formal education, 78 (28%) grade 9-12 followed by 75(26.9) college and above. Occupationally, 111 (39.8%) were students followed by 47 (16.8%) employee and 121 (43.4) others.

Table 1: Socio-demographic characteristics of women seeking post abortion care in health facilities of Mekelle town, 2011

Variables	Number	Percent
Age (years)		
15-19	67	24
20-24	104	37.3
>=25	108	38.7
Marital status		
Never married	163	58.4
Ever married	116	41.6
Religion		
Orthodox	207	74.2
Muslim	38	13.6
Protestant	15	5.4
Catholic	14	5.0
Other	5	1.8
Educational status		
Not formal education	79	28.3
Grade 1-8	47	16.8
Grade 9-12	78	28
College or university	75	26.9
Occupational status		
Student	111	39.8
Employee	47	16.8
Others	121	43.4
Ethnicity		
Tigre	212	76
Amhara	24	8.6
Oromo	24	8.6
Afar	11	3.9
Others	8	2.9

***Others for occupational status includes (house wives, merchants, daily workers)**

Knowledge and sources of information on emergency contraceptive among women seeking post abortion care

From the total 279 study participants, 229 (82.1%) had heard about modern contraceptive. Among study participants who had heard of modern contraceptives, 198 (86.5%) were heard about pills followed by Depo-Provera 194 (84.5%), 169 (73.8%) condom, 95 (41.5%) norplant, 40 (17.5%) IUCD and 30 (13.1%) tubal ligation. From participants who had heard about modern contraceptive, 57 (24.9%) were heard about emergency contraceptive and from total study participants, 45 (16.1 %) of women have good knowledge, 12 (4.3%) poor knowledge and 222 (79.6 %) have no knowledge about EC. Regarding source of information about EC, 49 (86%) heard from friends, (50.9%) health professionals, 16 (28.1%) school, 6(10.5%) mass media and 3 (5.3%) were families. This is supplemented by indepth interview of a student with 23 years old who said that, “...*My friends were my sources of information to hear about emergency contraceptive method...*”. All of the respondents who ever heard about EC, were mentioned pills as EC type and also 55 (96.5%) reported that, it could be obtained from pharmacy, 39 (68.4%) from governmental hospitals and health centers and 23 (40.4%) from private clinic. Thirty six (63.2%) clients those who ever heard EC reported that they didn't know the time when it should be taken to be effective in the prevention of unwanted pregnancy. This is supported by qualitative speech of one client with 20 years old who said that” ...*I don't know the time when EC should be taken to be effective in the prevention of unwanted pregnancy...*”. Additionally, 43 (75.4%) clients mentioned as it prevents pregnancy whereas the rest 14 (24.6%) as it facilitates abortion and 49 (86%) participants know at least one side effect of EC, of them 46 (93.9%) listed vomiting followed by 36 (73.5%) nausea. This result is similar with the speech of 30 years old health worker women who said that, “...*Our clients are mostly complaining vomiting and nausea as side effects EC...*”.

Table 2: knowledge on emergency contraceptive among women's seeking post abortion care in health facilities of Mekelle town, 2011.

Variables	Number	Percent
Hearing about modern contraceptive		
Yes	229	82.1
No	50	17.9
Hearing about EC		
Yes	57	24.9
No	172	75.1
Specific place where EC can be obtained		
Governmental hospital and health center		
Yes	39	68.4
No	18	31.6
Private clinic/ hospital		
Yes	23	40.4
No	34	59.6
Pharmacy		
Yes	55	96.5
No	2	3.5
Time when EC pills should be taken to be effective		
Within 72 hrs after sex	7	12.3
Out of 72 hrs after sex	14	24.6
I don't know	36	63.2
Advantage of EC		
Prevents pregnancy	43	75.4
Acts as abortifacient	14	24.6
Do you know the side effects of EC		
Yes	49	86
No	8	14
Vomiting		
Yes	46	93.9
No	3	6.1
Nausea		
Yes	36	73.5
No	13	26.5
Headache		
Yes	33	67.3
No	16	32.7

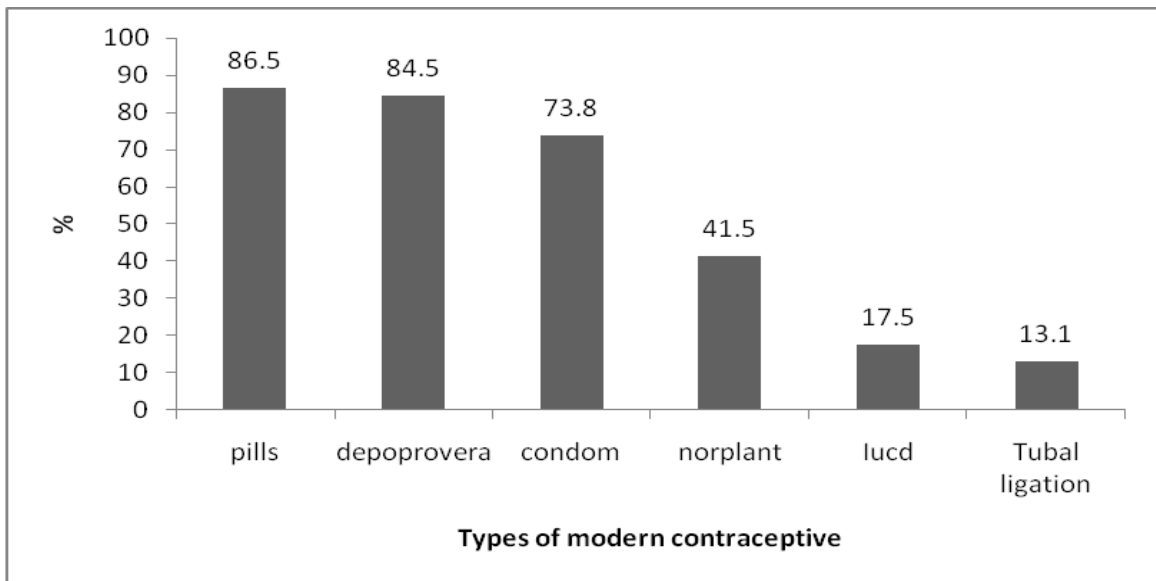


Figure 3: Ever heard about types of modern contraceptive among women seeking post abortion care in health facilities of Mekelle town, 2011.

