

ORIGINAL ARTICLE

Knowledge, attitudes, practices and barriers to use emergency contraception among women with unsafe abortion in Jimma Marie Stopes Clinic, South West EthiopiaAnteneh Admasu¹, Bosena Tebeje²**Abstract**

Background: It is observed that safe and effective contraception including emergency contraception (EC) prevents the occurrence of unwanted pregnancy and unsafe abortion.

Objective: To assess the knowledge, attitudes and practices (KAP) as well as identify barriers to the use of EC among women with unsafe abortion.

Methods: This is a cross-sectional health facility based study that involved women with unsafe abortion treated at Jimma Marie Stopes clinic from February 2 to March 16, 2006.

Results: There were a total of 153 respondents, the majority, 131(85.6%) being in the age range 15-24 and single, 88 (57.5%). Only 20 (13.1%) of the total respondents had heard about EC and out of this only seven (35%) correctly identified 72 hours as the time limit for taking EC. The most common source of information about EC were health institutions, and Marie Stopes clinic which accounted for 12 (60%) of the respondents followed by neighborhood and partner each accounting for three (15%). The study has also revealed that after having explained about EC, the vast majority respondents 130 (84.3%) had positive attitude towards the method and showed interest to share information about EC with their friends. Regarding use among those with prior knowledge of EC, only seven (35%) reported previous use. The most common reason given for non-use of EC were lack of awareness about the existence of EC, 132 (86.3%); fear of side-effects, five (3.4%) and the rest reported unavailability of service, partner disagreement, religion and culture.

Conclusion: Most cases with unwanted pregnancy were young people, as they lacked awareness about the existence of EC. As a result, they were led to look for termination of pregnancy as an option in avoiding unwanted pregnancy. It is strongly recommended that IEC materials on EC targeting young people be prepared and widely disseminated.

Keywords: Emergency contraception, unwanted pregnancy, unsafe abortion, KAP.

^{1,2} Jimma University, Jimma, Ethiopia

Introduction

Unintended and mistimed pregnancies are extremely common event for many women especially in developing countries. The World Health Organization (WHO) has estimated that every year unintended pregnancy leads to at least 20 million unsafe abortion resulting is death of some 80,000 women. According to a national survey on abortion conducted in 2000, abortion related mortality was 1,209 per 100,000 abortions (1). Unsafe abortion also causes other serious complication like sepsis, hemorrhage, uterine perforation; lower genital tract trauma, intestinal injuries, disseminated intravascular coagulation (DIC), shock, renal and cardiac failure, which may result in permanent disabilities and incapacitating condition like infertility and psychological problems (2).

Adolescents and women who are not married have less access to reproductive health (RH) information and services and are often highly vulnerable to sexual coercion and violence because of cultural factors, desire to secrecy, economical dependency and the like. They are thus more likely to have unintended pregnancy and usually rely on procuring safe or unsafe abortion services based on local conditions. Experts agree that use of emergency contraception (EC) is a safe and effective way to prevent unintended pregnancies after unprotected sex or when other contraceptive method fails (3). Although EC has been endorsed by the WHO and the United States Food and Drug Administration (FDA), many women still don't know about this important and unique contraceptive resource (4). In addition, many young people are not aware of the existence of EC. Health services providers are also often poorly informed about EC.

In Ethiopia, the need for EC was identified in the late nineties. However, it has not been formally introduced into either the public, non-governmental organization (NGO) or private sectors until 2006. Data about the knowledge, attitudes, practices (KAP) and barrier to use EC among different population group particularly vulnerable women and girls is not sufficient. Therefore, this study is undertaken to assess KAP and barriers in the use EC in women and girls with unsafe abortion. This will help to come up with valuable data that will be used by policy makers and other partners to plan future interventions.

Subjects and Methods

The study was carried out in Jimma Marie Stopes Clinic from February 2 to March 16, 2006. Jimma town is located in Oromia region, Ethiopia and is a zone capital. It has a population of 152,163 of which 50.6% are females. In the town there are one specialized teaching hospital, one health center, one maternal and child health (MCH) clinic and two NGOs providing RH services. A prospective cross sectional study was conducted among women who came to Marie Stopes clinic and have a diagnosis of unsafe abortion during the study period.

For the purpose of this study, the following definitions were used:

Unsafe abortion is a procedure for terminating unwanted pregnancy either by persons lacking the necessary skills or in an environment that lack the minimal medical standards or both.

Yuzpe method is a combined oral contraceptive method containing 200 mg *ethinyl estradiol* and 1.0 mg *levonorgestrel*.

EC is a specific method that can be used by women of reproductive age in the first few days following unprotected sex to prevent unwanted pregnancy.

