Research Article

Awareness and attitude toward the use of emergency contraceptives among male and female adolescents of Jamnagar

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Abstract

Background: Emergency contraceptive methods help in preventing pregnancy following 72–120 h of unprotected sexual intercourse. Emergency contraceptive pills (ECP) are available over the counter (OTC) in India since 2005. In India, studies on emergency contraceptives have been mainly carried out on females. Both male and female partner owe responsibility for pregnancy. Hence, we carried out this study among both male and female adolescents.

Objective: To find the awareness and attitude toward the use of emergency contraceptives among adolescents of Jamnagar.

Materials and Methods: Our study included both male and female adolescent participants (MAP and FAP, respectively) who were educated upto Class Ten. A pre-validated and pretested questionnaire was used as a tool for the study. It contained questions on knowledge and attitude regarding ECP usage.

Result: Completed questionnaires were obtained from 403 adolescents, MAP (n = 198) and FAP (n = 205). Knowledge about ECP was inadequate in adolescents (47% in MAP and 49% in FAP). Knowledge about cost was more in MAP (39%) than FAP (31%). Electronic media was the most common source of information in our study (43% by MAP and 36% by FAP). Knowledge about adverse reactions of ECP was poor in adolescents (19% in MAP and 21% in FAP). MAP had a more positive attitude compared to FAP with regard to availability of ECP as OTC medicines (43% and 36%, respectively).

Conclusion: Education about ECP among adolescent population is necessary. There is a need of more studies on ECPs in rural areas and among less educated adolescents.

KEY WORDS: Emergency contraceptive pills, adolescents, pregnancy, abortion, knowledge

Introduction

The present youngsters enjoy more freedom of movement than it was a decade ago. With increasing gap between puberty and marriage and, having access to uncensored films on electronic media, premarital sexual relationships are rising. This has led to many teenage pregnancies. Of guilt, instead of consulting doctors, they visit quacks for abortion. Usage of crude and unsterile methods for termination of pregnancy by quacks can lead to high morbidity and mortality rates in women.

India is next only to China in terms of population. Overpopulation is a major cause of poverty, malnutrition, and slow economic growth in developing countries. In India, 78% pregnancies are unplanned and at least 25% are unwanted. Every year 11 million abortions take place and at least half of these are unsafe and associated with a high morbidity and mortality. At least 20,000 women are dying annually due to abortion-related complications.[1,2]

Emergency contraception is one of the methods to prevent unplanned and unwanted pregnancy. Levonorgestrel (LNG) and Ulipristal pills are the most commonly used forms of emergency contraception.[3,4] Emergency contraceptive pill (ECP) has got approval as over-the-counter (OTC) medicine by the government of India since 2005.[5,6] The availability

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of ECPs as OTC medicines has led to their injudicious use. There are no parallel educational programs in the community to give knowledge about ECP. Moreover, no proper instructions are given to users by pharmacists at chemists' shops. Hence, the users are unaware about their correct method of use, time of administration, and adverse effects.[7] LNG tablet was approved as an OTC product to reduce the rates of unwanted pregnancy and unsafe abortion in 2005. However, the awareness of this method of emergency contraception is yet to percolate to the grass root level.

Emergency contraception is used by adolescent girls including college girls and young married women.[8] National Demographic and Health Survey shows that only 1% married women had ever used ECP and less than one-third of unmarried women knew about ECP.[9] It has also been reported from northern India that there is little knowledge regarding indications, availability, and time of use of emergency contraception among college students.[10]

The Family Planning Program was launched in India 1952 with the objective of reducing birth rate.[11] Temporary methods of contraception (e.g., oral contraceptive pills, condom, IUCD, and hormonal injections) and permanent methods (e.g., tubectomy and vasectomy) have been introduced by the Family Welfare Department of India.[2] However, unprotected, unplanned exposure, and contraceptive accidents, such as forgotten pills, condom burst, and slipping of diaphragm, have led to failure of temporary methods of contraception. This has led to many unwanted pregnancies and high abortion rates.[7] Unwanted pregnancy following unprotected sexual intercourse or failure of regular contraception can be prevented by emergency or post-coital contraception.[12]

In India, surveys regarding knowledge of the use of ECP have been conducted so far only on females. The responsibility of pregnancy lies on both the male and the female partner. Hence, this study was conducted to evaluate the knowledge and attitude toward the use of ECP among male and female adolescents of Jamnagar city.

Materials and Methods

This descriptive cross-sectional study was conducted at Jamnagar city, Gujarat, India, from December 2014 to February 2015. The study was approved by the Institutional Ethics Committee. The study participants included students from high school (Class Eleven and Twelve) up to second year of undergraduate colleges of Jamnagar city. Our study also included adolescents of Jamnagar city who stopped studying after Class Ten or high school.