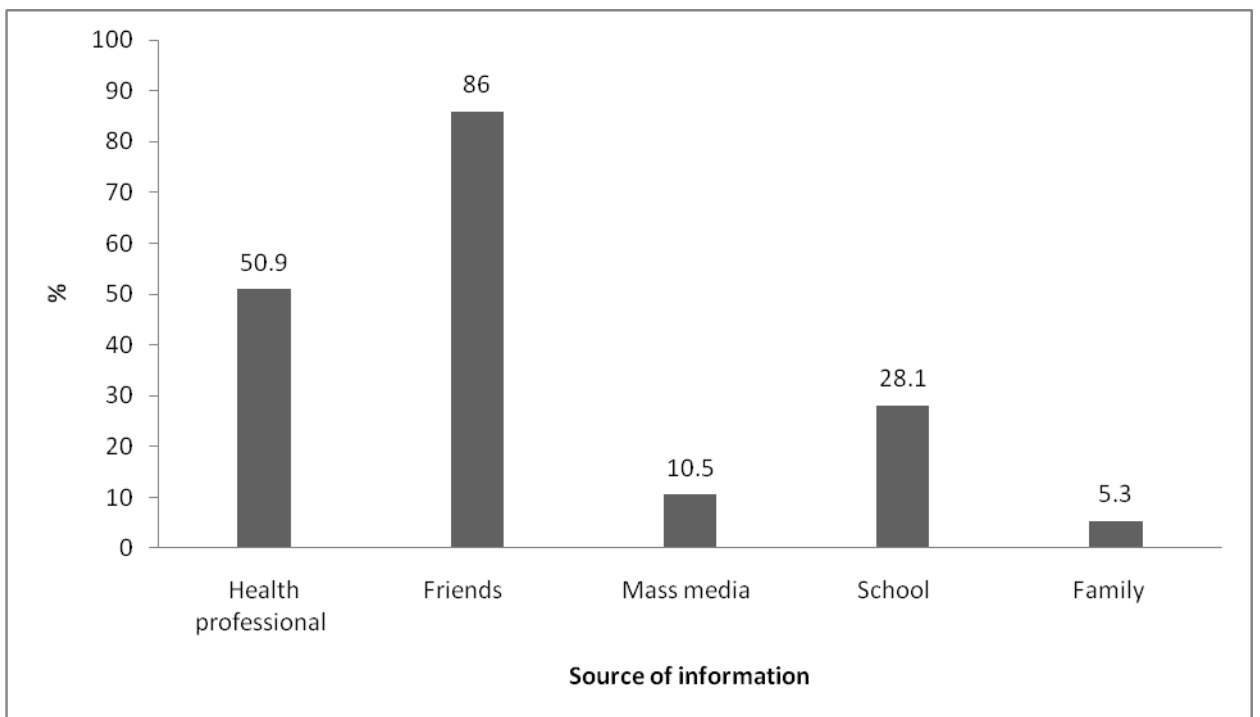


Figure 4: Sources of information for ever heard of emergency contraceptive among women seeking post abortion care in health facilities of Mekelle town, 2011.

Socio-demographic characteristics Determinants of knowledge on EC

Independent variables (age, marital status and occupational status) didn't show any significant association with the presence of knowledge on EC except educational status and it is the only predictor of knowledge on EC as shown in table3;

- Women with non-formal education were 33 times more likely to be non-knowledgeable than college or university students (AOR=33.24, 95% CI, 7.24-152.58).
- Women with educational status of grade 1-8 were 27 times more likely to be non-knowledgeable than college or university students. (AOR=26.75, 95% CI, 3.40-210.36).
- Women with educational status of grade 9-12 were 3 times more likely to be non-knowledgeable than college or university students. (AOR=3.42, 95% CI, 1.53-7.66)

Table 3: Multinomial logistic regression model showing the predictor of knowledge on emergency contraceptive among women seeking post abortion care in health facilities of Mekelle town, 2011.

Variables	Knowledge category						
	No	No knowledge		No	Poor knowledge		
		COR (95% CI)	AOR (95% CI)		COR (95% CI)	AOR (95% CI)	
Age(years)	15-19	60	2.7(0.9-7.6)	2.0(0.5-7.1)	2	1.9(0.3-13.5)	0.7(0.07-6.5)
	20-24	77	0.8(0.4-1.6)	1.2(0.5-2.7)	6	1.4(0.3-5.6)	0.8(0.2-3.9)
	+25	85	1.0	1.0	4	1.0	1.0
Marital status	Never married	128	0.9(0.5-1.9)	1.3(0.5-3.0)	9	2.2(0.5-9.2)	2.5(0.5-12.8)
	Ever married	94	1.0	1.0	3	1.0	1.0
Occupation status	Student	81	0.9(0.4-2.11)	0.7(0.4-1.9)	6	3.2(0.6-18.9)	2.2(0.5-13.9)
	Employee	25	1.2(.08-1.4)	1.1(.06-1.32)	4	1.6(0.3-9.8)	2.6(0.2-9.4)
	Others	116	1.0	1.0	2	1.0	1.0
Educational status	Non formal education	77	28.0(6.6-127.0)	33.2(7.2-152.6)	0	**	**
	Grade 1-8	45	33.7(4.0-259.0)	26.7(3.4-210.4)	1	6.0(0.3-112.3)	6.2(0.3-123.5)
	Grade 9-12	60	3.8(1.7-8.2)	3.4(1.5-7.7)	6	3.0(0.8-11.7)	3.3(0.8-13.8)
	Collage/university	40	1.0	1.0	5	1.0	1.0

* Significant at p-value <0.05.

** Means there is no COR/AOR for poor knowledge category b/c there are no women with non-formal education have poor knowledge.

N.B- Good knowledge is the reference for knowledge categorization.

Attitude towards emergency contraceptive among women seeking post abortion care

From total 279 participants, only those who ever heard about EC were assessed their attitude towards EC and 11 was obtained to be the mean score. Thirty five (61.4%) of study subjects had positive attitude towards EC and 22 (38.6%) were with negative attitude.

Socio-demographic characteristics Determinants of attitude on EC

As shown in the table 4, there is no significant association between attitude towards EC and independent variables of socio demographic characteristics (age, marital status, occupational status and educational status). This might be because of too small number of study participants to hear about EC, so they didn't give their response towards attitude questions.

Table 4: Binary logistic regression model showing association of independent variables with attitude on emergency contraceptive among women seeking post abortion care in health facilities of Mekelle town, 2011.

	Variable	Attitude		COR (95% CI)	AOR (95% CI)
		Negative	positive		
Age(year)	15-19	3	4	1.03 (0.19-5.67)	2.60 (0.26-26.61)
	20-24	9	18	1.54 (0.05-4.85)	3.58 (0.74-17.30)
	25+	10	13	1.00	1.00
Marital status	Never married	15	20	1.61 (0.53-4.92)	0.56 (0.16-2.01)
	Ever married	7	15	1.00	1.00
Occupational status	Student	9	10	1.00	1.00
	employed	6	16	0.86 (0.23- 3.29)	0.86 (0.26-3.28)
	Others	7	9	2.07 (0.53-8.10)	2.07(0.53-8.10)
Educational status	Not formal education	1	1	0.59 (0.03-10.27)	0.89 (0.01-69.87)
	Grade1-8	1	1	0.59 (0.03-10.27)	1.53 (0.07-33.77)
	Grade9-12	7	11	0.93 (0.29-2.99)	0.77 (0.03-19.11)
	College/university	13	22	1.00	1.00

Ever practice of emergency contraceptive among women seeking post abortion care

From the total study participants, 9 (3.2%) women had ever used EC method. EC type that is ever utilized by clients was only pill. This is in agreement with the indepth interview of three health care providers who said that, “...*Our health institution is providing only pill type of EC method for its clients...*”.

Among 9 clients who ever used EC, 3 (33.3%) reported they took it within 72 hrs and 5 (55.6%) were out of 72 hrs and 1 (11.1%) didn’t remember when she took it.

