

Knowledge and Attitude regarding Emergency Contraception among Higher Secondary Students

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Abstract: *Unplanned pregnancy and unsafe abortion are the major global women health problems. Of the 210 million pregnancies that occur each year about 46 million end in induced abortion. Timely use of emergency contraception (EC) after all contraceptive failures could prevent up to 50% of all unintended pregnancies. The current study aimed to find out knowledge and attitude regarding emergency contraception among higher secondary students. The design of this study was descriptive cross-sectional, probability stratified random sampling technique was used to select 166 sample and self administered questionnaire was administered. The collected data were analyzed using SPSS program version 17.*

Regarding use of EC, most of the respondents 139(83.7%) said slippage /misuse or broken of condom. Whereas approximately, three quarter of respondents (73.5%) said e-con pill can be use for EC purpose. Out of 166, 87(52.4%) of the respondents had fair level of knowledge only 2 (1.2%) respondents had good knowledge. The level of knowledge regarding EC is statistically significant with reproductive health information from mother ($p= 0.001$). The respondents 96(57.44%) had positive attitude regarding EC and 47(28.40%) respondents had negative attitude toward EC. Attitude of the respondents were positive where as knowledge of the respondents about EC were low toward EC. Health education and promotion should be targeted towards these students to increase knowledge.

Key Words: *Emergency contraception, Knowledge, Attitude*

I. Introduction

Emergency contraceptive methods can be used after unprotected coitus to prevent unintended pregnancies. 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 (EC) using what is known as the Yuzpe regimen; 250mg of Levonorgestrel plus 50mg of Ethinyl-estradiol, within 72 hours of intercourse, followed 12 hours later by an identical dose ¹. The Intrauterine Contraceptive Device (IUCD) used for emergency contraception is the Copper T 380A IUCD (ParaGard). It can be inserted up to 5 days after unprotected sexual intercourse but should be inserted as soon as possible. The IUCD can be removed after the next menstrual period, when it is confirmed that woman is not pregnant. IUCD can use for long-term birth control. The copper IUCD can be left in place for up to 10 years for contraception, and it is a reversible form of birth control ².

Each year throughout the world, approximately 210 million women become pregnant and some 130 million of them go on to deliver live-born infants. As many as 80 million pregnancies are unplanned. Of the 210 million pregnancies that occur each year about 46 million (22 percent) end in induced abortion ³. Unplanned pregnancy and unsafe abortion are the major global women health problems. Each year the world approximately 210 million women become pregnant and 80 million pregnancies are unplanned. Of the 210 million pregnancies that occur each year about 46 million (22%) end in induced abortion ⁴. According to World Health Organization out of the estimated 46 million pregnancies around the world that are terminated through induced abortion, about 19 million of them occur outside the legal system, considered unsafe and 36 million live in developing countries and WHO also estimate that globally nearly 68,000 women die from complications of abortion each year. About 95% of those women live in developing countries. The unsafe abortion rate for Asia is 13 per 1000 women aged 15-44 years ⁵.

In Nepal, unprotected intercourse is common. One study in Nepal revealed that 10 to 20 percent of adolescents reported participating in pre-marital sex, yet only 9 percent of them reported using a method of contraception ⁶. 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 marriage ⁷. Thus in this study, author aimed to find out knowledge and attitude regarding emergency contraception among higher secondary students.

II. Materials And Methods

A descriptive and exploratory study was carried out by collecting data from 2069/06/24 to 2069/7/24. The population of the study was students of higher secondary school of Maiya Devi Kanya college grade 11 & 12. Probability stratified random sampling technique was used to select 166 sample size. Inclusion Criteria of the study was students who were studying in higher secondary level three different stream (education, humanities and management) were only participating in the study. Research approval and ethical clearance was obtained from the concerned authority. The verbal informed consent was obtained from each study participant prior to data collection. The content validity of the instrument was established by extensive literature review and reliability was maintained by pre testing the questionnaire and modified tools as necessary. The collected data were analyzed using SPSS program version 17. Descriptive statistics like frequency, percentage, mean and standard deviation as well as inferential statistics like chi-square and fisher's exact test was used to analyze the data.

III. Results

Socio Demographic data (Table 1) reveal that majority 99(59.6%) of the respondents in twelve, 86(51.8%) of the respondents were in management stream, majority 158(95.2%) of the respondents were < 20 years of age in which 156(94%) respondents were unmarried, 151(91%) of the respondents were Hindu.

Table 1: Socio Demographic Characteristics n = 166

Variables	Frequency	Percent
Level of education		
Eleven	67	40.4
Twelve	99	59.6
Stream of respondents		
Management	86	51.8
Humanities	40	24.1
Education	40	24.1
Age		
< 20 years	158	95.2
≥20 years	8	4.8
Marital Status		
Yes	10	6.0
No	156	94.0
Religion		
Hindu	151	91.0
Buddhist	11	6.6
Muslim	1	0.6
Christian	3	1.8

Mean ± SD = 17.14±1.66 yrs

The mean knowledge score and standard deviation of the meaning of EC is 3.31±.08, 66.2% , Sunaulo gulaf & Nilocon White is 1.79 ±1.3, 44.75% , e-con pill is 1.80±1.3, 45% , general information of EC pills is 3.50 ±1.2, 50.00% , copper- T is 2.56 ±1.5, general Information of EC is 5.25±1.69, 47.72% (Table 2).

