



ORIGINAL RESEARCH ARTICLE

KNOWLEDGE AND ATTITUDE REGARDING EMERGENCY CONTRACEPTION AMONG NURSING PERSONNEL

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ABSTRACT

Emergency contraception plays vital role reducing maternal mortality substantially and improves maternal health by avoiding unwanted pregnancy and unsafe abortion. The objective of this study was to find out the knowledge and attitude of nursing personnel regarding emergency contraception. On an average, 96.33% of nursing personnel had knowledge on general information of Emergency Contraception (EC), 88.78% had knowledge about intrauterine contraceptive device as EC, 66.1% had knowledge on general information of emergency contraceptive pills, 65.5% had knowledge on its dosage and administration and only 59.05% had knowledge on its side effects and their management. On an average, 72.83% of them had knowledge on EC as a whole. More than three- fourth (78.18%) of them had positive attitude towards EC. When comparing nurses' knowledge between educational qualifications, training on EC, duration of experience and between in-service training on family planning counseling, there was statistically no significant difference on knowledge between these variables. When studying the correlation between nurses' knowledge and attitude regarding EC, it was found to be moderately correlated ($r = 0.537$). Based on the findings, it is concluded that on an average majority of nursing personnel tend to have knowledge on emergency contraception as a whole. Majority of them are likely to have positive attitude towards EC. Knowledge regarding emergency contraception is not related to different variables. Nurses' knowledge and attitude regarding emergency contraception have positive correlation.

Key Words: emergency contraception, combined oral contraceptive pills, progesterone only pills & intrauterine contraceptive device

INTRODUCTION

Emergency contraception is defined as any methods used after sexual intercourse or a contraceptive accident to prevent an unwanted pregnancy. It is not an abortion method. There are two main methods available in Nepal that can be used for emergency contraception: oral contraceptive pills (both combined pills & progestin only pill) and use of intrauterine device.²

Every year, eight million women suffer severe complications as a consequence of pregnancy, childbirth and unsafe abortion. Each year, globally, 40-60 million women seek termination of an unwanted pregnancy under unsafe conditions. Worldwide, almost 20 million unsafe abortions occur each year, of which 95% take place in the developing world. Globally, one in eight pregnancy-related deaths (13%) is to be estimated due to unsafe abortions. Poor maternal health also affects the chances of survival of the newborn. Although progress in infant and child survival has been made, an estimated 9.4 million babies still die shortly before or after their birth.¹⁰

According to Sedgh et al (2006) most but not all unsafe abortions take place in low income countries. Unsafe abortion is one of the greatest health risks that young women can face. The primary reason for induced abortion is unwanted pregnancy.⁹ The maternal mortality ratio in Nepal is among the highest in South Asia, at 281 per 100,000 live births. In Nepal, one

woman dies every two hours due to preventable pregnancy and childbirth causes such as post-partum haemorrhage (46.3% deaths), obstructed labour (16.3%), eclampsia (14.3%), puerperal sepsis (11.8%) and unsafe abortions. Moreover, some 80% of all maternal deaths in Nepal occur due to preventable obstetric complications.¹

Despite the legitimization of abortion, abortion complication is a major problem in Nepal and 20-27 percent of maternal deaths in the hospital are due to complications resulting from abortions. The records collected at the Maternity Hospital in Kathmandu in 2002 showed that nearly 10 % of the 18,000 women admitted at the hospital were for abortion case.⁷

According to Tyden et al (2002) studies have shown that EC options are under-utilized because of lack of client awareness and there is limited knowledge of E.C. among health care providers ranging from obstetricians/gynecologist to nurses and midwives to students and potential users.

According to Ziebland (1999) by making EC more widely available, family planning and reproductive health care providers can help reduce unplanned pregnancies, many of which result in unsafely induced abortion and take a huge toll on women's health.

In fact, nursing personnel mainly those who are working at

family planning center should have adequate knowledge about E.C because clients, who have unprotected sex, come to family planning centre first. Family planning center is the first contact place and nurses are the first contact persons for them. If they are knowledgeable about E.C. then they can routinely educate women about their use which plays an important role to reduce the number of unwanted pregnancy and induced abortion also, thereby reduce the RH mortality and morbidity. ⁶ Hence, this study was carried out to assess the knowledge of nursing personnel regarding emergency contraception.

MATERIALS AND METHODS

The descriptive exploratory study design was used. The population of the study was included from all those nursing personnel who were working in family planning service sites of Kathmandu and Lalitpur district. A total of 13 family planning centers including Primary health care centre, health post, and Marie Stopes Centers (non governmental organization which provides family planning, comprehensive abortion care services and post abortion care services) in Kathmandu and Lalitpur district were taken for the study. There were a total of 70 nursing staffs in these centers but only 60 of them were available during the study period were included in the study.

Administrative approval was obtained from the authorities. The permission for the study was taken from the head of related institutions after submitting request letter from Maharajgunj Nursing Campus. Verbal informed consent was obtained from all participants to ensure the right of the subject.