The most reasons mentioned for not using EC by clients who ever heard about EC were; 18 (37.5%) feel of shame, 13 (27.1%) using of other contraceptive methods and 5 (10.4%) were because of other reasons (involuntariness of health professionals, too far distance of health facility and voluntariness to be pregnant). This is supported by the in depth interview of female health care provider with 25 years old who said that, “...*Most females are not users of EC in our health institution which might be because of different reasons including; feel of shy, not expecting of failure of contraceptive might happen or shortage of EC method supplies in health institutions and others...*”.

Table 5: Ever practice of emergency contraceptive among women’s seeking post abortion care in health facilities of Mekelle town, 2011.

Variables	Number	percent
Have you ever used EC before		
Yes	9	3.2
No	270	96.8
When do you take that EC		
Within 72 hrs	3	33.3
Out of 72 hrs	5	55.6
I don’t remember	1	11.1
Why don’t you use EC before		
No available service	12	25
Feel shame	18	37.5
used other contraceptive method	13	27.1
Others (need to be pregnant, involuntary of health professional and too far of health facility)	5	10.5

Socio-demographic characteristics Determinants of ever practice of EC

As shown in the table 6, there is no significant association between utilization of EC and independent variables of socio demographic characteristics (age, marital status, occupational status and educational status). This might be because of too small number of study participants had ever used EC.

Table 6: Binary logistic regression model showing association of independent variables with ever practice of emergency contraceptive among women seeking post abortion care in health facilities of Mekelle town, 2011.

Variable	Practice of EC		COR (95% CI)	AOR (95% CI)	
	No	Yes			
Age(years)					
	20-24	100	4	0.84 (0.15, 3.15)	0.57 (0.14, 2.23)
	25+	103	5	1.00	1.00
Marital status					
	Never married	158	5	0.88 (0.23, 3.37)	1.16 (0.24, 5.60)
	Ever married	112	4	1.00	1.00
Occupational status					
	student	109	2	1.00	1.00
	employed	43	4	5.07 (0.89, 28.70)	1.73 (0.26, 11.31)
	others	118	3	1.39 (0.23, 8.45)	2.10 (0.27,16.23)
Educational status					
	Grade1-8	46	1	0.25 (0.02, 2.14)	0.48 (0.05, 4.25)
	Grade9-12	76	2	0.31 (0.06, 1.55)	0.41 (0.08, 2.11)
	College/university	69	6	1.00	1.00

N.B- Both women with in age group of 15-19 years old and all women who are non-formal educators were excluded from the table b/c they never utilized EC. (COR/AOR/95%=0.00)

6 Discussion

The study has tried to show the level of knowledge, attitude and ever practice of emergency contraceptives among women seeking post abortion care in health facilities of Mekelle town.

The finding of this study indicated that, ever heard of emergency contraceptive method is low and only 24.9% of women had ever heard of EC from total study subjects who ever heard about modern contraceptive. This result is similar with a study done among women in public health sectors of South Africa in which 22.1% had ever heard about EC (39).

Among respondents who ever heard of EC, 86%, heard from their friends and 50.9% from health professionals as their source of information to ever heard about EC. This is supported by the in depth interview report of one client with 23 years old who said that “... *My friends were my sources of information to hear about emergency contraceptive method...*”. This is consistent with a finding obtained in Uganda where by 85% heard from their friends and 47% from health professionals (49).

Of subjects who ever heard of EC, 36 (63.2%) reported that they didn't know the time when it should be taken to be effective in the prevention of unwanted pregnancy. This is supported by qualitative result of one client with 20 years old who said that “...*I don't know the exact time when EC should be taken to be effective in the prevention of unwanted pregnancy...*”. This result is higher than in a study done in Addis Ababa university in which 26.2% didn't know the timing of taking of EC (34). This difference might be difference in educational status of the participants.

Women who had educational status of grade 9-12 were 3 times more likely to be non-knowledgeable than college or university students. (AOR=3.42, 95% CI 1.53-7.66). This is similar with a study conducted in South Africa (48).

Eighty six percent participants who ever heard of EC know at least one side effect, of them 46 (93.9%) listed vomiting followed by 36 (73.5%) nausea. This result is supplemented by the speech of 30 years old health worker women who said that,

“...*Our clients are mostly complaining vomiting and nausea as side effects EC...*”. This is consistent with a study done in Mahidol university (25).

Based on this study finding, 61.4% of those women who ever heard of EC had positive attitude towards EC which is similar with result of Cameroon 61.8% had positive attitude towards EC (47).

Based on the results of this study, the ever utilization of EC among total clients is 3.2% which is similar with a study conducted among women seeking post abortion care in health facilities of Addis Ababa, which was 3.6% (42). This low utilization may be because of low awareness about EC and also low promotion and availability of EC methods in health institutions.

The EC method that is ever utilized by clients was only pill type. This is supported with the in depth interview of three health care providers who they said that, “...*Our health institution is providing only pill type of EC method for its clients...*”. This result is similar with a study conducted among Jimma university students (35).

Contrary to the recommended time among those clients who ever utilized EC, 55.6% women didn't took the pill within 72 hrs which is higher than a result obtained from shanghai (china) 1.6% among women seeking abortion care. This difference might be because of level of knowledge differences b/n developed and developing countries (50).

Strength and Limitations of the Study

Strengths

- It includes both quantitative and qualitative methods of data collection.
- Both public and private health institutions were participated in the study.

Limitation

- Clients may forget whether they ever utilized EC or not previously (recall bias).

7 Conclusion and Recommendations

7.1 Conclusion

- In general, the study has shown low level of knowledge and practice of EC among women seeking post abortion care and there are no utilizers of IUCD as emergency contraceptive. But more than half of the women who ever heard about EC have positive attitude to EC even though those who ever heard and practiced were very small in number..
- Among all socio-demographic characteristics, educational status had shown a significant association with knowledge about EC i.e More educated women have better knowledge about EC than those less educated.

7.2 Recommendations

Based on findings of this study, the following recommendations to the relevant government bodies, NGOs and other responsible bodies.

- Health bureau of the region and the town should maintain continuous health education programmes on contraceptives in general and on emergency contraceptive in particular.
- NGOs should made an effort to educate women on EC in the study area. Increasing availability of EC methods in governmental health facilities, private clinics and pharmacies is mandatory for continuous utilization of by clients.
- Mass medias should give emphasis on information education program about EC.
- Other researchers should give especial attention for further study on factors associated with KAP on EC in the study area and for the country at large.
- Moreover, existence of "Reproductive Health Clubs" in high schools could be the venue for disseminating information about EC in the study area.

