The Emergency Contraceptive Pills: Knowledge, Attitudes and Practice among Students at Gorkha Campus

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Abstract

Unplanned and unwanted pregnancy is one of the leading causes of maternal mortality and morbidity in South Asia. Despite the availability of a range of modern and effective contraceptives, unwanted and unplanned pregnancies continue to occur. Emergency contraception is a method to prevent pregnancy in women who have had unprotected sex or when birth control methods have failed. A cross-sectional study was carried out to determine the knowledge, attitude and practice (KAP) of students of Gorkha Campus regarding Emergency Contraception Pills (ECP). Total 98 respondents were selected using the census sampling technique, with self-administered questionnaires for data collection. Out of the total sample, most of the respondents were female (88%) , nearly three-quarters (72%) were from age18 to 21 years, and more than half were Janajati. Only 35% of the respondents knew that I-Pill is ECP, while half of them did not know the best time to use it. It was a pity that only more than a fifth (22.4%) of the respondents had adequate knowledge on ECP. The mean score of knowledge was 1.31, and St. deviation was 1.30. The student's streams of education were significantly associated with adequate knowledge, $P<0.5$ and the rest of the variables were insignificant. Thought the knowledge of ECP was low, had a positive attitude towards ECP, and only few (7%) of the respondent had used the ECP till the date of data collection. Based on the study finding, educational intervention related to ECP is recommended for the students of Gorkha campus.

Key words: Attitude, Cross-Sectional Emergency Contraceptive Pill (ECP), Knowledge, Practice

Introduction

Worldwide, more than 41% of the pregnancies that occur each year are unplanned-nearly half of the pregnancies end in abortion (Wold Contraception Day, 2020). In Nepal, according to Nepal Demographic Health Survey (2016), overall, 81% of births were wanted at the time of conception, 12% were mistimed, and 7% were unwanted.

Among those pregnancies which are unwanted 72%were terminated by using the medicine, while 18% used Manual Vaccum Aspiration (MVA). The gap between wanted and actual fertility shows that women have an average of half a child more than they want. Besides the regular contraceptive measure to prevent unplanned pregnancy, couples can use the emergency contraceptive pill (ECP)(Yogi et al., 2018). ECP refers to contraceptives for women to prevent an unwanted pregnancy following unprotected intercourse or contraceptive failure (Matyanga & Dzingirai, 2018).

Contraceptive failure is a major contributor to unintended pregnancy worldwide, most common in low-income countries due to inconsistent or incorrect use or failure of the method itself (Bearak et al., 2020; Khatri et al., 2019). However, in developing countries, errors in method use are the leading causes of an overwhelming majority of unintended pregnancies. ECP can prevent up to over 95% of pregnancies when taken as soon as possible. There is also evidences that emergency contraceptives can decrease the rate of unwanted pregnancy, reducing the need for an abortion and the negative maternal health consequences associated with an unwanted pregnancy (Bradley et al., 2019; Samandari et al., 2012). Evidence suggested that women with better knowledge and understanding of the ECP can use it appropriately to prevent unwanted pregnancy. Assessment of existing knowledge, attitude and practice regarding emergency contraception can raise awareness and promote the utilization of emergency contraception. Though the use of the ECP has been increasing rapidly in recent years, very little is known about the knowledge, attitude and practice of ECP within our community and educational setting. So, this study came into the limelight to find out ECP knowledge among college-level students, as knowledge and attitude directly affect the use of ECP.

Methodology

A cross-sectional study was carried out to determine the KAP of students of Gorkha Campus regarding ECP. Total 98 respondents were selected using the census sampling technique. A self-administered questionnaire was used for data collection. The questions were divided into four sections: socio-demography profile, knowledge, attitude and practice-related questions. For the information collection, the following variables were identified as independent variables based on the theory of Pender's Health Promotion Model, which identified individual character: age**,** marital status, sex**,** caste**,** religion, and faculty of students. Similarly, the dependent variables were identified as knowledge, attitude and practice of students toward emergency contraception. Informed written consent was obtained from all respondents in the study. The anonymity of respondents was maintained by giving the code to each respondent. The study was conducted after written permission from Research Management Cell, Gorkha Campus. Respondents in the study were voluntary participated.

Results

Table 1*: Socio-Demographic Characteristics of the Respondents*

Characteristics		N	%
Sex	Male	12	12.20
	Female	86	87.80
Age	18 to 21	71	72.40
	22 to 25	27	27.60
Marital status	Married	13	13.30
	Unmarried	85	86.70
Caste	Brahmin/ Chettri	28	28.60
	Janajati	51	52.00
	Dailt	18	18.40
	Muslim	1	1.00
Religion	Hindu	77	78.60
	Buddhish	9	9.20
	Christian	11	11.20
	Muslim	1	1.00
Study Year	first year	37	37.80
	Second year	42	42.90
	Fourth-year	19	19.40
Faculty	Education	63	64.30
	Management	35	35.70
Major Subject	Science	14	20.00
	Nepali	19	27.10
	Math	4	5.70
	Management	35	35.70
	English	18	25.70
	Health	8	11.40
	Total	98	100