The study was conducted using pre-validated and pretested questionnaire. It included multiple choice questions, closed-ended and a few open-ended questions. Questionnaire was both in English and vernacular languages. The questionnaire elicited details on knowledge and attitude toward the use of ECPs. It also included information on various sociodemographic variables, such as age, sex, educational status, and marital status.

Our study included both male and female adolescent participants (MAP and FAP, respectively). They were approached individually and invited to participate in the study. Since the topic was highly sensitive, the study participants were taken into confidence before conducting the study. They were also ensured about their anonymity. Questionnaire was given to adolescents at hostels (with prior permission of authorities) and other public places, such as cafeteria and spectators' area of sports. Data were recorded and analyzed in MS Excel 2010.

Result

In this study, questionnaire was given to 440 adolescents and completed questionnaire was obtained from 403 adolescents, MAP (n = 198) and FAP (n = 205), constituting a 92% response rate. The study participants were in the age range of 15–20 years. Analysis of marital status revealed that no one was married in MAP whereas 37(18%) were married in FAP. The demographic details of participants are presented in Table 1.

Knowledge and other aspects of using ECP are summarized in Table 2. It was observed that 47% of MAP and 49% of FAP were aware about emergency contraceptives. Of the 37 married adolescents in our study, only 17 (46% of married female adolescents) knew about ECP. It was observed that 33% of MAP and 41% of FAP had knowledge that they/their partner should expect their next period within 3 weeks of taking the pill. The most common indication for ECP mentioned by both MAP and FAP was to avoid unwanted pregnancy. Other reasons mentioned were unprotected sex, rape, and birth control. It was also observed that 24% of MAP and 22% of FAP knew that ECP does not protect against sexually transmitted diseases (STDs).

Sources of information on ECP are shown in Table 3. In our study, electronic media (television/internet) was the most common source of information on ECP (43% in MAP and 36% in FAP) followed by newspapers/magazines. The other sources mentioned were doctors, nurses, pharmacists, friends, seminars, and family.

Attitude was recorded on a 5-point Likert scale (from strongly disagree, disagree, neither disagree nor agree, agree to strongly agree). The positive attitude (strongly agree and agree) of the adolescents about the use of ECP is shown in Table 4. It was observed that 47% adolescents from MAP and 49% from FAP were in favor of using ECP to avoid unwanted pregnancy. It was also observed that 45% of MAP and 43% adolescents of FAP were in the favor of advising others on usage of ECP. There were 43% of MAP and 33% of FAP who were of the attitude that emergency pill should be available as OTC. However, FAP commented that procuring ECP from a chemist would be too embarrassing for girls.

Discussion

As unmarried teenage pregnancies are becoming common, both male and female adolescents need to have knowledge about emergency contraception. They also need to know the

Table 1: Basic demographic profile of the study population (*n* = 403, MAP = 198, FAP = 205)

Characteristics		MAP frequency (%)	FAP frequency (%)
Age (years)	<16 years	17 (9)	16 (8)
	16–18 years	85 (43)	102 (50)
	18–20 years	96 (48)	87 (42)
Educational status	High school students	41 (24)	42 (21)
	First and second year undergraduate college students	78 (39)	65 (32)
	Stopped studies after Class Ten or high school	79 (40)	98 (48)
Marital status	Married	0 (0)	37 (18)
	Unmarried	198 (100)	168 (82)

MAP, Male adolescent participants; FAP, female adolescent participants.

Table 2: Awareness about ECP in adolescents (*n* = 403, MAP = 198, FAP = 205)

Parameter	MAP correct response (%)	FAP correct response (%)
Indication for ECP	94 (47)	101 (49)
Methods of emergency contraception (IUCD/combined pills/LNG pill)	93 (47)	100 (49)
Appropriate time of taking	89 (45)	96 (47)
No. of tablets to be taken (LNG)	89 (45)	96 (47)
Interval for repeat dose, if any	61 (31)	78 (38)
Need to check for start of next menstrual period after taking tablet	65 (33)	84 (41)
Common side effects	38 (19)	43 (21)
Contraindications to ECP	32 (16)	39 (19)
Does ECP protect against STDs?	48 (24)	45 (22)
Can ECP be used on a regular basis for contraception?	42 (21)	55 (27)
Availability of ECP as OTC drug	85 (43)	68 (33)
Cost of ECP at chemist shop (50–100 INR)	77 (39)	64 (31)

MAP, Male adolescent participants; FAP, female adolescent participants.

Table 3: Sources of information on ECP among adolescents (*n* = 403, MAP = 198, FAP = 205)

Source	MAP frequency (%)	FAP frequency (%)
Electronic media (Television/Internet)	85 (43)	74 (36)
Friends	73 (37)	98 (48)
Newspaper/magazines	67 (34)	55 (27)
Pharmacy	77 (39)	43 (21)
Doctor	30 (15)	53 (26)
Textbook	22 (11)	18 (9)
Workshop/seminar	10 (5)	14 (7)
Family	8 (4)	12 (6)

MAP, Male adolescent participants; FAP, female adolescent participants.