8 References

1. World health organization. Unsafe abortion: Global and regional estimates of the incidence of unsafe abortion and associated mortality in 2003.5th ed. WHO: Geneva, 2007.
2. Guttmacher Institute. Abortion Worldwide: A Decade of Uneven Progress. New York, 2009
3. Family Health International: Emergency Contraceptive pills. Network 2001; 21(1): 8-16.
4. Ethiopian Society Of Obstetricians and Gynecologists (ESOG) in collaboration with MOH & EC afrique: EC training Curriculum for mid level health workers in Ethiopia, Oct 2004
5. McInerney T, Baird T.L, Hayman A , Huber A.B and Wolf M,editor . A guide to providing abortion care. IPAS .2001.
6. World Health Organization. Unsafe abortion: global and regional estimates of the incidence of unsafe abortion and associated mortality in 2000. 4th ed. Geneva, Switzerland, 2004.
7. Alan Guttmacher Institute (AGI). Induced abortion worldwide: Sharing Responsibility Women, Society and Abortion Worldwide. United press international .1999;5
8. Fetters T, Tesfaye S and Clark A. An assessment of post abortion care in three regions in Ethiopia. Journal of obstetrics and gynaecology. 2000 to 2004
9. Guttmacher Institute. Abortion in Africa: A Decade of Uneven progress, New York, 2009
10. Amanuel G. Abortion and unwanted Pregnancy in Adigrat Zonal Hospital, Tigray, North Ethiopia. Ethiop.J Health Sci. 2010.
11. Tigray Health Bureau. Second five year strategic health plan for Tigray, 2006-2010.
12. TeKNet Ethiopia Computer Service.emergency contraception guide line.2005
13. USAID. Emergency contraceptive pills manual training: A reproductive health intervention. Family Fealth International. 2005
14. Mesce D. Unsafe Abortions: Facts & Figures. Population Reference Bureau. 2005
15. Pulley L, Klerman V, Tang H and Baker B. The extent of pregnancy mistiming and its association with maternal characteristics and behaviours and pregnancy outcomes. Perspect Sex Reprod Health. 2002;34: 206–211

16. Dunn S and Guilbert E. SOGC clinical practice guide lines. 2003 Aug ; NO 131
17. Bi-annual information. Bulletin of the consortium of Reproductive Health associations (CORHA). 2005 Sep; 4 (2). Sep 2005
18. Central Statistic Authority & ORC Macro. Ethiopia Demographic and Health survey (EDHS) 2000. Addis Ababa, Ethiopia & Calvrton, Maryland, USA. 2001
19. Terki F and Malhora U. Emergency contraception. Medical and Service Delivery Guideline. International Planned Parenthood Federation, 3rd ed. 2004:252-267.
20. Baiden F, Awini E and Clerk C. Perception of University Students in Ghana about Emergency contraception. *Contraception* 2002; 66(1): 23-26.
21. World Health Organization (WHO). Emergency contraception: A guide for service delivery. Geneva; 1998:19-24.
22. Oyebola and Oyebanji. Knowledge, attitude and practice of family planning following termination of pregnancy among Basotho women at queen Elithabeth II hospital, Maseru, Lestho. faqs.org. 2010.
23. Melanie A, Gold D, Gina S, Sucato E, Conard P, et al. Position paper of the society for Adolescent Medicine. *Journal of Adolescent* 2004;31(1): 66-70
24. Kathleen W, Jeane M, Nancy A, Ginger C and.Hanson R. Knowledge Awareness Perception and use of Emergency contraceptive among Survivors of Intimate Partner Violence. Hindawi Publishing Corporation *Obstetrics and Gynecology International* Volume 2009, Article ID 625465
25. Pakanelt T. Emergency contraceptive pills: The situation of knowledge, attitude and use among vocational students in Phatthalung province, Mahidol university 2002. (*pop. and soc.res*)/5. 2002
26. Chris P. Adolescents and Emergency Contraceptive Pills in Developing Countries. *Family Health International (FHI)*, May 2005
27. Davis A. Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of All Children. American College of Obstetricians and Gynecologists and American academy of paediatrics. 2003-2004
28. Douglas H & Mary V. *Comprehensive Reproductive Health and Family Planning Training Curriculum*. Sep 2000.
29. James W. Science and Success: Programmes that work to prevent subsequent pregnancy among adolescent mothers. [www. advocates for youth](http://www.advocatesforyouth.org). 2009.
30. Hilmiye A, Mert K, Banu K and Vesile Ü. Knowledge, practices, and barriers concerning the use of emergency contraception among women of reproductive

- age at a university hospital of Aydin, Turkey. Archives of Gynecology and Obstetrics: Oct 31, 2009; 282(3): 285-292.
31. UNDP/UNFPA/WHO/WORLD BANK. Special programme of research development and research training in human reproduction. 2008
 32. Akindate O. Awareness, use and barriers to family planning services among female students at the national university of Lesotho, Roma. 2010
 33. Heimbürger A, Acevedo D and Schiavon R. Emergency Contraception in Mexico City. Contraception 2002; 66(5): 321-330
 34. Wegene T, Fikre E. Knowledge, attitude, and practice on emergency contraceptives among female university students in Addis Ababa, Ethiopia. J. Health Dev. 2007;21;(2):111-116
 35. Nasir T. Knowledge, Attitude and Practice of emergency contraception among graduating female students of jimma university, south west Ethiopia. Ethiop J Health Sci. July 2010; Vol. 21, No. 2
 36. Henry K. Family foundation of womens health policy facts. Feb 2004.
 37. Seife M. Assessment of level of awareness and utilization of emergency contraception, among college female students in Oromia Regional state, Arsi Zone, Asella town South-East Ethiopia: Jun 2007
 38. Muia E, Blanchard K, Lukhando M, Olenja J and Liambila W. Evaluation of an emergency contraception introduction project in Kenya. Contraception. Oct 2002; 66(4): 255-260.
 39. Smit J, Fadyen L and Beksinska M. Knowledge attitude & use of emergency contraception among Public Sector Primary health care clients of South Africa. Contraception 2001. Dec 2001; 64(6): 333-7
 40. EBall D, Marafie N, Abahussian E. Awareness of and attitude towards hormonal emergency contraception among married woman in Kuwait. Journal Of Women's Health 2006; 15(2):194-201
 41. Arora N and Mittal S. Emergency Contraception and prevention of Induced abortion in India. Journal of Family Planning & Reproductive Health Care. Oct 2005; 31(4): 294-296.
 42. Berhanu D. Assessment of Knowledge, Attitude and Practice on emergency contraception among women seeking post abortion care in Addis Ababa, 2006. an annotated bibliography of population and reproductive health researches in Ethiopia. 2002-2007

43. Kelly B, Teresa H and Mosala S. Pharmacists' Knowledge and Perceptions of Emergency Contraceptive Pills in Soweto and the Johannesburg Central Business District, South Africa. *Int Fam Plan Perspect*; Dec 2005 Vol. 31, Issue 4, Pages 172-8
44. Obiechina N, Mbamara S, Ugboaja J, Ogelle M and C. Akabuike J. Knowledge, Attitude and Practice of emergency contraception among students in tertiary schools in Anambara state South East Nigeria 2009. *International Journal of Medicine and medical sciences* 2010,vol2(1);1-4
45. Dawit A. Emergency contraception in Addis Ababa: practice of service providers. 2009
46. The population census commission of Ethiopia. The 2007 populaton and housing census of Ethiopia: statistical report. 2007
47. Eugene J, Pius N , Nelson F , Charles W, Luc K and Anderson D. A survey of knowledge, attitudes and practice of emergency contraception among university students in Cameroon. *BMC Emerg Med.* 2007;7
48. Landon M, Regina M, Cooper D, Jennifer S and Chelsea M. Knowledge and use of emergency contraception among women in the Western Cape province of South Africa. *BMC Women's Health* 2007, 7:14
49. Josaphat K, Florence M , Elisabeth F and Gemzell D. Emergency Contraception and Fertility awareness among University Students in Kampala, Uganda. *African Health Sciences* 2006; 6(4):194-200
50. Meng K, Gemzell D. Emergency contraceptive use among 5677 women seeking abortion in Shanghai, China. *Human Reproduction*, Vol.24, No.7 pp. 1612–1618, 2009

9 Annexes

9.1 Questionnaire

JIMMA UNIVERSITY COLLEGE OF PUBLIC HEALTH AND MEDICAL
SCIENCE POST GRADUATE SCHOOL DEPARTMENT OF EPIDEMIOLOGY

Questionnaire for health facility related information for clients on assessment of Knowledge, Attitude and practice on emergency contraceptive methods among women seeking post abortion care in health facilities of Mekelle town of Tigray region.