Table 1 explains the demographic information of the respondents. Out of the total sample, most of the respondents were female (87.6%), which was nearly the sixth time more than that of male participants (12.2%). Almost a quarter (72%) belonged to the age group from 18 to 21. The majority of the respondents were unmarried, accounting eight-six percentage. Similarly, more than half of the respondents belong to Janajati,

followed by Brahim/ Chhetri, representing one-fourth of the total population. Nearly a quarter of (70.6%) respondents were Hindu, which was seven times more than Christian (11%). Nearly two-thirds (64%) of the respondents belonged to the education faculty and the rest (35.7%) were from the management faculty. In the case of major subjects, nearly one-third of the students were from management, followed by Nepali (27.1%) and English (25.7%). One-fifth (20%) of the respondents chose the science as a major subject, while nearly one in ten (11.4%) were from health education.

Knowledge related to ECP

There were 16 questions related to knowledge about the ECP and FP in the first section of the research tool. Those four major multiple-choice questions were considered as core questions measuring the respondents' knowledge. The four questions to evaluate the level of knowledge about ECPs were: (1) "which of these is an emergency contraceptive pill¿", (2) what is the best time to use ECP¿", (3) " when to use ECP (4) "when taken early, ECPs can prevent sexually transmitted infections".

Table 2*: Core question measuring knowledge related to ECP*

Asked questions	Correct answer	N	%
Which of these is an emergency contraceptive pill	I-pill	34	34.7
When to use ECP	After unprotected sex	29	29.6
what is the best time to use ECP	within 72 hour	39	39.8
When taken early, ECPs can prevent sexually transmitted infections	No	27	27.6

Table 2 shows the percentage of the correct answer given by respondents. Nearly two-fifths (39.8%) of the students chose the correct answer about the best time of using ECP, followed by as I-pill as ECP. Similarly, less than one-third of the respondents, 29.6% and 27.6%, gave correct answers as ECP need to be used after unprotected sex, and it does not prevent sexually transmitted disease, including HIV/ AIDS.

Table 3*: Level of knowledge of ECP*

Inadequate knowledge		Adequate Knowledge		Mean score	Std. Deviation
76 (N)	77.6%	22(N)	22.4 %	1.31	1.30

Table 3 explains the level of knowledge of respondents on ECP for each correct question corresponded to 1 point, so there was a total of 4 points for the four questions. Students were considered to have adequate knowledge if they scored 3 or 4 out of 4. They were considered to have inadequate knowledge if they scored between 0, 1 and 2 out of 4. The score is presented in percentage, resembling fifty percentage as the cut-off point; a score above the cut-off point is high is adequate knowledge and below is inadequate knowledge. Only more than one-fifth (22.4%) of the respondents had

adequate knowledge of ECP. The mean score is 1.31, and the stander deviation is 1.30.

Table 4: *Comparison of selected characteristics of respondents with adequate and inadequate knowledge*

Variables		Inadequate knowledge		Adequate knowledge		P-Value
		Nr	%	N	%	
Sex	Male	10	83.3	2	16.7	0.6
	Female	66	76.7	20	23.3	
Age	18-21 years	55	77.5	16	22.5	0.9
	22-25	21	77.8	6	22.2	
Marital Status	Married	10	76.9	3	23.1	0.95
	Unmarried	66	77.6	19	22.4	
Religion	Hindu	63	81.8	14	18.2	0.10
	Buddhish	6	66.7	3	33.3	
	Christian/ Muslim	8	63.6	4	36.4	
Study Year	first year	28	75.5	9	24.3	0.4
	Second year	35	83.3	7	16.7	
	Fourth-year	13	68.4	6	31.6	
Faculty	Education	45	71.6	18	28.6	0.05
	Management	31	88.6	4	11.4	

Table 4 compares the characteristics of respondents with adequate and inadequate knowledge. 22.4% of the respondents demonstrated adequate knowledge of ECPs. Factors significantly associated with adequate knowledge were the education stream of the students ($p = 0.05$) rest of the other variables were not significant.

Attitude towards ECP

There were five statements used to assess the attitude towards emergency contraception. The statement was based on Likert-type scales. The students' attitudes were measured using five items rated on a five-point Likert scale as strongly agree (SA), Agree (A), Neutral (N), Disagree (DA), and strongly disagree (SD).

Table 5*: Attitude towards ECP*

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I would use or would recommend emergency contraception to a friend if they had unprotected sex	13.3%	39.8%	22.4%	19.4%	5.1%

Providing ECPs would discourage consistent use of a condom	21.4%	48.0%	11.2%	17.3%	2.0%
I feel safe using ECP	13.3%	39.8%	22.4%	19.4%	5.1%
ECP is harmful to future pregnancies.	21.4%	48.0%	11.2%	17.3%	2.0%
People feel the shame of buying and using emergency contraceptive pills.	24.5%	61.2%	9.2%	2.0%	3.1%

Table 5 Shows that nearly two-fifths of the respondents agreed that they would recommend emergency contraception to a friend if they had unprotected sex and felt safe using ECP. Furthermore, a similar percentage of respondents opined that they feel safe using ECP. However, 21. 4% of respondents strongly agreed that ECP is harmful to future pregnancy. Nearly a quarter of respondent strongly agreed that still people feel shame in buying and using emergency contraceptive pills.

