

Knowledge of Emergency Contraceptives among Undergraduate Students in Bhojpur Multiple Campus, Province 1

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ABSTRACT

Introduction: Emergency contraceptives prevent unintended pregnancy which reduce unsafe abortion or unwanted child birth. Very few undergraduates are aware of it which can be considered as major problem of maternal health. The main aim of the study was to find out the level of existing knowledge of emergency contraceptives among undergraduate's students.

Methods: A descriptive cross-sectional study was carried out in Bhojpur Multiple Campus, Province 1. Ethical approval was obtained from Nepal Health Research Council (Reg. no. 386/2019). Data was collected from 360 students, selected by convenient method. Validated and pretested self-administered questionnaire was used to find out knowledge regarding emergency contraceptives. The data was entered and analyzed in SPSS V 16. Descriptive statistics was reported using frequencies and percentages.

Results: The findings of study revealed that among 360 respondents, more than half 237 (65.8%) of the respondents had heard about emergency contraceptives. Out of 237 respondents, 66.2% were found to have good knowledge regarding emergency contraceptives. 38.4% respondents reported emergency contraceptive as a drug used for birth spacing, only 6.3% respondents were aware about intrauterine device.

Conclusions: Based on the study findings, knowledge of emergency contraceptives among college students was low. More than half of the respondents had poor knowledge of emergency contraceptives which provide an assumptive severity of the problems of unintended pregnancy and unsafe abortion.

Keywords: Awareness; Emergency contraceptives; Nepal; Sexual and reproductive health.

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INTRODUCTION

Emergency Contraceptives methods are used after sexual intercourse, offering a second chance to prevent unsafe abortion and unwanted pregnancy.¹ Oral hormonal tablets and intra-uterine device (IUDs) are types of emergency contraceptives.² Unplanned pregnancies lead to 50 million abortion worldwide and result in approximately 80,000 maternal deaths each year and 25 million unsafe abortion take place.³ University students have history of different risky sexual behavior that exposed female undergraduates to unintended pregnancy.⁴ In 2011 it was estimated that 230,000-342,000 unintended pregnancy occurred in Nepal.⁵

A basic reproductive right is to access contraceptives and essential to avoid unintended pregnancies which have become a major public health issue in Nepal.⁶ In Nepal, the data suggest that more than a third (35%) of all pregnancies and 41% the current pregnancy among currently pregnant women are unintended.⁷

The main objective of this study was to determine the level of existing knowledge of emergency contraceptives among undergraduate's students.

METHODS

A descriptive cross-sectional study was conducted among 360 adolescent students in Bhojpur Multiple Campus, Province 1. The study population was undergraduate students. Data collection period was one month from July 2019 to August 2019.

The ethical approval was obtained from Nepal Health Research Council (Reg. no. 386/2019) to conduct the study. Permission for data collection was received from the selected college and written informed consent was obtained from the adolescents.

All male and female undergraduate students of selected campus were included in the study and students who were absent during data collection along with those who were not willing to participate were excluded from this study.

The sample size was calculated by using the formula given below:

$$\begin{aligned} \text{Sample size (n)} &= Z^2 pq / d^2 \\ &= \frac{3.8416 * 0.5 * (1-0.5)}{(0.05)^2} \end{aligned}$$

$$= 384.16$$

$$= 384$$

Where,

$$\text{Prevalence (p)} = 50\% = 0.5$$

$$q = 1 - p = 1 - 0.5 = 0.5$$

$$\text{Allowable error (d)} = 0.05$$

$$\text{Confidence interval (CI)} = 95\%, Z = 1.96$$

Hence, the sample size for the study was calculated and found to be 384. The samples of 360 students were selected by using convenient sampling technique (due to absenteeism only 360 samples were collected).

Semi-structured questionnaire was used to assess the level of knowledge of emergency contraceptives. For assessing level of knowledge, we have categorized knowledge as good knowledge and poor knowledge. For calculating the total score, 9 dimensions were taken which includes- definition of emergency contraceptives (EC), condition for using EC, availability of EC, types of emergency contraceptive devices, correct time for using oral contraceptives pills and IUDs, side effective of EC, prevention of STDs and lasting duration of EC. All questions have its own multiple answers. The corrected answers were scored as 1. After computing the total score on knowledge, a value ranged from 4 to 20 was obtained which was then added and divided by 2 for a mean value of 12. The value ranging from 4 to 11.9 was coded as poor knowledge and the value ranging from 12 to 20 was coded as good knowledge.