Introduction and informed consent form for clients seeking post abortion care:

Greeting: Hello, my name is ----- I am a health professional working in another health institution and also as data collector currently on this study. The purpose of the study is “assessing women knowledge, attitude and use of emergency contraceptive among women seeking post abortion care in health facilities of Mekelle town, Tigray region” which will be beneficial in identifying the problems which will prevent women from having enough knowledge, good attitude and appropriate use of EC and developing good strategies to solve these problems.

The participation in the study is voluntary and all the information you will give me will be confidential. No one will know what you said. I will not record your name in the questionnaire and there will be no way in which the responses you give me can be directly linked to you. Also you can skip question that you don't know or questions that you did not want to answer fully or partly and you can also stop the interviewing process at any time if you want to do so. Are you willing to participate?

Yes-----, No-----, If yes, thank you.

Signature of a client-----

Name of interviewer-----Date-----sign

Name of supervisor-----Date-----sig

Part I . socio-demographic characteristics			
S.No	Questions	Responses	
Q101	Age	_____	
Q102	Marital status	1. Never married 2. Ever married	
Q103	Religion	1. Orthodox 2. Muslim 3. Protestant 4. Catholic 5. Others specify_____	
Q104	Educational level	1. Non formal education 2. Grade 1-8 3. Grade 9-12 4. College and university	
Q105	Occupation	1. Student 2..Governmental or Ngo employee 6.Others,specify_____	
Q106	Ethnicity	1. Tigre 2. Amara 3. Oromo 4. Afar 5. others, specify-----	

Q201	Have you ever heard about modern contraceptives?	1.yes 2.No	
Q202	among modern contraceptives methods which one do you know	1. Pills 2. IUCDs 3. depoprovera 4. Norplant. 5. condoms 6. tubal ligation	
Q203	Have you ever heard about emergency Contraceptive method?	1. Yes 2. No,	
Q204	Who were your sources of information to ever heard about emergency contraception?	1. Health workers 2. Friends 3. Mass media 4. School 5.Family	
Q205	Do you know from where emergency Contraception can be obtained?	1. Yes 2. No	207
Q206	could you list where it can be obtained?	1. Governmental hospital/health center 2. Private clinic 3.Pharmacy	
Q207	Which methods do you know used as emergency contraceptive?	1. Pills 2. IUCDs 3. i don't know	
Q208	When should emergency contraceptive pills taken will be effective?	1. within 72 hours 2. Out of 72 hrs 3. I don't know the time	

Q209	What is the advantage of emergency contraceptive	1. Prevent pregnancy 2.abortifacient	
Q210	Do you know the side of effects EC?	1. yes, 2. no	
Q211	List of side effects	1. Vomiting 2. Nausea 3. Headache	

Part-III. Respondent's Attitude towards Emergency Contraception

	Characteristics	Strongly agree	agree	Neutral	disagree	Strongly disagree
Q301	Emergency contraceptive methods have no effect for most females.	5	4	3	2	1
Q302	Emergency Contraceptive are effective in prevention of unwanted pregnancy	5	4	3	2	1
Q303	The presence of emergency contraceptive exposes females for more sexual exposure.	5	4	3	2	1
Q304	Emergency Contraceptive methods do not cause sterility.	5	4	3	2	1
Q305	It is better to use ECs than routine and long acting contraceptive	5	4	3	2	1

IV. Respondents Utilization of Emergency Contraception.

Q 400	Have you ever used emergency contraceptive?	1. Yes 2. No	403
Q 401	Which type of emergency contraceptive method have you ever used?	1. Oral pill 2. IUCD 3. I don't remember	
Q 402	In what time have you taken that EC method after unprotected sexual intercourse?	1. within 72 hrs 2. out of 72 hrs 3. I do not remember	
Q 403	What was the reason for not ever using of EC?	1. Health workers unwilling 2. Service unavailable 3. feel of shame 4. Health institute is far to get services 5. already used other contraceptive method 6. nee to be pregnant	

Informed consent for Key post abortion care providers in health facilities of Mekelle town, Tigray region.

Today I would like to discuss with you some issues that are important to women in your health institution on emergency contraceptive and related questions. As you are post abortion care provider here, your opinions and experience are important to us and will help us to design appropriate strategies to reduce unwanted pregnancies and its outcome. The main aim of this study is to assess the knowledge, attitude and the utilization of the emergency contraceptive among women seeking post abortion care in health facilities of in Mekelle. It will also help in improving the accessibility and quality of family planning service especially emergency contraceptive in the future. The participation in the study is voluntary and all the information you give will be kept confidential and your name will not be written . Moreover, you are not forced to answer to all questions i.e you can skip questions if you are not volunteer and not suitable for you. Can I proceed to the question? Is there something not clear that I should clarify?

Yes----- No-----

Name of data collector _____ Date _____ signature _____

Signature of health care provider _____

Age _____, Sex _____

Questions for health care providers

1. Could you explain the most common side effects of EC that are complained by your clients that ever used EC?
2. Are your clients using EC from your health institution
3. If no, mention the reasons.

I will close our interview here. If you have something to add you can suggest me.
Finally I want to thank you for sharing your ideas and opinions today.

Interview guide line for indepth interview for clien\ts seeking post abortion care in health facilities of Mekelle town.

Greeting:

Hello, my name is ----- I am MPH student in Jimma university and I want to interview you. The purpose of the study is “assessing women knowledge, attitude and use of emergency contraceptive among women seeking post abortion care in health facilities Mekelle town of Tigray region” which will be beneficial in identifying the problems which will prevent women from having enough knowledge, good attitude and appropriate use of EC and to developing good strategies to solve these problems.

The participation in the study is voluntary and all the information you will give me will be confidential, and no one will know what you said. I will not record your name in the questionnaire and there will be no way in which the responses you give me can be directly linked to you. Are you willing to participate?

Yes-----, No-----, If yes, thank you.

Signature of a client-----

Name of interviewer----- date----- signature-----

Questions related to Knowledge, attitude and practice of emergency contraception

Age of the client -----

1. Have you ever heard about emergency contraceptive method?
2. If yes, who were your source of information?
3. Do you know the time when EC should be taken to prevent unwanted pregnancy?
4. If yes, could you explain it?

NOTE- Thank you for your willingness and cooperation in participating in the study.