Face to face interview using structured data collection instruments were used to collect data on socio demographics, KAP of EC and barriers to the use of EC. Two Marie Stopes clinic nurses were responsible for data collection. Data were edited, cleaned and entered into a computer and analyzed using SPSS 11.0 statistical soft ware. Chi-square test was employed for statistical testing when appropriate.

Results

As shown in Table 1, among 153 respondents, 131 (85.6%) were aged between 15-24 year and the mean age was 23.4 years. Women in their thirties accounted for 2.6% of the respondents and adolescents for 35.9%. Nearly half of the women were Oromo nationals followed by Amhara and Gurage 34 (22.2%) and 21 (13.7%), respectively. A big number of respondents were Orthodox Christians 85 (55.6%) followed by Muslims 47(30.7%).

Eighty eight (57.5%) women were single and 56 (36.6%) were married; the remaining had previously been married.

Women with family income less than 200 Birr (20 USD) accounted for 48.8% and only nine (5.8%) had income exceeding 800 Birr.

Fifty percent of the respondents were students with 76 (49.7%) being 9-12th grade; followed by 44 (28.8%) twelve grade and above. Regarding their living arrangement, 61 (39.9%) were living with their parents and 59 (38.6%) were with spouse.

Table 1: Demographic characteristics of clients seeking abortion at Jimma Marie Stopes Clinic, Jimma, Ethiopia, May 2006 (n=153).

Characteristics	Number	%
Age (in year)		
15-49	55	35.9
20-24	76	49.7
25-29	18	11.8
30-34	3	2.0
35-39	1	0.7
40-45	0	0
45-49	0	0
Educational Status		
Illiterates	3	2.0
Read and write	3	2.0
1-8 grade	27	17.6
9-12	76	49.6
12+	44	28.8
Marital status		
Married	56	36.6
Single	8	5.2
Separated	1	0.7
Divorced	8	5.2
Windowed	0	0
Occupation		
House wife	29	19.0
Student	77	50.3
Daily laborers	7	4.6
Merchant	11	7.2
Govern. Employee	24	15.7
Commercial sex worker	1	0.7
NGO's employee	0	0
Other	3	2.0
Income < 200	74	48.3
200-400	21	13.7
400-600	25	16.0
600-800	24	15.6
800-1000	33	12.0
> 1000	6	3.9
Living arrangement		
Parents	61	39.9
Spouse	59	38.6
Relative	6	3.9
Friend	5	3.3
Alone	21	13.7
Other	1	0.6
Ethnicity		
Oromo	76	49.7
Amhara	34	22.2
Tigrie	1	0.7
Guragie	21	13.7
Kulo	1	0.7
Other	20	13.1
Religion		
Orthodox	85	55.6
Muslim	47	30.7
Protestant	19	12.4
Catholic	2	1.3
Other	0	0

Only 20 (13.1%) of the respondents heard about EC, and of those women who were aware of EC, the majority 18 (90%) were youth and three-fourth were single. There was no difference in awareness between a housewife and a student. Ninety percent of the respondents who were aware of EC were Christians predominately Orthodox and 11 (55.0%) earn less than 400 Birr. Religion and income with level of awareness showed a significant association ($P < 0.05$) (Table 2). Half of the respondents have heard about regular combined oral contraceptive pills, eight about EC and the rest five about EC and IUCD as emergency contraceptive options. On the other hand, the majority of women who heard about EC had superficial information.

Only 7 (35%) correctly identified 72 hours as the time limit for EC use after unprotected sex. The pattern of socio-demographic characteristic of women who had correct information about the correct time for EC use followed the same trend as that for general knowledge.

Table 3 shows that when respondents expressed their positive attitudes about EC, the majority agreed that unwanted pregnancy is preventable by EC, use of EC relieves stress and promotes peace of mind and that current service delivery models are not convenient.

Few stated that EC has targeted only married women seeking EC from health institutions precipitates stigmatization and think EC may lead to abortion.

Table 2: Respondents knowledge and socio-demographic characteristics, at Jimma Marie Stopes Clinic, Jimma, Ethiopia, May 2006 (n=133).