Table 4: Positive attitude* of adolescents regarding ECP (*n* = 403, MAP = 198, FAP = 205)

Item	MAP frequency (%)	FAP frequency (%)
ECP can be used if there is unprotected intercourse during the unsafe period	93 (47)	101 (49)
ECP is safe for its users	85 (43)	80 (39)
Using ECP is better than abortion	81 (41)	86 (42)
ECP will discourage regular use of contraception or condoms	65 (33)	76 (37)
ECP should be available as OTC	85 (43)	68 (33)
I would recommend ECP to others (friends, rape victims, etc.)	89 (45)	88 (43)
Awareness programmes need to be promoted by government	91 (46)	98 (48)

*Strongly agree and agree; MAP, male adolescent participants; FAP, female adolescent participants.

correct method of use, adverse effects, availability, and cost of ECP. They should have a positive attitude on its use and recommend them to others for emergency contraception. Our study was carried out to find the awareness and attitude of adolescents toward ECPs.

In our study awareness on ECP (47% in MAP and 49% in FAP) was similar to a study conducted at Ahmedabad on health-care female students (50%)[13] but less than private medical practitioner of Nigeria (60%).[14] It was higher than in a study on nursing students (41%).[15] In our study, knowledge about correct method of use (47% in MAP and 49% in FAP) was more than a study conducted at Ahmedabad (44%)[13] but less than a study on Delhi medical officers (54%).[16] This shows that the knowledge about the use of ECP is inadequate in Indian adolescents. The ECP may not be effective if the recommended timing of its use is not resorted to. Moreover, it can cause menstrual irregularities.

The most common source of information was from electronic media in our study (43% in MAP and 36% in FAP) which was similar to a study at Ahmedabad (71% health-care students and 55% other students)[13] but less than a study in women at Chandigarh (57.7%).[17] Awareness on ECP can be promoted by electronic media because they are the most common source of information for adolescents. In our study, source of information from friends (37% in MAP and 48% in FAP) and from family (4% in MAP and 6% in FAP) was very low compared to a study at Cameroon where the most common source of information was through friend/family (69.6%).[18] Contacting family for information on ECP was poor in India, possibly because of social inhibitions. In our study, only 15% of MAP and 27% of FAP sought information from doctors. This was very less compared to a study at Sikkim on nursing students (80%)[6] and another study on nursing students (57%).[15] It was also less than a study in Karachi on working women where 50% mentioned that they got information from health-care professionals.[19] In our study, only 5% of MAP and 7% of FAP mentioned workshop/seminar as source of information which was very less compared to a study on nursing students (32%).[15] The other sources were newspaper/magazines. Thus, different countries use different sources of information regarding ECP which could be based on government policies and regional preferences. A noncommercial and unbiased source would educate adolescents on ECP in a better way.

In our study, the knowledge about adverse drug reactions (ADR) (19% in MAP and 21% in FAP) was higher compared to other students of Ahmedabad (13%)[13] and at Chandigarh (4%).[10] It was lower than health-care students at Ahmedabad (40%)[13] and in health-care staff at New Delhi (47%).[8] This shows that the knowledge about ADR is poor in young population. Adolescents may use ECPs indiscriminately if they do not have adequate knowledge of their ADRs. The attitude to advice others regarding the use ECP in our study (45% in MAP and 43% in FAP) was similar to health-care students at Ahmedabad (46%)[13] but higher than other students of Ahmedabad (33%).[13] In our study, 46% of MAP and 48% of FAP had a positive attitude toward promotion of awareness programs by the government, which was considerably less than a study on nursing students (66.6%).[15] In our study, MAP had a more positive attitude compared to FAP with regard to availability of ECP as OTC medicines (43% and 36%, respectively). Availability of ECP as OTC has been a subject of debate even after it received OTC status. The reason could be that because of OTC status of the medicine, there is a possibility of its misuse by the young generation.[4]

The strength of our study was that it was conducted on both male and female adolescents whereas other studies have so far been conducted only on female population in India. There were a few limitations of our study. As the study was done on a sensitive issue (using contraception mainly in young unmarried population), we could not include a large number of adolescents in the study. The survey related to practice of usage of ECP could not be covered as the adolescents could not come out openly with their personal issues. Another limitation was that this study was carried out only in urban settings among adolescents who completed Class Ten and above.

Conclusion

The results of this study indicate that knowledge and attitude of adolescents in relation to ECP was inadequate in India. Adolescents need to have a positive attitude on usage of ECP.

There is a need to sensitize adolescents on ECP usage by health-care professionals through lectures and workshops. In addition, media should come forward to create awareness and provide information on method of usage of ECP and its adverse effects. Adolescents should be clearly explained that ECP is only an emergency method to prevent unwanted pregnancy that could occur following unprotected intercourse and that ECP cannot prevent STDs. Further studies can include adolescents who are less educated and also those from rural areas.

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