

Knowledge, Attitude and Practice of Reproductive Aged Women regarding Emergency Contraceptives in Tertiary Hospital

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Abstract

Background: In Nepal maternal mortality rate is very high more than one in five women die from pregnancy or pregnancy related causes. Emergency contraception is a method used to avoid pregnancy after unprotected sexual intercourse unlike the regular methods of contraception that are taken before sexual contact. Oral contraceptive pills and intrauterine contraceptive devices are mainly used as emergency contraceptives. The aim of this study was to assess knowledge, attitude and practice of emergency contraceptive among women

Methods: A descriptive cross sectional research design was carried out. Non probability purposive sampling was used to select sample which was 174 reproductive aged women attending family planning clinic of TUTH. Data was collected by interview using semi structured interview questionnaire. Data analysis was done by descriptive and inferential statistics using SPSS version 17.0.

Results: Based on findings majority 67.24% of respondent had knowledge to prevent unintended pregnancy, regarding practice only 13% used emergency contraceptive (EC) correctly within 72 hours of unsafe intercourse. 90.80% of respondents used family planning (FP) methods to reduce unwanted pregnancy. 47.13% responded correctly as EC is not a method of abortion and among all respondents 43.68% did abortion for unwanted pregnancy. Maximum 82.76% respondents had positive attitude towards EC.

Conclusion: The study findings showed majority of respondents had knowledge to prevent unintended and unwanted pregnancy; but only few percentage practice EC correctly within 72 hours of unsafe intercourse. Similarly majority of respondents had positive attitude towards EC, hence IEC programme should be planned to provide information regarding prevention of unintended pregnancy among reproductive aged women.

Key words: Reproductive aged women, emergency contraceptive, knowledge, attitude and Practice.

Introduction

In Nepal maternal mortality rate is very high more than one in five women die from pregnancy or pregnancy related causes³. The use of contraceptives helps to prevent unwanted pregnancies. Unsafe abortion is an important strategy to minimize maternal mortality rate.

Among various forms of contraception, emergency contraceptives are the only one that can be used after sexual intercourse offering chance to prevent unwanted pregnancy.

History of emergency contraceptive dates back to the 1960's when physician in the Netherlands administered

estrogen extracts to 13 years girl who had been raped in mid cycle⁶. Emergency contraceptives (EC) can prevent pregnancy when taken shortly after unprotected sex. Currently there are four food and drug administration of America approved products on market. Three of these products are approved for prevention of pregnancy when taken within 72 hrs after unprotected sex. Consequences of unprotected sex, such as unintended pregnancy and unsafe abortion, can be prevented by access to contraceptive services including emergency contraception. Emergency contraception is a method used to avoid pregnancy after unprotected sexual intercourse unlike the regular methods of contraception that are taken before sexual contact. Oral contraceptive pills and intrauterine contraceptive devices (IUCDs) are mainly used as emergency contraceptives. The most recommended post-coital hormonal contraceptive method is the use of dedicated progestin only pills: 1.5 mg of Levonorgestrel administered as one or two doses. These must be taken as soon as possible, within five days after unprotected intercourse. Combined oral contraceptives can also be used as emergency contraception ;250 mg of Levonorgestrel plus 50 mg of Ethinyl-estradiol, within 72 hours of intercourse, followed 12 hours later by an identical dose¹

Emergency contraception (EC), sometimes referred to as the “morning-after pill,” is a safe and effective method of preventing pregnancy after intercourse. Levonorgestrel, a hormone found in many birth control pills, is the active ingredient in most emergency contraceptive products used in the U.S¹².

In Nepal, Emergency Contraceptive was included in National Medical Standard for contraceptive services and in the clinical protocol for the health providers in 2003. But with EC available only through social marketing in selected area, further change needed to occur. In 2004, Family Health Division collaborated with an NGO, to organize an Emergency Contraceptives Programme (ECP) consultation-sharing previous South Asian experience of ECPs National Introduction Plan. As a result, Family Health Division (FHD) introduced EC in Nepal in phased manner, adopting Bangladesh model and India’s educational materials. The population

council provided technical assistance, building national capacity in training for ECPs²

Nepal has a high level of unintended pregnancies(33%) among currently married women of reproductive age .Unintended pregnancies among young married women (15-24 years of age) are also significantly high in country. An unintended pregnancy in an unmarried adolescent girl can either result in induced or early and unplanned marriage³.