Characteristics	Good Knowledge	Poor Knowledge	Odds Ratio (OR)	X^2 , P = value
Age				Fisher's Exact test
15-24 Year	18 (17.12)	113 (113.87)		$P > 0.05$
> 25	2 (2.86)	20 (19.12)		
Religion			OR = 4.6	$X^2 = 4.67$
Christian ¹	18 (13.86)	88 (92.14)		$P < 0.05$
Muslim	2 (6.17)	45 (40.86)		
Marital Status				$X^2 = 0.030$
Single ²	15 (12.86)	82 (84.32)		$P > 0.01$
Married	5 (7.32)	51 (48.68)		
Literary Status				Fisher's Exact test
Illiterate ³	0 (0.39)	3 (2.61)		$P < 0.05$
Literate	20 (19.60)	130 (130.39)		
Occupation				$X^2 = 4.14$
House wife	6 (3.79)	23 (25.21)		$P > 0.05$
Student	6 (10.07)	71 (66.93)		
Unemployed ⁴	3 (2.61)	17 (17.39)		
Employed	5 (3.53)	22 (23.47)		

¹Christians include Orthodox, Protestant and Catholic

²Single include unmarried, divorced & separated

³Literate include who can read & write with 1-12 grade and above

⁴Unemployed include daily laborer, commercial sex worker, and a merchant

Table 4 shows that after explanation about EC, a substantial proportion of women (84.9%) showed a positive attitude towards EC. However, out of those who had positive attitudes, only few were found to have previous knowledge and practice.

Attitude was found to have a strong association with religion and literacy levels (Table 5).

Table 3: Attitudes towards EC of abortion care clients at Jimma Marie Stopes Clinic, Jimma, Ethiopia, May 2006 (n=153).

Attitudes	Agree		Disagree		Neutral	
	No	%	No	%	No	%
Do you think unwanted pregnancy is preventable?	149	97.4	3	1.9	1	0.7
Do you think EC only target married women?	3	2.0	146	95.4	4	2.6
Do you think EC can be use any time after unprotected sex?	12	7.8	125	81.7	16	10.6
Do you think seeking EC from health institution precipitate stigmatization?	18	11.8	121	79.0	14	9.2
Do you think increased accessibility of EC bring about irresponsible sexual behavior?	29	19.0	98	64.1	26	16.9
Do you think EC cause early abortion?	8	5.2	97	63.4	48	31.4
Use of EC relieve stress and promote peace of mind	145	94.8	8	5.2	-	-
Women's will stop using other forms of contraceptive method if EC is widely available	33	21.7	110	71.9	10	6.5
Service delivery is not convenient for EC use	123	80.4	18	11.8	12	7.8
If male partner knows about EC, he is less likely to use condom	95	62.1	52	33.9	6	4.0

Table 4: Levels of knowledge and attitude of abortion care clients at Jimma Marie Stopes Clinic, Jimma, Ethiopia, May 2006.

Knowledge	Attitude		Total	Fisher's exact test P-value
	Positive attitude	Negative attitude		
Good Knowledge	18(16.0)	2(3.01)	20	P>0.005
Poor Knowledge	112(113.0)	21(19.9)	133	
Total	130	23	153	

Table 6 shows that only 7(5.4%) of the respondents used EC in the past and five of them were single and students of twelve grades and above. Regarding to the type of EC used, five used a dedicated EC pills and the other two combined oral contraceptives and IUCD.

Pharmacy was the common source of EC to the four of the users and the rest took from Marie Stopes and FGAE Clinics. The practice of EC was found to be strongly associated with the level of awareness regarding of the method ($P < 0.001$).

Of the total women who were aware of EC, more than half had received information on EC from health institution mainly family planning clinics and Marie Stopes clinic followed by partner and neighborhood each accounting for 15%. Radio and School clubs were also other rare source of information.

Although women gave different reasons for not using EC, ninety percent of the reason given by the non-users was attributed to absence of awareness about the existence of EC. Other less frequently cited reasons include fear of side effects (3.4%), unavailability of service (1.3%), spouse disagreement, religion and culture.

Discussion

According to this study the overwhelming majority (87.9%) of the respondents has never heard about EC and those respondents who heard about EC were having a superficial knowledge except 7(35%). The majority of the respondents who weren't aware of EC were students and youth (19-24 year of age). This clearly shows that RH information has not yet reached this important segment of the population.

Table 5: EC attitudes and socio demographic characteristics of abortion care clients, at Jimma Marie Stopes Clinic, Jimma, Ethiopia, May, 2006 (n=153).

Characteristics	Positive Attitude	Negative Attitude	Odds ratio	X ² and P=value
Religion				
Christian	90(82.42)	7(14.58)	5.14	X ² =12.8 P<0.05
Muslim	40(47.58)	16(8.42)		
Marital status				
Single	81(82.42)	16(14.48)		X ² =0.66 P>0.05
Married	49(47.58)	7(8.42)		
Literacy Status				
Illiterate	2(2.55)	1(0.45)	2.91	Fishers Exact test P<0.05
Literate	128(127.45)	22(22.54)		

Table 6: Level of EC practices of abortion care clients' with their knowledge and attitudes, Jimma, Ethiopia, May, 2006 (n=153).