Table 6 : *Practice of respondents regarding Emergency Contraception*

Variables	Responses	N	%
Ever used ECP	Yes	6	7.1
	No	79	92.9
Reasons for not using ECP	High cost	2	2.5
	Negative rumour	8	10.0
	Use of other types of family planning	4	5.0
	Not necessary	66	82.5
Reasons for using ECP	Did not use any contraceptives before	5	83.3
	Condom broken	1	16.7

Table 6 shows that out of 98 respondents, 6 (7.2%) of them had used emergency contraception till the data collection date. Among those who did not use emergency contraception, 66 (82.5%) said that they did not need to use it. In comparison, one in ten (10%) shared that they have heard a negative rumour about ECP, that motivated them not to use the ECP. Regarding the cause for using ECP, 83.3% of respondents shared that they had to use it as they haven't used the contraceptive measures before.

Discussion

In our study, all the participants had heard about FP methods; however, the majority of them had heard about the condom (85.6%), followed by Depo provers 66.3%. Oral contraceptive pills were a well-known method for FP to more than fifty per cent (57.7%) of the students, while IUCD was the least popular (34.%) among respondents. The finding is similar to the study conducted in Ghana, where less than half (43.2%)

of the 194 respondents (88 males and 106 females) had heard of modern emergency contraceptive methods(Baiden et al., 2002). Similarly, the study at the University of Buea (Cameroon) shows that general awareness of emergency contraceptive pills among University students was 63.0% (418/664), which was comparably low in our study, 22.4%. In the case of information related to FP, the majority, 68.8% of the respondents, state media as a source of information on FP, followed by health workers was 55.2%. About one-third (31.3%) of the respondents got information about FP from friends, while family (18.8%) acted as the source of FP information for respondents. The finding is similar to the result presented in world contraception day 2020, where more than half of all women of reproductive age in developing countries, approximately 867 million, want to avoid pregnancy and main source of information for them was also mass medi. Furthermore, other informal networks for information were friends, family members and health workers (WCD, 2020).

Similarly, in this study, most of the students lacked adequate knowledge about the general features of ECPs. Knowledge about the correct time for taking ECPs after unprotected sex was low 39.7%. However, this finding is higher than the study in Ghana 11.3% (Baiden et al., 2002). At the same time, the study conducted in South Korea among the surveyed students showed a deficit of knowledge about ECPs, followed by different misconceptions about their safety and use modality (Kang & Moneyham, 2008). In this study, many students wrongly believed that condom is an emergency contractive method and that the I-pill needs to be used before unprotected sex. Similarly, the study conducted in 24 countries regarding ECP shows that only 33.9% of the participants had correct knowledge of effective timing and 14.2% of the definition of emergency contraception pills (Aşut et al., 2019). In this study, there was no significant difference in age, sex and marital status of the respondents, while a study by (Jha, 2020; Lakde et al., 2018) showed that age, marital status, use of contraceptives and knowledge of ECP used within 72 hours were significantly associated with the use of ECP. Similarly, in Bearak.et.al (2018) study, there were significant differences in many of the variables, in that female students had higher knowledge about ECPs. In regards to the attitude of respondents regarding the ECP, fifty percent of the students reported that they would feel comfortable using ECP, of which only 13.9 % strongly agreed and 39.0% agreed in this study. A Cross-sectional study conducted in community pharmacies located in three districts of Kathmandu valley showed that a majority of the respondents had a positive attitude towards ECP (93.4%). More than half of the study respondents believed that ECPs are safe to use (53.4%). Only 25.6% reported that adolescents (teenagers) should be given easy access to ECPs, and 34% agreed with the recommendation for ECP use (Shakya et al., 2020). Two hundred and fifty-five participants (38.4%) thought providing ECPs would discourage the consistent use of condoms compared to 53.4% of students in Ghana (Baiden et al., 2002).

Regarding the use of ECP in this study, only 7% of the participants had used the ECP.

Forty-nine students (7.4%) reported that they or their partners had used ECPs before, compared to 10% of students in Jamaica and 7.5% of nursing students in Kenya (Kongnyuy et al., 2007).

Conclusion

This study was the first one the on students of Gorkha campus to examine emergency contraception among students. The awareness of ECPs among the students of the Gorkha campus was found to be low, and misinformation is high; although the students generally have positive attitudes regarding ECPs, most of them believe that ECPs are unsafe for their users. The study strongly recommens that the strategies to promote ECP use should be focused on spreading accurate information through information, education and communication by the faculties of health education.

Ethical approval and consent to participate

The study ethically approved by research management cell of Gorkha Campus.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions: SG has work for preparing manuscript and PS has done analysis.

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