Self administered questionnaires were used to collect information from the respondents. Filled questionnaires were collected back by the researcher from the respondents' place of work. The anonymity of subjects was maintained by asking them not to write their name and subjects were not forced to participate in the study. Data was collected from 2065/04/12 to 2065/05/12.

RESULTS

Responses from the 60 nursing personnel have been analyzed according to the objectives of the study. The analyzed data and their interpretation are shown in the following texts and tables. The analysis and interpretation of data are presented as follows:

Table 1: Socio Demographic Characteristics of Respondents

Characteristics	Number	Percent
Professional Qualification		
ANM	29	48.3
PCL Nursing	24	40.0
BN/B.Sc.	7	11.7
Job Designation		
ANM	29	48.3
Staff Nurse	17	28.3
Senior Staff Nurse	11(6 from PCL 5 and from BN)	18.3
In charge	3(2 from BN and 1 from PCL)	5.0

Out of total 60 nurses, almost half(48.3%) of them had completed

ANM and were working as ANM, 28.3% holding staff nurse position, 18.3% holding senior staff nurse position and 5% holding in-charge position. Median duration of experience on family planning service site was 6 years and 48.3% had taken in- service training on Emergency Contraception (EC). Mean duration of in-service training on EC was 1.38. Similarly, 65% of the respondents had taken in-service training on family planning counseling and median duration was 14 days and 95% of the respondents had mentioned that they had sufficient supply of EC devices in their FP clinic (not shown in table).

Table 2: Mean Knowledge of Nursing Personnel on Emergency Contraception

Knowledge items	Total Score	Mean score (percent)	Standard Deviation
General information on EC	6	5.78 (96.33)	0.6132
Knowledge about IUCD as EC	4	3.55 (88.78)	0.6223
General information on ECP	10	6.61 (66.1)	1.4153
Dosage and administration	2	1.31 (65.5)	0.6507
Side effects and their management	9	5.31 (59.0)	1.6518
Sum knowledge on EC	31	22.58 (72.83)	3.24

Table 2 deals with mean knowledge of nursing personnel on EC. All the correct responses were added and mean score (SD) and percentage was calculated. On an average, 96.33% of nursing personnel had knowledge on general information of EC, 88.78% had knowledge about intrauterine contraceptive device as EC, 66.1% had knowledge on general information of Emergency Contraceptive Pills (ECP), 65.5% had knowledge on its dosage and administration and only 59.05% had knowledge on its side effects and their management. On an average, nearly three fourth (72.83%) of nursing personnel had knowledge on EC as a whole.

Table 3: Attitudes of Respondents Regarding Emergency Contraception

Statements	Correct Responses	Percent
All health-care providers should know about EC and include it in routine contraceptive counseling	52	86.7
EC should be easily available at every health facilities	56	93.3
Wider use of EC is cost saving than abortion and unwanted child bearing	54	90.0
The ECP is safe for its uses	48	80
EC is less effective than regular contraception*	38	63.3
EC should be prescribed for married and unmarried girls*	40	66.7
Easy availability of EC does not increase risky sexual behavior*	30	50.0
EC is used not only by commercial sex worker*	56	93.3
Providing ECP would not discourage the use of other contraceptive methods*	34	56.7
I would use ECP if I have unprotected sex during the unsafe period	55	91.7
I would recommend emergency contraception pills to a friend	53	88.3
Total mean/percentage = 8.60 (78.18%).		

Eleven statements were responded in two types of options i.e. agree and disagree. These statements were grouped into positive and negative responses. * Negative responses were turned into positive responses to facilitate analysis.

Among 60 respondents, three-fourth (78.18%) of them had positive attitude towards EC. Among the respondents who had positive responses, 56(93.3%) of the respondents mentioned that EC should be easily available at every health facilities and 56(93.3%) mentioned that EC is used not only by commercial sex worker, followed by 55 (91.7%) mentioned that they would use ECP if they had unprotect sex during the unsafe period, 54(90.0%) mentioned that the wider use of ECP is cost saving than abortion and unwanted child bearing, 53(88.3%) mentioned that they would recommend emergency contraception pills a friend, 52(86.7%) mentioned all health-care providers should know about EC and include it in routine contraceptive counseling, 48(80%) mentioned the ECP is safe for its uses, 40(66.7%) mentioned EC should be prescribed for married and unmarried girls, 38(63.3%) mentioned EC is less effective than regular contraception, 34(56.7%) mentioned providing ECP would not discourage the use of other contraceptive methods and 30(50%) mentioned that easy availability of EC does not increase risky sexual behavior.

Comparison of Knowledge about EC According to Different Variables

Table 4: Knowledge about EC According to Respondents' Educational Qualifications

Educational qualification	Number	Mean (SD)	p value
ANM	29	22.13(3.65)	Reference
PCL Nursing	24	22.7(2.9)	0.543
BN/ B.Sc.	7	24(1.91)	0.204

(t-test significant at 0. 05 level)

There was no statistically significant difference on knowledge and educational qualification of nurses.