In 2011, 27.0% of married women in Nepal had an unmet need for family planning. Likewise, married women between the age of 15-19 had a 41.5% unmet need for contraception³.

Assessment of existing knowledge, attitude and practice regarding EC can raise their awareness and promote the utilization of EC. These help in decreasing the incidence of unintended pregnancies and abortions and ultimately improve the reproductive health of women. It also helps in reducing the national maternal morbidity and mortality.

Methods

The Descriptive cross sectional study was conducted to find out knowledge, attitude and practice of emergency contraceptives among reproductive aged women with total sample of 174 who came for seeking service of FP temporary methods and safe abortion at FP Clinic of TUTH by using non probability purposive sampling technique. Semi structured Interview

Questionnaire used for data collection; Face to face interview was taken by researcher themselves. Data collection time duration was 4 weeks in October to November. During study period ethical consideration was maintained before during and after data collection. IRB approved from IOM and permission from TUTH as well as from clients who were interested to participate in the study. The collected data was analyzed by using descriptive and inferential statistics and interpreted in terms of percentages and association between variables were calculated using chi-square tests and significance at p-value 0.005.

Results

Table 1: Description of Socio Demographic Characteristics
n=174

Characteristics	Number	Percentage
15-24 years	43	24.71
25-34 years	72	41.38
35-44 years	57	32.76
45-54 years	2	1.15
Median age	31.11	
Ethnicity		
Bramhin	33	18.97
Chetri	57	32.76
Newar	48	27.59
Magar	8	4.60
Others	28	16.09
Religions		
Hindusm	139	79.89
Buddhism	30	17.24
Christian	5	2.87
Level of Education		
Illiterate	13	7.47
Literate	161	92.53
Primary	49	30.43
Secondary	44	27.33
higher secondary	42	26.09
higher education (including bachelor)	26	16.15
Occupation		
Service	26	14.95
Household	113	64.94
Business	25	14.37
Others	10	5.75

Table 2: Use of Contraceptive Methods

n =174

Variables	Number	Percentage
No	32	17.82
Yes	142	81.61
If Yes, use of temporary methods (n=142)		
Depoprovera	44	30.99
Pills	7	4.93
Condom	16	11.27
ICUD	34	23.94
Norplant	40	28.17
Natural	1	0.70
Duration of using Contraceptive		
< 1 years	60	42.25
1-2 years	26	18.31
2-3 years	29	20.42
> 3 years	27	19.01

Table 3: Knowledge about Emergency Contraceptives

n =174

Knowledge of EC	Number	Percentage
Meaning of EC		
Spacing the child birth	6	3.45
Regular FP method	5	2.87
Prevent unintended pregnancy#	117	67.24
Don't know	46	26.44
Information of EC		
No	79	44.83
Yes	95	54.60
If Yes, source of information (n=95)		
Radio	66	69.47
TV	88	92.63
Newspaper	22	23.16
Health personnel	26	27.37
Heard about the method of the EC Availability in Nepal		
No	109	62.64
Yes*	65	37.36
COCs (combined oral pills)	28	43.08
Intra Uterine Device (copper T)	47	72.31
Progestron only pills	28	43.08
Name of EC available in Nepal *		
Econ	56	86.15
Gulaf	2	3.08
Ipill	55	84.62

#-correct answer; * Multiple Responses

Table 4: Experience of Using EC n =174

Variables	Number	Percentage
No	143	82.18
Yes	31	17.82
If Yes, experience of using EC(n =31)		67.74
No time limit	21	
Within 72 hrs of unsafe intercourse	6	19.35
Within 24 hrs of unsafe intercourse	4	12.90

Table 5: Knowledge about Reducing Unwanted Pregnancy and Symptoms n =174

Variables	Number	Percentage
Reducing Unwanted Pregnancy		
Termination of the pregnancy	2	1.15
Using FP methods	158	90.80
Using Emergency Contraceptive	8	4.60
Don't know	6	3.45
Symptoms of Pregnancy		
No	8	4.60
Yes*	166	95.40
If Yes, Morning Sickness	122	73.49
Anorexia	109	65.66
Amenorrhea	155	93.37
Breast heaviness	52	31.33
Dizziness	32	19.28

