

Original Article

A STUDY OF KNOWLEDGE, ATTITUDES AND PRACTICE OF EMERGENCY CONTRACEPTIVE PILLS AMONG FEMALE COLLEGE STUDENTS IN UDAIPUR, RAJASTHAN

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ABSTRACT

Background: Emergency contraception is administered after unprotected intercourse to prevent unintended pregnancy. Sexually active young and adolescent women are at greatest risk of unintended pregnancy and thus unsafe abortion related morbidity and mortality.

Objective: Purpose of this study was to evaluate knowledge, attitude and experiences on emergency contraceptive pill (ECP) by female college students of Udaipur.

Study design: Cross-sectional, pre-structured questionnaire based study.

Material and methods: Study was conducted among 600 college going female students (arts, science and commerce faculty) of two randomly selected girls colleges of Sukhadia University Udaipur. Data were analyzed statistically by simple proportions and test of significance (Chi square test) and Mann Whitney U test using SPSS ver.16.

Results: Students included in study were of 16-29 years age group (mean age 18.6±3.2 years), 225 (37.5%) had adequate knowledge about emergency contraceptive pills, statistically significant difference in knowledge is seen among students who got knowledge from literary sources and health personnel (p<0.05). Majority of the science stream students (50%) were having adequate knowledge followed by commerce and arts stream students respectively but statistically significant difference in knowledge is seen among all faculty students (p<0.05). Majority of students (78%) know about the correct timing of EC pills administration. Among all the students only 201 (33.5%) students shown positive attitude regarding EC pills. No significant association seen between adequate knowledge and positive attitude (p>0.05). Only 3% students had already used EC pills.

Conclusion: Awareness of EC pills is low and there is a gap between knowledge and attitude. Appropriate awareness programme needed.

Keywords: Emergency contraceptive pills, knowledge, attitude

INTRODUCTION

Each year about 210 million women around the world become pregnant.¹ Among them, about

75million pregnancies are unplanned and/or unintended.² Most of these unplanned/unintended pregnancies are not carried to full term, but aborted often in unhygienic conditions

leading to serious consequences. Young and unmarried women constitute a high risk group for unsafe abortions. It has been estimated that widespread use of emergency contraception may significantly reduce the number of abortion-related morbidity and mortality.

In India, as elsewhere, adolescent pregnancy presents a serious social and public health problem. Young woman fail's to complete her education due to early child bearing, thus limiting her future job prospects and her own and her child's economic well-being. Among adolescent females in India who gave birth before their fourth year of secondary school, less than one-third returned to school after the birth of their child.^{3,4}

Emergency contraception (EC) is a method of contraception that can be used to prevent pregnancy after an unprotected act of sexual intercourse, also called "morning-after" or "post-coital" pills. However, since emergency contraceptive pills can be used up to three days after unprotected intercourse. EC is intended for occasional or emergency use only and not as a regular contraception. It is associated with a failure rate of 0.2% to 3%. At present LNG-only regimen has become the first progesterone-only tablet especially developed for post-coital contraception and is approved by the United States Food and Drug Administration (USFDA) and the Drug Controller of India.⁵

The present study is a college based study conducted among female college students in Udaipur city. Purpose of study is to assess the knowledge, attitude and practice of emergency contraceptive pills among the college girls .we had chosen college girls, as many of them are in the teen age, the age of experimentation and also most of them are going to be involved in a marital relation soon.

MATERIALS AND METHODS

Study design: A cross sectional study done in college was adopted for the study.

Study area: Study was conducted at two randomly selected Girls colleges in Udaipur city.

Study technique: There are total four girls degree colleges in Udaipur city, we selected randomly two of them .Permission for the study taken from regulatory authorities. Girls of three different streams arts, science and commerce who were present in the college at that time and

consented were included in the study. For the sake of homogeneity we included only final and second year students of the colleges. All the consented students were requested to gather in a common hall. Information was provided about aims and objectives of the study and methodology adopted, and students were given assurance about confidentiality. Students were made to sit separately while filling the questionnaire to avoid communication.