After the collection of data, it was checked thoroughly, edited and coded into different categories. Data entry was done in IBM Statistical Package for Social Sciences version 20 (SPSS 20). Data was organized and presented by applying principles of descriptive statistics. Analysis of the data was done by SPSS version 20. Descriptive analysis was done and presented through frequency and percentage.

RESULTS

The table 1 showed that only 33.8% of total respondents had good knowledge on emergency contraceptives.

Table 1. Knowledge on Emergency Contraceptives (n=360)

Variables	n (%)
Poor Knowledge	157(66.2)
Good Knowledge	80 (33.8)

Table 2 shows that 65.8% of respondent had heard about emergency contraceptives. Major source of information about emergency contraceptives was found to be media i.e. 83.1% and only 9.7% from formal education. Almost 40% of the respondent said that emergency contraceptives was a drug used for the birth spacing, 36.3% of the respondent said that drugs used after unprotected sex to prevent from unwanted pregnancies and 25.3% respondents said that drugs used before unprotected sex to prevent from unwanted birth. Among 4 multiple response question of condition using emergency contraceptives, majority (54.5%) respondent said unprotected sex. Respectively when asked about condition for using emergency contraceptives, 34% respondent said rape and 43% respondent said after

breakage or slippage of condom during intercourse. About the availability of emergency contraceptive, 70.5% respondent knew that emergency contraceptives were available in pharmacy, only 57.8% knew that emergency contraceptives were also available in health post and only 7.2% of the respondent did not know about the emergency contraceptives. And 41.8% of the respondent said oral contraceptives pills were emergency contraceptives device. About 30.6% respondent did not know about the side effect of emergency contraceptives. When asked about the side effects of emergency contraceptives, 50.2% said abdominal pain, 41.3% said profuse bleeding and 27.7% said nausea / vomiting. Majority of respondent (51.9%) said that STDs (HIV/AIDS) could be prevented by using EC. When respondents were asked about how long emergency contraceptives last, 42.2% said emergency contraceptives just work once and 1.7% respondent said emergency contraceptives work for one month.

Table 2. Knowledge on Emergency Contraceptives (n=360)

Characteristics	n (%)
Heard about emergency contraceptives (n= 360)	
Yes	237 (65.8)
No	123 (34.2)
If yes, Source of information ** (n = 237)	
Media	197 (83.1)
Family / friends	116 (48.9)
Hospital & health centre	98 (41.4)
Social media	59 (24.9)
Formal education	23 (9.7)
Emergency contraceptives** (n = 237)	
Drugs using for birth spacing	91 (38.4)
Drugs used after unprotected sex to prevent from unwanted pregnancies	86 (36.3)
Drugs used before unprotected sex to prevent form unwanted birth	60 (25.3)
Emergency contraceptives should be used on following condition**	
Rape	80 (34.0)
After breakage or slippage of condom during intercourse	101 (43.0)
Unprotected sex	128 (54.5)
Don't know	31 (13.2)
Availability of Emergency Contraceptives **	
Pharmacy	167 (70.5)
Health post	137 (57.8)
Hospital only	94 (39.7)
Supermarket	14 (5.9)

Don't know	17 (7.2)
Emergency contraceptive devices are following**	
Oral contraceptives pills	99 (41.8)
Intra-uterine device (IUDs).	15 (6.3)
both a & b	65 (27.4)
Don't know	58 (24.5)
Correct time for using oral contraceptives pills as emergency contraceptives**	
after 5 days / 120 hours after sexual intercourse	134 (58)
Within 72 hours after unprotected sex	116 (50.2)
As soon as after unprotected sex	64 (27.7)
After unprotected sexual intercourse intra uterine contraceptive device is more effective	
Within 5 days after the sex	79 (33.3)
After 5 days of the sex	36 (15.2)
Within 10 days	33 (13.9)
Don't know	89 (37.6)
Side effects of emergency contraceptive **	
Abdominal pain	118 (50.2)
Profuse bleeding	97 (41.3)
Nausea & vomiting	65 (27.7)
Don't know	72 (30.6)
Emergency contraceptives prevent STDs (HIV / AIDS)	
Yes	123 (51.9)
No	114 (48.1)
Once used, emergency contraceptive will last for	
Just works once only	100 (42.2)
one month	4 (1.7)
2 weeks	51 (21.5)
no idea	82 (34.6)