ጅማ ዩንቨርሲቲ

ናይ ሕብረተሰብ ጥዕና ኣተሓላዎን ጥዕና ሳይንስ ኮሌጅ

ቃለ መሕተት

ኣብ ፍልጠት፣ ኣረኣኢያን ኣጠቓቕማን ናይ ድንገተኛ መካላከሊ ጥንሲ ዘድሃበ ድሕሪ ጥንሲ ምስዳድ ሕክምና ንዘድልዩን ኣብ ከተማ መቀለ ኣብ ዘሎ መውሃቢ ጥዕና ትካላት ንዝርከባ ደቂኣንስትዮ ዝቃረበ ቃለ መሕተት።

ድሕሪ ጥንሲ ምስዳድ ሕክምና ንዘድልዩን ደቂኣንስትዮ መእተዊ ፍቓድ መሕተቲ ቅጥዒ።

ሰላም ስመይ _____ ይባሃል። ኣብ ጥዕና መውሃቢ ትካላት ዝሰርሕ ኮይነ ካብዚ መዕናዕቲ ከም ሓበሬታ ሰብሳቢ/ት ኮይነ የገልግል ኣለኩ።

ናይዚ ፅንዓት ዓላማ ኣብ ከተማ መቀለ ዝነበራ ድሕሪ ጥንሲ ምስዳድ ኣብ ድንገተኛ ናይ ጥንሲ መካላከሊ ሜላ ዘለወን ፍልጠት፣ ኣረኣኢያን ኣጠቓቕማን ንምፍቓድ እዩ። ኣብቲ ሜላ ዘለወን ፍልጠት፣ ኣረኣኢያን ኣጠቓቕማን ፀገም ንምፍላይን ምዕቡል ዝኮነ ናይቲ ፀገም መፍትሒን ስትራተጂን ንምዝግጃው እዩ።

ኣብዚ ንክትሳተፊ ናትኪ ሙሉእ ፍቓደኛ ምኃን ዝሓትት ኮይኑ እትህብኒ ሓሳብ ኩሉ ምስጢሩ ዝተዓቀበን ንማንም ዘይንገርን እዩ።

ኣብዚ ቃለ መሕተት እዚ ስምኪ ዘይፀሓፍ ኮይኑ ዝሃብኪ መልሲ ድማ ምሳኪ ዝተሓሓዘ እይከውንን፣ ብተወሳኪ ብተወሳኪ ድማ ዘይትፈልጥዮ ወይድማ ክትዘልዩም ትደልዩ ሕቶታት ምዝላል ዝካኣል ኮይኑ ነዚ ቃለ መሕተት ኣብ ዝደለክዮ ግዜ ናይ ምቁራፅ መሰልኪ እውን ዝተሓለወ እዩ።

ኣብዚ ፅንዓት ንምስታፍ ፍቓደኛ ዲኪ?

እወ _____ ኣይኮንኩን _____ መልሱ እወ እንድሕር ኮይኑ የቀነየለይ።

ናይ ተሓካሚት ፊርማ _____

ስም መረዳኢታ ኣካቢ _____ ዕለት _____
_____ ፊርማ _____

ተቆፃፃሪ ስም _____ ዕለት _____
_____ ፊርማ _____

ክፍሌ 1 ናይ ማሕበራዊ ስነ ህዝብን ኢኮኖሚን ኩነታት ዝድህስስ መሕተት

ተቁ	ሕቶ	መልሲ	ዝለል
ሕ 101	ዕድመኪ ክንደይ እዩ?	_____	
ሕ102	ናብራ ሓዳር	1.ዘይተመርዕዎት 2.ዝተመርዐዎት	
ሕ103	ሓይማኖትኪ እንታይ እዩ?	1.ኦርቶዶክስ 2.ሙስሊም 3.ፕሮተስታንት 4.ካቶሊክ 5.ካልእ ይገለጽ	
ሕ104	ናይ ትምህርቲ ደረጃ	1.ዘይስፍዕ ትምርቲ 2. 1-8 ክፍሊ 3. 9-12 ክፍሊ 4. ኮሌጅ/ዩኒቨርሲቲ	
ሕ105	ስራሕ ደረጃኪ?	1.ተምሓሪት 2.ናይ መንግስቲ ወይ NGO ስራሕተኛ	

		6.ካልእ፡ይገለጽ	
ሕ106	ብሔርኪ እንታይ እዩ?	1.ትግራውይቲ 2.አምሓራይቲ 3. አሮሞ 4.አፋር 5. ካልእ ይገለፅ	

ክፍሊ 2 ኣብ ናይ ድንገተኛ መካላከሊ ጥንሲ ሜላ ዘሎ ፍልጠት ዝድህስስ ሕቶ

ተቁ	ሕቶ	መልሲ	
ሕ 201	ብዛዕባ ዘመናዊ መካላከሊ ጥንሲ ሰሚዕኪ/ክን ትፈልጢ/ጣ ዶ?	1.እወ 2. ኣይፈልጥን	
ሕ 202	ዘመናዊ ካብ ዝገሃሉ መካላከሊ ጥንሲ ኣየንኦም ትፈልጢ/ጣ (ካብ ሓደ ንላዕሊ ምምራፅ ይካኣል እዩ።)	1. ብኣፍ ዝወሓጥ ክኒን 2. ኣብ ማህፀን ዝቅበር መካላከሊ ጥንሲ 3. ኣብ ክንዲ ዝውጋእ መርፍእ 4. ኣብ ኢድ ዝቅበር መካላከሊ ጥንሲ 5. ኮንዶም 6. ቀዋሚ መካላከሊ ጥንሲ ን ደቂ ኣን 7. ካልእ ይገለፅ	
ሕ 203	ብዛዕባ ናይ ድንገተኛ መካላከሊ ጥንሲ ሜላ ሰሚዕኪ/ክን ትፈልጢ/ጣ ዶ?	1.እወ 2.ኣይፈልጥን ፣	
ሕ 204	ብዛዕባ ናይ ድንገተኛ መካላከሊ ጥንሲ ሜላ ዝሰማዕክዮ ካብ መን እዩ?	1. ካብ ጥዕና ባዓል ሞያ 2. ካብ ኣዕርክተይ 3. መራከብቲ ሓፋሽ(ቴሌቪዥን, ራድዮ) 4. ካብ ትምህርቲ ቤት 5. ካብ ጋዜጣ ወይ መፅሕፍት 6. ካብ ቤተሰብ 7. ካልእ ይገለፅ	
ሕ 205	ናይ ድንገተኛ መካላከሊ ጥንሲ ሜላ	1.እወ	