Study tool: We used a three page, anonymous, self-administered and closed ended questionnaire for data collection. The questionnaire was designed considering similar studies that have been carried out in other countries. We modified the original questionnaire to suit our context.

The questionnaire consists of four parts .First part deal with information regarding age, stream of study and source of information about emergency contraceptive pills. In the second part we tried to assess the knowledge of participants about emergency contraceptive pills using five multiple choice questions. The questions were:(1) "According to you in which of the following conditions EC Pills should be used?", (2) "Which of these is an EC Pill?",(3) "What is the maximum acceptable time limit within which EC Pill to be taken after unprotected sexual intercourse?",(4) "Is EC Pill a method of abortion?",(5) "Will EC Pill protect against sexually transmitted infections?"

In the third part of the questionnaire we used four questions to test the attitude of the participants rated on Likert scale as (1)Strongly disagree (2) Disagree (3) Agree and (4) Strongly agree. We set the maximum score for each respondent at 16 and minimum at 4. High score (≥ 12) indicative of positive attitude and low score (< 12) indicative of negative attitude.

In the fourth part of questionnaire students were asked about their experience with EC Pill.

Statistical analyses: Data was entered and analyzed with the EPI Info version 6.0 and SPSS version 16.0. Appropriate tables were generated and Chi square test and Mann-Whitney U test used for statistical inferences.

RESULTS

Total six hundred students of two randomly selected Girls colleges consented and were included in the study. Participants belong to 16-

29 years age group (mean age 18.6±3.2 years). Out of all students, 363 students were from arts stream, 153 from commerce and 84 from science stream.

Majority of the students 461(76.8%) pointed informational sources as the main source of information about EC Pills. (Table 1)

Table 1: Source of information about EC Pills (N=600)

Source	Respondents	Adequate Knowledge	Inadequate knowledge	P value
Literature(books, magazines)	323(53)	135(41.8)	188(58.2)	0.019
AV media	138(22.5)	50(36.2)	88(63.8)	0.726
Health personnel	82(14.5)	19(23.2)	63(76.8)	0.004
Family and friends	57(10)	21(36.8)	36(63.2)	0.914

Figures in paranthesis indicate percentage

A total of 345 (57.5%) students correctly identified I-Pill as an EC Pill and 468(78%) students knew that first dose of EC Pill could be taken within 72 hours of the unprotected sexual intercourse. Responses of the questions meant to assess the knowledge were scored, maximum score was 5 and all those respondents who scored >=3.5 were considered to have adequate knowledge. Only 225(37.5%) students showed adequate knowledge. Although 185(82.2%) students got the information about EC Pill from informational sources but statistically significant difference in knowledge is seen among respondents who got the knowledge from literary sources and health personnel as compared to other sources(p value <0.05). (Table 1)

Although observationally majority of the science stream students (50%) were having adequate knowledge followed by commerce and arts stream students respectively but statistically

significant difference in knowledge is seen among all faculty students(p<0.05). (Table 2)

Table 2: Comparison of knowledge among different faculty students

Stream	Students' knowledge		P value
	Adequate	Inadequate	
Science	42(50)	42(50)	0.011
Commerce	75(49)	78(51)	0.001
Arts	108(30)	255(70)	0.000

Figures in paranthesis indicate percentage

Attitude of the students rated on Likert scale. Only 201(33.5%) students were having favorable positive attitude, Out of them 108(29.7%) were arts students, 57 (37.2%) commerce students and 36 (42.8%) science students. In case of unprotected sexual intercourse in future 390 students (65%) either agreed or strongly agreed to use EC Pill. A total of 336 students (56%) considered EC Pill as safe for users.(Table 3)