Table 5: Knowledge According to Respondents' In-Service Training on EC

Training on EC	Number	Mean (SD)	p value
Training received	31	23.22 (3.24)	0.114
Training not received	29	21.89 (3.16)	

(t-test significant at 0. 05 level)

There was no statistically significant difference between knowledge and in-service training on EC (p = 0.114).

Table 6: Knowledge about EC According to Duration of Experience

Duration of experience	Number	Mean (SD)	p value
Up to 20 years	47	22.72 (3.31)	0.530
More than 20 years	13	22.07 (3.06)	

(t-test significant at 0.05 level)

There was no statistically significant difference on knowledge and duration of experience ($p = 0.530$).

Table 7: Knowledge about EC According to In-Service Training on Family Planning Counseling

In-service training on FPC	Number	Mean (SD)	p value
Training received	21	22.57 (3.04)	0.984
Training not received	39	22.58 (3.39)	

(t-test significant at 0.05 level)

There was no statistically significant difference on knowledge and in-service training on FPC ($p = 0.984$).

Correlation between Knowledge and Attitude Regarding EC

When studying the correlation between nurses' knowledge and attitude regarding EC, it was found to be moderately correlated ($r = 0.537$).

DISCUSSION

Regarding the types of Emergency Contraceptive Pills (ECP), 8 (13.3%) of respondents gave no response. Respondents who gave names of ECP, majority (70%) had knowledge on COCP & POP (both methods), followed by 6 (10%) had knowledge on COCPs and only 4 (6.7%) had knowledge on POPs. A survey was conducted among 214 health-care providers working at a university hospital in eastern Turkey revealed that 74.0% of the respondents knew about at least one methods of EC, among these, 38.5% of the participants had accurate knowledge. None of the respondents knew about levonorgestrel.¹¹

Regarding the ECP as a method of abortion, 49 (81.7%) of the respondents responded that the EC was not the method of early abortion which was the correct answer and 11(18.3%) of the respondents responded incorrectly. In Nigeria in 2003–2004, a sample of 256 health care providers within Lagos State were surveyed which revealed one third of respondents incorrectly believed that they may act as an abortifacient and 57 (95%) of the respondents correctly responded that the ECP does not prevent STI even when taken early.³

Regarding schedule of low dose COCP for EC, majority (83.3%) of respondents responded correctly as 4 pills immediately followed by 4 pills 12 hours later and rest of the respondents responded incorrectly. Regarding the maximum acceptable

time to take ECP after unprotected sex, 28 (46.7%) of the respondents had the correct knowledge as 72 to 120 hours. A study conducted in Nigeria in 2003–2004 revealed that only half of them knew the correct time frame for effective use of emergency contraceptive pills, and three-fourth knew that the pills prevent pregnancy and only 10% of these providers could correctly identify the drug dose and timing of the first pill in the regimen.³

On an average, 96.33% of nursing personnel had knowledge on general information of emergency contraception, 88.78% had knowledge about intrauterine contraceptive device as emergency contraception, 66.1% had knowledge on general information of emergency contraceptive pills, 65.5% had knowledge on its dosage and administration and only 59.05% had knowledge on its side effects and their management. On an average, nearly three fourth (72.83%) of nursing personnel had knowledge on emergency contraception as a whole. It is supported by a descriptive research study on knowledge, attitude and practice with regard to E.C. was conducted among 167 nurses and 63 nursing students in Nairobi, Kenya revealed that poor knowledge among nurses about the applications and side effects of EC.⁴

Among 60 respondents, majority of the nursing personnel had positive attitude on EC. Correct response on attitude towards EC (mean/percentage) was 8.60(78.18%). Among the respondents who had correct responses (positive attitude) towards EC, 56 (93.3%) of the respondents mentioned that EC should be easily available at every health facilities and EC is used not only by commercial sex worker, followed by 55 (91.7%) mentioned that, they would use ECP if they had unprotect intercourse during the unsafe period and only 50% responded positively on easy availability of EC does not increase risky sexual behavior. When studying the correlation between nurses' knowledge and attitude regarding emergency contraception, it was found to be moderately correlated ($r = 0.537$). It is supported by the study which was conducted to determine the effect of technical training program on upgrading a newly graduate physician and nurses knowledge and attitude regarding EC. Improving the study subject's knowledge had a positive impact on their attitude toward emergency contraceptives as well.⁸

CONCLUSION

Based on the findings, it is concluded that on an average majority of nursing personnel tend to have knowledge on emergency contraception as a whole. Majority of them are likely to have positive attitude towards EC. Knowledge regarding emergency contraception is not related to different variables. Nurses' knowledge and attitude regarding emergency contraception have positive correlation.

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