	ካብይ ከምዝርከብ ትፈልጡዎ?	2.አይፈልጥን፣ መልሱ አይፈልጥን እንተኮይኑ ናብ ሕቶ ቁጽሪ →	207
ሕ 206	አየን አም ትፈልጠ/ጣ? (ካብ ሐደን ላዕሊ ምምራፅ ይካኣል እዩ፡፡)	1. ናይ መንግስቲ ጥዕና ትካላት 2. ናይ ግሊ ክሊኒክ 3. ሱቅ 4. ካልእ ይገለፅ	
ሕ 207	ካብ ዘለኪ ሓበሬታ ናይ ድንገተኛ መከላከሊ ጥንሲ ማለ መዓዝ ክወሰድ አለዎ?	1. ድሕሪ ዘይተሓሰበ ምታዊ ርክብ 2. ዘይተደለየ ጥንሲ ምስ አጋጠመ 3. ከምስሩዕ መከላከሊ ጥንሲ 4. ካልእ ተሃልዮ ይገለፅ 5. አይፈልጠን	
ሕ 208	ናይ ድንገተኛ መከላከሊ ጥንሲ ብዝግባእ ስርሑዝስርሑ አብ ውሽጢ ክንደይ ሰዓታት (መዓልቲ)ክወሰድ ከሎ እዩ?	1. አብ ውሽጢ 72 ሰዓት/3መዓልቲ 2. አብ ውሽጢ 120 ሰዓት/5መዓልቲ 3. ግዚኡ አይፍለጠን	
209	እንታይ አይነት ድንገተኛ መከላከሊ ጥንሲ ትፈልጡ	1.ክኒን 2.አብ ማህጸን ዝቅበር መከላከሊ	
ሕ 209	ካብ ዘለኪ/ክን ፍልጠት ናይ ድንገተኛ መከላከሊ ጥንሲ ጥቅሙ እንታይ ይመስለኪ?	1. ካብ ጥንሲ ይከላከል 2. ጥንሲን ምስዳድዩ ቀላጥፍ 3. አይፈልጠን	
ሕ 210	ናይ ድንገተኛ መከላከሊ ጥንሲ ማለ ናይ ባዕሉ ዝኮነ ሳዕቤን አለዎ ኢልኪ/ክን ዶ ትሓሰቢ/ባ?	1. እወ 2. አይአምንን	
ሕ 211	ካብዘምዝተዘርዘሩ ሳዕቤናት አየኖት እዮም ኢልኪ/ ክን ትግምቲ? (ካብ ሐደን ላዕሊ ምምራፅ ይካኣል እዩ፡፡)	1. ንዓቀብ ምባል 2. ምዕ ውልዋል 3. ሕማም ርእሲ	

አብ ናይ ድንገተኛ መካላከሊ ጥንሲ ማለ ዘሎ አረአእያ ዝድህሰሰ ሕቶ

ተቁ	አረአእያ	ብጣዕ ሚ ይስ ማዕ ማዕ	ይስ ማዕ ማዕ	ሓሳብ የብለይን	አይስ ማዕ ማዕን	ብጣዕ ሚ አይስ ማዕ ማዕን
ሕ 301	ናይ ድንገተኛ መካላከሊ ጥንሲ ማለ ን መብዛ ሓትእን ደቂኣን ስትዮ ጉድኣት የቡሉን					
ሕ 302	ድንገተኛ መካላከሊ ጥንሲ ምርካቡን ዝበአሰ ጾታዊ ርክብ የቃልእ					
ሕ 303	ድንገተኛ መካላከሊ ጥንሲ ማለ ታት ካብ ስሩኣት መካላከሊ ጥንሲ ይበልጹ					
ሕ 304	ሓንቲ ጋልኣን ስትዮቲ ብዘይ መካላከሊ ጥንሲ ስታዊ ርክብ እንተፈጸመ ናይ ድንገተኛ መካላከሊ ጥንሲ ማለ ክትጥቀም አለዎ					

ሕ 305	ናይ ድንገተኛ መከላከሊ ጥንሲ ማለታት መኻንነት አየስዕቡን					
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ክፍሊ 4: አብ ናይ ድንገተኛ ጥንሲ መከላከሊ ማለታት አጠቃቅማ ዝድህስስሱ ሕቶ

ተቁ	ሕቶ	መልሲ	ዝለል
ሕ 400	ናይ ድንገተኛ ጥንሲ መከላከሊ ማለታት ጠቀምኪ ዶት ፈልጢ?	1. እወ 2. አይተጠቀምኩን፣ ናብ ሕቶ →	403
ሕ 401	አየናይ ዓይነተ መከላከሊ ኢኪ ትጥቀሚኒ ይርኪ	1. ብአፍ ዝወሓጥ ክኒን 2. አብ ማህፀን ዝቅበር መከላከሊ 3. አያሳታውስን	
ሕ 402	እቲ ናይ ድንገተኛ ጥንሲ መከላከሊ ማለታት አብ ወሰጢ ክንደይ ሰዓት/መዓልቲ ኢኺ ወሲድኩዮ	1. አብ ወሰጢ 3መዓልቲ/72 ሰዓታት 2. አብ ወሰጢ 5መዓልቲ/120 ሰዓታት 3. አይዝክሮን	
ሕ 403	ናይ ድንገተኛ ጥንሲ መከላከሊ ማለታት ዘይተጠቀምኪ እንተኮይንኪ ዘይተጠቀምኩሉ	1. ናይ ጥዕና በዓል ሞያታት መድሓኒትን ምሃብ ፍቃደኛታት ብዘይምንባሮም 2. ናይ ግልጋሎት ተጠቃሚ ብዘይምኾነይ 3. ግልጋሎትን ምርካብ ግዜ ስለዘይብለይ	

	ምክንያት እንታይ እዩ ነይሩ	4. ሕፍረት ስለ ዝሰመዐ ኒ 5. ጥዕና ተቋማት ርሑቅ ስለ ዝኮነ 6. መከላከሊ ማለ ስለ ዝተጠቀምኩ 7. ክጠንስ ስለ ዝደለኩ	
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ጅማ ዩኒቨርሲቲ

የሕብረተሰብና ጤና አጠባበክ ጤና ሳይንስ ኮሌጅ

ቃለ መጠይቅ

በድንገተኛ የእርግዝና መከላከያ ዘዴ ዕውቀት፣ አመለካከትና አጠቃቀም ላይ ያተኮረ እርግዝናን ካስወረዱ በኋላ ሕክምና ለማያስፈልጋቸው በመከላከል ከተማ በሚገኙ የጤና ተቋማት ላይ እየታከሙላ ሚገኙ ሴቶች የቀረበ ካለ መጠይቅ ።

እርግዝናን ካስወረዱ በኋላ ሕክምና ለማያስፈልግቸው ሴቶች ፍቃድ መተየቅ ይርም

ስላም ስሜ _____ ይባላል። ስራዬ የጤና ባለሙያ ሲሆን በዚህ ጥናት ላይ እንደ መረጃ ሰብሳቢ ሁኔታ እየሠራሁ ነው።

የዚህ ጥናት ዓላማ በመከላከል ከተማ በሚገኙ የጤና ተቋማት እርግዝናን ካስወረዱ በኋላ በሕክምና ላይ የሚገኙ ሴቶች ያላቸው ዕውቀት፣ አመለካከትና አጠቃቀምን ለመፈተሻና ከዚህም በተጨማሪ በዕውቀት፣ አመለካከትና አተቃቀክም ላይ ያሉ ችግሮች አስፈላጊ መፍትሄ ለማዘጋጀት ነው።

በዚህ ጥናት ለመሳተፍ ያንቺ ፍቃደኝነት የሚጠይቅ ሲሆን የምትሰጩኝ መረጃ ማስጠፋት እንደተጠበቀ ይኖራል። ከዚህም በተጨማሪ ስምሽ የማይጻፍ ሁኖ የማታቂው ወይም መዘለል የምትፈልገው ጥያቄ መዘለል ወይም ጥያቄውን በመሀል ማቋረጥ ትችላለሽ።

በዚህ ጥናት ላይ ለመሳተፍ ፈቃደኛ ነሽ?