Table 3: Attitude testing of the participants

Attitude testing questions	Strongly agree	Agree	Disagree	Strongly Disagree	Not responded
I would use ECP if I have unprotected intercourse	129 (21.5)	261 (43.5)	120 (20)	60 (10)	30 (5)
ECP is safe for its users	81 (13.5)	255 (42.5)	183 (30.5)	72 (12)	9 (1.5)
I would recommend ECP to friend	144 (24)	300 (50)	108 (18)	27 (4.5)	21 (3.5)
Providing ECP would not discourage consistent use of condom	75 (12.5)	156 (26)	198 (33)	129 (21.5)	42 (7)

Figures in paranthesis indicate percentage

Relationship between knowledge and attitude investigated using Mann-Whitney U test. Knowledge was grouped as adequate and inadequate while each item of attitude rated accordingly, strongly disagree 1 point and strongly agree 4 point, maximum score 16. No statistically significant association seen between adequate knowledge and favorable positive attitude (p >0.05).

Out of all respondents only 18 students (3%) reported that they had previously used EC Pills.

DISCUSSION

Emergency contraception is most useful when there is failure of barrier methods such as slippage and breakage of condoms, or when sexual intercourse was unpremeditated. However women need to know about

emergency contraception and should be willing to use emergency contraception before it can be effective. The awareness of ECPs among female college students was found to be 57.5% although only 37.5% of them showed adequate knowledge. This level of awareness was higher than the level of awareness found among university students in Ghana (43.2%).⁶ It was however lower than among university students in the USA (86%) and Jamaica (84%).^{7,8} Surveys among university and postsecondary students in several American and African countries found that while a quarter to three-quarters of youth had heard of emergency contraception, accurate knowledge about its use was minimal.^{9,10,11} Berhanu et al found that 47% of the university students mentioned that they have ever heard of EC as a means of preventing unwanted pregnancy if used soon after unprotected sexual intercourse but only 25.7% had good knowledge of EC.¹²

Informational sources of information like books, magazines and media found to be associated with more adequate knowledge as compared to informal sources. This is in contrary to findings of Sorhaindo et al who reported that, although informal networks were the main sources of information on ECPs in Jamaica, most students had correct knowledge about the general characteristics of ECPs.¹³ In a study conducted at AAU university, Addis Ababa, capital city of Ethiopia Media was found to be the main source of information for EC.¹⁴ In a similar study conducted in Nigeria among undergraduate college students, the main source of information was through friends/peers.¹⁵ In another study conducted in 2005 among 379 female students of Makerere University of Uganda, only 45.1% had ever heard of EC; their main source of information were also via friends 34% followed by Media 24.8%.¹⁶

Majority of girls who showed adequate knowledge regarding EC pill are student of science stream followed by commerce stream students. Similar findings were observed in a study conducted at Bhavnagar (Gujarat) by Dr Chinmay shah, Vipul solanki et al.¹⁷

Students included in our study although had favorable opinion regarding EC pills but majority of girls consider that EC pill not safe for its users. Similar findings have been reported in studies at Kenya and Ghana.⁶

Objective of condom use was to prevent HIV and so the availability of ECPs could not

discourage the use of condoms; if the users understand that ECPs do not prevent HIV infection. In our study we found that 54.5% students consider that providing EC pill would discourage consistent use of condom this is in congruence with a study at Ghana where 53.4% students thought the same.⁶

More research is needed to augment our knowledge of adolescent's sexual attitudes and the factors that motivate or deter them from having sexual intercourse and using contraceptives.

CONCLUSION

In conclusion, this study showed that the awareness of emergency contraception among adolescent college girls was low. Even among many of those who were aware, adequacy of knowledge was lacking. Students generally believe that ECPs are unsafe for their users. In the face of significant risk of unwanted pregnancy and induced abortion there is a need to raise awareness about emergency contraceptives as an option with other contraception methods. Taking cognizance of the findings of our study we recommend that an effective sex and reproductive health education campaign should be started in every college and high school. "Reproductive Health Clubs" if set up in high schools and colleges might act as the venue for disseminating adequate knowledge, awareness and positive attitude regarding EC pills along with other contraceptive methods.

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