*multiple responses

Regarding experience of abortion and its reasons, 43.68% of respondents did abortion and among them, more than three fourth 78.95% did abortion first time and 61.84% did abortion for unwanted pregnancy. Regarding opinion about EC 34.48% answered correctly as EC is not a method of F/P and 47.1 3% responded correctly as EC is not a method of abortion. The overall attitude of respondent, were positive regarding EC. Regarding relationships between selected socio demographic characteristics (Ethnicity and Education) with knowledge P=0.000 (using likelihood chi square test) there is relationship between Ethnicity, Educational Level and Knowledge Level at 95% CL. There was Relationships between selected socio

demographic characteristics (Age, Ethnicity, Religion, Education and occupation) with Practice. P=0.000 at 95% CL

There was significant relationship between occupation and Level of Attitude on EC of Respondents

Table 6: Relationship between Knowledge Level and Attitude Level n =174

Level of Attitude	Knowledge Level			Total
	Inadequate	Moderate	Adequate	
Negative	1	1	2	4
Moderate	20	2	0	22
Positive	79	32	37	148
Total	100	35	39	174

p=0.008 (using likelihood chi square test)

Table 7: Relationship between Knowledge Level and Practice of EC n =174

Practice of EC	Knowledge Level			Total
	Inadequate	Moderate	Adequate	
No	100	21	22	143
Yes	0	14	17	31
Total	100	35	39	174

p=0.000 (using likelihood chi square test)

Table 8: Relationship between Practice of EC and Level of Attitude n =174

Practice of EC	level of attitude			Total
	Negative	Moderate	Positive	
No	4	22	117	143
Yes	0	0	31	31
Total	4	22	148	174

p=0.004 (using likelihood chi square test)

Discussion

Unintended pregnancy poses a major challenge to reproductive health of women in developing countries. Some women who had unintended pregnancies obtain abortion. Emergency contraceptive can prevent pregnancy when taken shortly after unprotected sex. The findings of this study shows that the socio-demographic characteristics of the 174 respondents. 41.38% of them were of 25-34 years whereas 32.76% of them belong to 35-44 age groups. A study done by Tatek Tesfaye, Tizata Tilahun and Eshetu Girma(2012)⁴ among 89 women 27(30.3%) were in the range of 15-19 years of age it does not support in this study. 3.45% had no child in this study but 46(51.7%) had child⁶. Regarding the educational status, 92.53% were literate, where 16.15% of higher education including bachelor level 39(43.8%) were illiterate and elementary class (grade 1-8) complete respectively in their education. Regarding Occupation, most (64.94%) were household activities and 14.95% were involved in services Only 10(11.2%) were government employee⁵. Regarding the ethnicity, 32.76 belonged to chhetry where 27.59% belonged to Newer; followed by others 16.09%.

Regarding the religion, majority (79.89%) was Hindu whereas only 2.87% were Christianity Majority (96.55%) had live children. Among them 77.38% had male and 55.36% had female children Majority 81.61% of respondents were used contraceptives methods among them 30.99% used Depo-Provera and only 0.70% used natural method of family planning. Among contraceptive users 42.25% of them using for less than 1 years.

Regarding knowledge about emergency contraceptives majority 67.24% of respondents had knowledge to prevent unintended pregnancy, regarding information of EC and its source 54.60% heard about it among them maximum 92.63% got information from Tele Vision channel. This finding is supported in the study done by , , and 10, which done in Teen Clinic in Honolulu, Hawaii with total of 100 teen girls the ages of 14 and 19, . Fifty-six percent of respondents had an awareness of emergency contraception. Regarding availability of EC in Nepal 62.64 not heard, 37.36 heard and regarding name of EC found in Nepal 86.15% of them known about Econ tablet which is available at medical shop and it is also supported by study done by , , and 10 ,where 69.6% of these adolescents were able to correctly list an emergency contraceptive method.

This study finding is supported by a study done in California by Susie B et.al¹¹ Health Interview Survey, measured EC awareness among 11,392 women ages 15–44, and EC use among 7,178 respondents who were aware of EC, Nearly 76% of respondents had heard of EC, but awareness was lower among teens.² a study done by Kathleen H. Besinque, PharmD¹² among 831 sexually active women at 26 randomly selected public sector clinics in the Western Cape province. Overall, 30% of the women had ever heard of EC, Only 15% mentioned EC by name. Knowledge of EC was independently associated with higher education, being married, and living in an urban setting. Four percent of women had ever used EC¹²

Regarding indications of using EC more than half 54.02% of respondents had knowledge and among them, 78.72% aware to use for unprotected sex and followed by forced sex 65.96% and not using of another contraceptive methods by 63.83%. 82.18% did not used EC in this study .it is supported by study⁵ Regarding use of EC, only 17.82% of respondents were used, All of them who used EC were taken from medical stores without medical prescription and among them, 13% used correctly that is within 72 hours of unsafe intercourse

Regarding knowledge of mechanism of action of EC, 71.26% were unknown about it, among known 28.74%, 86% of them had knowledge about inhibition the implantation of fertilized egg by EC.