አዎ _____ አይደለሁም _____

መልሱ አዎ ከሆነ አመሰግናለሁ።

የታካሚው ፊርማ _____

መረጃ ሰብሳቢ ስም _____ ቀን _____ ፊርማ _____

ተቆጣጣሪ ስም _____ ቀን _____
 ፊርማ _____

ክፍል 1: ማህበራዊ ሥነ ህዝብና የኢኮኖሚኦቅያ የሚዳስስ መጠይቅ

ተቁ	ጥያቄ	መልስ	ዝላል
ጥ 101	ዕድሜሽ ስንት ነው	_____	
ጥ 102	የትዳር ሁኔታ	1. ያላገባች 2. ያገባች	
ጥ 103	ሃይማኖት	1. ኦርቶዶክስ 2. መስሊም 3. ፕሮተስታንት 4. ካቶሊክ 5. ሌላ ካለ ይገለጽ	
ጥ 104	የትምህርት ደረጃ	1. መደበኛ ያልሆነ ትምህርት 2. 1-8 ^ኛ ክፍል 3. 9-12 ^ኛ ክፍል 4. ኮሌጅ/ዩኒቨርሲቲ	

ጥ105	ስራሕደረጃኪ?	1.ተማሪ 2. .የ መንግስት ወይም መንግስታዊ ያልሆነ ስራተኛ 3.ሌላ ካለይገለጽ	
ጥ106	ብሔር	1.ትግሬ 2.አማራ 3.አሮሞ 4.አፋር 5.ሌላ ይገለጹ	

ክፍሊ 2 በድንገተኛ የእርግዝና መከላከያ ዘዴ ላይ ዕውቀትን የሚያስጠጥ ድጋግ

ተቁ	ጥያቄ	መልስ	ዝላል
ጥ201	ስለ ዘመናዊ የእርግዝና መከላከያ ዘዴ ሰምተሽ ታቂያለሽ ዕ ኪ	1.አዎ 2.አልሰማሁም፤	
ጥ202	ዘመናዊ ከሚባሉ የእርግዝና መከላከያ ዘዴዎች የተኞቹን ታቂያለሽ	1. በአፍ የሚሞጥ ክኒን 2. ማህፀን ላይ የሚቀበር መከላከያ 3. ክንድ ላይ የሚወጋ መርፌ 4. ክንድ ላይ የሚቀበር መከላከያ 5. ኮንዶም 6. ሌላ ካለ ይገለጹ	
ጥ 203	ስለ ድንገተኛ የእርግዝና መከላከያ ዘዴ ሰምተሽ ታቂያለሽ?	1.አዎ 2.አላውቅም፤	
ጥ204	ስለ ድንገተኛ የእርግዝና መከላከያ ዘዴ የሰማሺውከየት ነው?	1. ከጤና ባለ መያ 2. ከጓደኞቼ 3. ከህዝብ መገናኛ ዘዴዎች (ፊደሌ, ቲቪ) 4. ትምህርት ቤት 5. ከጋዜጣ ወይ መፅሕፍት	

		6. ከቤተሰብ 7. ሌላ ካለ ይገለጹ	
ጥ 205	ድንገተኛ የእርግዝና መከላከያ ዘዴ ከየት እንደሚገኝ ታወቂያለሽ ወይ?	1. አዎ 2. አላውቅም፣ መልሱ አላውቅም ከሆነ ወደ ጥያቄ ቁጥር \longrightarrow	207
ጥ 206	ከየት ነው የሚገኘው?	1. ከመንግስት ጠፍተዋል 2. ከግል ክሊኒክ 3. ፋርማሲ 4. ሌላ ካለ ይገለጹ	
ጥ 208	ድንገተኛ የእርግዝና መከላከያ ዘዴ ስራውን በሚገባ የሚሰራው በስንት ሰዓቶች (ቀናት) ውስጥ ሲወሰድ ነው?	1. በ 72 ሰዓት/3 ቀን ውስጥ 2. በ 120 ሰዓት/5 ቀን ውስጥ 3. ግዜው አይታወቅም	
ጥ 209	ካለሽ ዕውቀት ድንገተኛ የእርግዝና መከላከያ ዘዴ ጥቅምን ይመስልሻል?	1. እርግዝናን ይከላከል 2. እርግዝና ማስወረድን ያፋጥናል	
ጥ 210	ድንገተኛ የእርግዝና መከላከያ ዘዴ የራሱ የሆነ ጉዳት ያመጣል ብለሽ ታስቢያለሽ?	3. አዎ 4. አላስብም፣	
ጥ 211	እዚህ ከተዘረዘሩ ጉዳቶች የተኞቹ ናቸው ብለሽ ታስቢያለሽ?	4. ሽቅብ ማለት 5. ማቅለሽለሽ 6. የራስ ምታት	

ክፍል 3፣ በድንገተኛ የእርግዝና መከላከያ ዘዴ ላይ ያለ አመለካከት የሚፈትሽ ጥያቄ

ተቁ	አመለካከት	ብጣም እስማማ	እስማማ ለው	ሐሳብ የለኝም	አልስማምም	ብጣም አልስማምም
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		ለው				ማም
ጥ 301	ድንገተኛ የእርግዝና ዘዴ ለአብዛኞቹ ሴቶች ጉዳት የለውም					
ጥ 302	ድንገተኛ መከላከያ ዘዴን መጠቀም መደበኛ የእርግዝና መከላከያ ከመጠቀም ይሻላል					
ጥ 303	ድንገተኛ የእርግዝና መከላከያ ዘዴ እርግዝና የመከላከል ብቃቱ ከፍተኛ ነው።					
ጥ 304	ድንገተኛ የእርግዝና መከላከያ ዘዴ መኖሩ ልቅ ለሆነ ጾታዊ ግንኙነት ያጋልጣል።					
ጥ 305	ድንገተኛ የእርግዝና መከላከያ ዘዴ መሃንነትን አያመጣም።					

ክፍሌ 4: ድንገተኛ የእርግዝና መከላከያ ዘዴ አጠቃቀምን የሚዳሰስ ጥያቄ

ተቁ	ጥያቄ	መልስ	ዝላል
ጥ401	ድንገተኛ የእርግዝና መከላከያ ዘዴ ተጠቅመሽ ታወቂያ ለሽ	1.አዎ 2. አልተጠቀምኩም	403

ጥ 402	ለ ጥያቄ 404 መልስ ሽ አዎ ከሆነ የተኛውን የእርግዝና መከላከያ ትጠቀሚኑ በር	<ol style="list-style-type: none"> 1. በአፍ የሚሞጥ ክኒን 2. ማህፀን ላይ የሚቀበር መከላከያ 3. አላስታወሰም 	
ጥ 403	ድንገተኛ የእርግዝና መከላከያ ዘዴው በስንተ ሰዓት/ቀን ውስጥ ነበር የወሰድሽው	<ol style="list-style-type: none"> 1. በ 3 ቀን /72 ሰዓቶች 2. በ 5 ቀን /120 ሰዓቶች 3. አላስታወሰውም 	
ጥ 403	ድንገተኛ የእርግዝና መከላከያ ዘዴ ያልተጠቀመሽ ከሆነ ያልተጠቀመሽበት ምክንያት ምን ነበር?	<ol style="list-style-type: none"> 1 የጤና ባለሙያዎቹ መድሐኒትን ለመሰጠት ፍቃደኛች ስላልነበሩ 2. የአገልግሎቱ ተጠቃሚ ስላልሆንኩኝ 3. ፍርሃት ስለሚሰማኝ 4. የጤና ተቋሙ ቅሬታ ስለሆነ 5. መከላከያ ስለተጠቀመኩ 6. ማርገዝ ስለፈልኩ 	