Table 2: Respondents' Score on Knowledge of EC

Variables	Mean Score ± SD	Percent of Mean Score	Range	Maximum Possible Score
Meaning EC	3.31±.08	66.2	1-5	5
Sunaulo gulaf & Nilocon White	1.79 ±1.3	44.75	0-4	4
e- con pill	1.80±1.3	45.00	0-4	4
General Information of EC pills	3.50 ±1.2	50.00	1-6	7
Copper-T	2.56 ±1.5	51.20	0-5	5
General Information of EC	5.25±1.69	47.72	2-11	11
Total	18.21± 7.07	50.58	4- 35	36

Majority 87(52.4%) of the respondents had fair level of knowledge, minority respondents had 2 (1.2%) had good level of knowledge & 77(46.4%) had poor level of knowledge (Table 3).

Table 3: Distribution of Respondents According to Level of Knowledge Regarding EC

Level of knowledge	Frequency	Percent
Good	2	1.2
Fair	87	52.4
Poor	77	46.4

Respondents who received RH information from mother showed that having 3.78 times more knowledge of EC than the respondents who did not get any information from their mothers (Table 4).

Table 4: Association level of Knowledge on EC by RH Information from Mother

Variables	Level of Knowledge		Odds Ratio (Unadjusted)	95% CI
	Poor (%)	Fair (%)		
RH information from mother				
Yes	80	54	3.21	
No	9	23	1	1.16- 8.80

Majority of the respondents 96(57.44%) positive attitude regarding EC and minority of the respondents 47(28.40%) have negative attitude toward EC (Table 5).

Table 5: Distribution of Respondents According to Level of Attitude Regarding EC

n=166		
Attitude	Frequency	Percent
Negative	47	28.40
Neutral	24	14.16
Positive	96	57.44

About the meaning of emergency contraception, less than half respondents (37.3%) said that use as regular family planning method. Regarding use of EC, most of the respondents 139(83.7%) said slippage /misuse or broken of condom. Most of the respondents (77.7%) said oral contraception pills are one of the methods of emergency contraception.

More than half of the respondents (66.3%) said that Sunaulo Gulaf and Nilocon White can be use for emergency contraception. Among 112 respondents, more than three fourth of the respondents (88.4%) said two tablets can take initially. Less than half of respondents (42%) said 6 hours for repeat the next dose. More than half of respondents (56.3%) said two tablets tablets that can take in the next dose.

Whereas approximately, three quarter of respondents (73.5%) said e-con pill can be use for EC purpose. Regarding the most specific time for a woman to take all types of emergency contraception pills, less than half of the respondents (43.4%) said that as soon as possible of unprotected intercourse. Regarding EC availability, more than two fourth of the respondents (67.5%) said that family planning clinics. Most of the respondents (84.3%) said that copper -T can be used for emergency contraception. Half of the respondents (57.1%) said that most specific time to use Copper-T is 72 hours (3days) of unprotected intercourse

Out of 166, 87(52.4%) of the respondents had fair level of knowledge only 2(1.2%) respondents had good knowledge. The level of knowledge regarding EC is statistically significant with reproductive health information from mother ($p= 0.001$) Respondents' over all responses on attitude statement in which the more than half of respondents (57.44%) had positive attitude, less than half of the respondents (28.40%) had negative attitude and (14.16%) had neutral view on it. Correlation between knowledge score and attitude score by Karl Pearson correlation coefficient ($r = 0.047$, $p\text{-value} = 0.551$) Hence there is no statistically significant relationship between the knowledge and attitude score of EC

IV. Discussion

Almost 95.2% of the students were less than 20 years age group and only 4.8% of the students were more than 20 years. Contrary findings were reported in a study done in Jimma, Southwest Ethiopia⁸ approximately, three quarter (74.6%) of the respondents were in the age group 20-24 years and about a quarter (22.3%) in the age group of 15- 19 years. Concerning the religion of the students, almost (91%) of the students was Hindu and only 0.6% was Muslim. Contrary findings were found in the study, the majority of students were Christian (64%) religion which was done in Trinidad⁹. Regarding side effects of all emergency contraception, 77.1% students said nausea and vomiting. Contrary findings were found in the study¹⁰ where 36.12% students said vomiting was the side effect of EC. More than three fourth of the students (83.7%) said that use of EC is slippage /misuse or broken of condom. Contrary findings were found in the study done in Kathmandu¹¹ where more than half of students (60.21%) said that the use of EC is condom breakage.

Out of 166 students, 67.5% respondents said that EC is available at family planning clinics. This study was supported by study done in Ethiopia¹² in which 78.3% students said that EC is available at health institutes. Regarding level of knowledge on EC among students was low. Similar findings were found in study done in Lekhnath Municipality of Nepal¹² where Knowledge on EC was found quiet low among youth. Only 1.2% students had good level of knowledge but more than half of the students 57.44% had positive attitude regarding EC. Contrary findings were found in the study done in Adama University¹³, in which 27.2% female students had good knowledge whereas similar finding was found regarding attitude (62.9%) towards EC.

V. Conclusion

This study showed that students had positive attitude but lacked knowledge regarding EC this means half number of students had a poor knowledge and half number of students had fair knowledge about EC. The level of knowledge regarding EC was not statistically significant with level of education ($p=0.329$) neither religion ($p=0.572$) nor RH communication with friends (0.274) but the level of knowledge regarding EC was statistically significant with RH information from mother (0.001). That means mothers are more aware of their daughter's health. So they wanted to give RH information to their daughters not to face that critical problem in future.

So, author strongly recommended to promote ECP use is focused on spreading accurate information through course, television and pamphlet/posters to college students which have been found to be reliable and one way to increase knowledge on ECPs.

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