Regarding knowledge to reduce unwanted pregnancy maximum use of FP methods by 90.80%, it is not contrast in the study done by Manila kausal,laxmi Maru andAnupama Davi⁵ unaware about 33.8% and 14.3% had good Knowledge only regarding symptoms of early pregnancy, 95.40% were known EC and among them, 93.37% had knowledge about amenorrhea, followed by 65.66% anorexia. Regarding experience of abortion, time and reasons, 43.68% did abortion and among them, more than three fourth 78.95% did first time and 61.84% did for unwanted pregnancy.

Regarding opinion about EC 34.48% answered correctly as EC is not a method of F/P and 47.1 3% responded correctly as EC is not a method of abortion.

Conclusion

The study concluded that there are a high number of females under the age of 18 years who practiced sexual intercourse which may result unintended pregnancy.

Moreover, this unwanted pregnancy urges women to practice unsafe abortion which in turn leads to maternal death. The study also revealed that there is a low trend of use of emergency contraceptives. As a whole it can be concluded that knowledge is high to reduce unwanted pregnancy maximum use of FP methods and practice of emergency contraceptive is low where as majority had positive attitude towards emergency contraceptive. Much more effort should be done on information education and communication of awareness and practice of emergency contraceptives to women so that able to decrease unintended pregnancy and abortion. In addition, works should be done at the level of health post, health center and hospital to enhance awareness and practice cost and consequences of abortion on women's health.

The study findings showed majority of respondents had knowledge to prevent unintended and unwanted pregnancy; but only few percentage practice EC correctly within 72 hours of unsafe intercourse. Similarly majority of respondents had positive attitude towards EC, hence IEC programme should be planned to provide information regarding prevention of unintended pregnancy among reproductive aged women.

Acknowledgement

Authors would like to express special thanks to respondents who give valuable information and time for this study. Further, we would like to heartfelt gratitude to research department, I.O.M for providing grants for study. Likewise, we would like to thanks to Family Planning centre, TUTH for giving permission to conduct this study and Mr. Bivav Adhikari for statistical guidance.

References

1. Bastianelli, Emergency Contraception: A review. *European Journal of Contraception and Reproductive Health Care*, 2008,13(1):9-16.
2. CREPA, proceeding of the National Workshop on Developing Sustainable Strategies for Introducing Emergency contraception in Nepal. ,2010. Retrived from on 12 September 2012
3. GoN, Nepal Demographic and Health Survey 2011, Kathmandu, Nepal. (2011).
4. Tatek Tesfaye, Tizata Tilahun and Eshetu Girma, Knowledge, Attitude and Practice of emergency contraceptive among women who seek abortion care at Jimma University specialized hospital, Southwest Ethiopia, *BMC Women's Health* 2012;12:3 <http://www.biomedcentral.com/1472-6874/12/3>
5. Manila kausal, laxmi Maru and Anupama Davi ; Emergency Contraceptive Knowledge, Attitude and Practice in women presenting to family Planning Clinic in central India, *Journal of South Asia Federation of Obs. & Gynae.* 2014 Jan-April;6 (1).21-24
6. Shah, I Unsafe Abortion: (2009). Global and Regional Incidence, Trends, Consequences and Challenges.
7. WHO Managing Incomplete Abortion. Midwifery education modules. 2008. 2nd ed.
8. Shrestha, MP. Strengthening emergency contraception in Nepal, Population Council. 2008
9. WHO Compendium of Maternal and Neonatal Health Strategies in SEA Region. 2010. Regional Office for South-East Asia.
10. , , , . Knowledge and awareness of emergency contraception in adolescents. 2010 Oct; 23(5):273-8.
11. , , , , and , Awareness and Use of Emergency Contraception Among California Women and Teens *Women's Health Issues* , , September 2008 P 360-368
12. Kathleen H. Besinque, PharmD, An Emergency Contraception Update of Clinical and Regulatory Changes November 1, 2009 <http://www.uspharmacist.com/continuing-education/ceviewtest/lessonid/106417/http://www.cdc.gov/reproductivehealth/unintendedpregnancy/contraception.htm>