**Multiple response

Among 360 respondents, the mean age was 20.9 and the highest number of respondents were of 20 to 21 years of age. More than half (53.9%) were females. Ethnic wise, the highest number of respondents were Brahmin/Chhetri (53.6%). Majority of respondent i.e. 83.6% follows hindusim. Only 2.5% of respondents were married. More than half of the respondents stay

in nuclear family i.e. 54.4%. Majority of the respondents 36.9% were from bachelor 1st year and only 13.3% were from bachelor 4th year. Respondents from management stream were more i.e. 37.8%. The respondents with family income ranging from 16,000 to 30,000 were 51.4% while only 6.1% were from the family income below 15,000.

Table 3. Socio-demographic information of respondents (n=360)

Characteristics	n (%)	Characteristics	n (%)
Age (in years)		Above 24	39 (10.8)
18-19	101 (28.1)	(Mean age: 20.9)	
20-21	128 (35.6)	Gender	
22-23	92 (25.6)	Male	166 (46.1)

Female	194 (53.9)
Ethnicity	
Brahmin / chettri	193 (53.6)
Janajati	143 (39.7)
Dalit	24 (6.7)
Religion	
Hindu	301 (83.6)
Buddhist	41 (11.4)
Christian	11 (3.1)
Other	7 (1.9)
Marital Status	
Unmarried	351 (97.5)
Married	9 (2.5)
Family Type	
Joint	164 (45.6)

Nuclear	196 (54.4)
Level of Education	
Bachelor first year	133 (36.9)
Bachelor second year	101 (28.1)
Bachelor third year	78 (21.7)
Bachelor fourth year	48 (13.3)
Stream Of Respondent	
Management	136 (37.8)
Education	112 (31.1)
Humanities	112 (31.1)
Family Income (NRs)	
Below 15000	22 (6.1)
16000-30000	185 (51.4)
31000-45000	111 (30.8)
46000	42 (11.7)

DISCUSSION

The primary aim of this study was to assess knowledge of emergency contraceptives among undergraduate's students. The finding of this study showed that more than half of undergraduate's students i.e. 65.8% had ever heard about Emergency Contraceptives. About those who have heard about emergency contraception only 33.8% had good knowledge regarding concept, side effect and appropriate timing of use. However still 66.2% of the respondent had poor knowledge. Similar study conducted in Nepal that shows two third of the respondent heard about emergency contraceptives. Among those who have heard about emergency contraceptives, only 28.9% had fair knowledge regarding its meaning, side effect and appropriate timing of use.⁸ In our study out of 237 students, 38.4% reported emergency contraceptive as a drug used for birth spacing, only 6.3% were aware of IUDs as a emergency contraceptives. Majority of the respondents (51.9%) said that emergency contraceptives prevent STDs (HIV/AIDS). Similar study conducted in Ekpoma, Nigeria showed 17.39% male and 15.23% female respondents believed that contraception is a safe means of protecting against unwanted pregnancies and STDs (HIV/AIDS).⁹ Knowledge of emergency contraceptives among college students was low in our study. It shows the

need of awareness on emergency contraceptives. There is a need to educate students about emergency contraceptives, which can help to reduce unintended pregnancy and unsafe abortion.

CONCLUSIONS

The study result illustrate that more than half of the respondents had poor knowledge on emergency contraceptives which provide an assumptive severity of the problems of unintended pregnancy and unsafe abortion. So, it is recommended to establish an initiative to address the common misconceptions and beliefs regarding emergency contraceptives.

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CONFLICT OF INTEREST

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