Variable	Practice	Not Practiced	Odds Ratio (OR)	P=value, Fisher exact Test
Knowledge				
Good	7(0.91)	13(19.98)	-	P<0.001
Poor	0(5.08)	133(126.91)		
Attitudes				
Favorable	7(5.95)	123(117.37)	-	Fisher exact test P>0.005
Not Favorable	0(1.05)	23(21.95)		

It is a clear manifestation that parents and society at large have discharged their responsibility to openly discuss sexuality and RH matters with their daughters to prevent problems associated with unwanted pregnancy. Similar studies from sub-Saharan Africa indicated that young people possess some basic information about STI/HIV and pregnancy prevention from rumors and myths, which in most of the cases were inaccurate, and some health care providers are also often times poorly informed about EC (5).

The findings of this study are consistent with a study done among women who were seeking abortion in Kenya (11%), South Africa (17%) and Jimma town (12.5%) (6, 7) which have shown a very low rate of awareness of EC. Our findings, however, were contrary to a study done in England in 2003 (78.2%) and Canada (39%) among women who are seeking termination of pregnancy (8, 9) which have shown a higher rate of awareness. This discrepancy might be due to a better access to RH services in these countries through hot-line information service.

Data from this study revealed that after having explained about EC, a substantial majority of respondents (84%) had positive attitude towards EC as evidenced by the majority of the respondent's agreeing that unwanted pregnancy can be prevented through effective use of EC. However, a few respondents expressed concerns that easy and wide access of EC will promote irresponsible sexual behaviors, hamper the likelihood of condom use by the partner and use of EC may cause early abortion.

These impressions might be due to lack of concrete knowledge about the method. Different researches in a variety of context have shown that expanded access does not increase the rate of unprotected sexual intercourse nor does it change sexual behaviors (9, 10). Most importantly these beliefs could be barriers to potential client willingness to use EC and even health care provider's willingness in providing EC particularly for young women. As to the access to EC, clients preferred pharmacies to other health institution. This might be due to privacy, easy access of services in off working hours.

When source of information of respondent's about EC in this study was explored, health institution (mainly FGAE and Marie Stopes) took the lead followed by partner and neighborhood and radio and school respectively. Although the number of respondents who got information on EC was very low to make inference, the role of NGOs working on RH is significant. Although different reasons were cited, 90% of the respondent's reason for non-use of EC is attributed to lack of awareness about the existence of EC.

In conclusion, increasing access to client friendly EC services through all the major sectors of service provision in line with awareness creation and incorporation of RH programs at schools, youth organization and other areas where access is facilitated to this vulnerable group is essential if levels of unwanted pregnancy and induced abortion are to be reduced in Ethiopia.

Acknowledgements

We are grateful to Population Council (EC Afrique) and the Ethiopian Society of Obstetricians and Gynecologists (ESOG) for their full financial support to undertake this study. Our warmest appreciation goes to Jimma University library staff, and Internet workers to their great contribution in helping access important materials for this study. Finally, our special thanks go to W/o Etagegne Solomon for her support in typing this manuscript.

References

1. Mekbib T, Gebrehiwot Y, Fantahun M. Survey of unsafe abortion in selected health facilities in Ethiopia. *Ethiop J Reprod Health*, 2007; 1(1): 28-43
2. Federal Ministry of Health 1996. Guidelines for family planning in Ethiopia.
3. Reproductive Health Policy and Program (July, 1993). Reflection on the African Experience. Conference Report, Harare.
4. USAID (2002). Fact sheet on emergency contraception Op.cit.
5. Marion C, Ilene S Pharmacists knowledge and perception of EC in South Africa: *Int Fam Health Persp*; 2005; 31: 172-177.
6. Walker DM. EC use is correlated with increased condom use among adolescents: results from Mexico. *J Adol Health*; 2004;35:329-334.
7. Mc Donald G, Amir L. Women's knowledge and attitudes about emergency contraception: a survey in Melbourne women's clinic. *Aust NZ J Obstet Gynaecol*; 1999; 1;39:460- 464.
8. Mathew S, Urquhart R. Awareness of emergency contraception on women seeking abortion in England. *J Fam Plan Reprod Health Care*; 2005; 31:113-114.
9. Brown L, Tayane M. Knowledge and perception of Emergency Contraception among Mexican women, IPPF Escondido. *Inter Family Plann Persp*; 1997; 25:34-37.
10. Mqbayi MM, Smit JA, McFadyen ML et al. Missed opportunities: Emergency Contraception Utilization by Young South Africa Women. *Afr J Reprod Health*; 2004; 8(2): 137-144.