

Imparting Knowledge Of Emergency Contraception To Female College Students: Is It Dangerous?

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Abstract

Globally, unplanned pregnancy in adolescents is a major public health problem with psychosocial and economic repercussions for the unprepared young individual. The problem is more grave in developing countries where 1/3rd of women are mothers before 20 yrs of age¹. Even though sexarche (age of 1st coitus) is happening earlier now a days but still the young population is unaware of the hazards of unsafe sexual encounters and modes of avoiding it leading to increase in number of teenage pregnancies².

Awareness of EC in preventing unwanted pregnancies in college going female students was found to be minimal. Efforts should be put in for awareness promotion, improving access and usage in potential users. Health professionals should be involved as many of the respondents relied on them for information on contraceptive methods.

NAME OF INSTITUTE WHERE WORK IS DONE

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INTRODUCTION

Globally, unplanned pregnancy in adolescents is a major public health problem with psychosocial and economic repercussions for the unprepared young individual. The problem is more grave in developing countries where 1/3rd of women are mothers before 20 yrs of age¹. Even though sexarche (age of 1st coitus) is happening earlier now a days but still the young population is unaware of the hazards of unsafe sexual encounters and modes of avoiding it leading to increase in number of teenage pregnancies².

Emergency contraceptive pills can prevent 75-85% of unintended pregnancies, if used within 72 hrs of unsafe sex. The women who had unsafe sex, had contraceptive failure, or had sexual assault can resort to emergency contraception (EC) to avoid unwanted pregnancy³. Though, legally one can opt for termination of pregnancy in India, but still owing to social reasons, majority of adolescents visit quacks instead of getting it done in medical institutions. In spite of EC being available over the counter in India, still the rate of teenage and unintended pregnancies are high owing to it being the underused and unknown method. Also,

the misconception that EC is an abortifacient and that its use promotes irresponsibility as well as promiscuous lifestyle particularly among adolescents, contribute to its under prescription by health professionals to prevent unintended pregnancies⁴.

The hormonal EC concept came in India in 2000. In public sector, EC got available in 2003 by the name of E pill. Also in mass media now by name of 'I-pill', it is being promoted. Introduction of EC through government supply in the new millennium has a potential to empowering the young females in India.

Many studies dealing with awareness of EC has been done in India but the awareness in young population and if the knowledge of EC promotes the sexual promiscuity has not been adequately investigated. The Present study was an endeavour to ascertain the awareness in young generation and to find out if this encourages them for indulgence in sexual activity.

METHODOLOGY

Chandigarh, one of the modern cities of India has literacy rate of 81.6%. Lot of young people from different parts of India comes here for education. In Sep. 2004 - Oct 2005, the study was done in undergraduate and graduate female students of different colleges. A total of 11 colleges and

some departments of the only university were enrolled in the study. By systematic random sampling method, a sample of 1017 female students was selected. The instrument used for assessing the knowledge was questionnaire. A revised self-administered questionnaire after pilot survey was made that included demographic information along with detailed information of EC.

The confidentiality of the subjects was assured. Participants were enrolled only after the written consent. After collection of data from subjects, trained research assistants held the educational talk in which their doubts were clarified. Data was analysed using simple proportions and percentages. Epi info Version 6 was used for analysis.

RESULTS

In total, the number of female students who were enrolled were 1217. The refusal rate was 10.8% and hence study sample comprised of 1017 females, who were in the age group 17-25 yrs. The mean age of the respondents was 18.3yrs(SD=2.4yrs). Majority of respondents were hindu 457(44.9%). Others being sikh, 398(39.1%), muslim 6% and christian 5%. Of the total study sample, 97.8% were unmarried.

Knowledge of EC was found in 7.3% of subjects, in comparison to that of regular contraceptive methods, 507(49.9%). The main source of information was health professionals 37.8%, followed by friends, 24.3%. Other sources of information were media 24.3% and books 4.1%. The awareness of different types of EC methods was less in the subjects. Most, 73% of them were aware of EC as being pills. Only, 14.9% knew that IUD too can be used as EC.

Also, the exact time frame of the usage of EC was not known by most of them. That it had to be used immediately after the unprotected sex was thought by 47%. 8.1% had no idea of the correct time span of usage and 14.7% correctly responded that it had to be used within 72 hrs of unprotected sex. 6(11.1%) of the total girls, who knew about EC, had no knowledge of their side effects. Hormonal changes 97.9%, nausea/vomiting 83.3% and headache 77.7% were answered as the main side effects.

When asked if the knowledge of EC and awareness of its source of availability will increase the sexual promiscuity, then 3/4th of the respondents did not agree to it. 70.3% wrongly took them to be an abortifacient. None of the respondents had ever used this.

DISCUSSION

During adolescence when young women and their partners become sexually active many unintended pregnancies occur before they are fully aware of the need for contraception. The idea of adolescent sexuality is not easily accepted by family, school and society at large. That's the reason why in many countries young people are denied education on sex and family life. Hence many interventions are needed to encourage them to avoid sexually transmitted infections and unintended pregnancies. One intervention that is being encouraged is awareness about emergency contraception.

Young women can safely use hormonal EC. EC should not be used in women who are pregnant because, not they are thought to be harmful but ineffective at terminating established pregnancies⁵. Emergency contraception decreases the risk of ectopic pregnancy. However it does not prevent the spread of sexually transmitted infections, including HIV. For women suffering with STD's also EC pills are likely to be safer choice than IUD insertion⁶.

The knowledge regarding EC was found insufficient (7.3%). A study in USA revealed that only 23% young women knew about EC⁷. Graham found the awareness level about EC in teenagers in Southeast Scotland to be 93.0%⁸. Similar findings from a study done by Cynthia et al showed the awareness to be 95% in Princeton University students⁹. Such differences in the awareness level in different countries on contraception may be due to their cultural differences and government policies.

Another interesting finding was that even among the students, who were aware of the EC, knowledge regarding correct time frame for using EC was less (14.7%). In developed countries an awareness level of 9-29% about usage of EC has been reported by various authors^{10,11}. Majority, 3/4th underestimated the time and only around 1/10th knew that this regimen could be initiated within 72 hrs after unprotected sex.

Combination hormone EC pills induce nausea in 30-50 percent of women and vomiting in 15-25 percent of women¹². In our study, the main side effects enumerated by respondents were nausea, hormonal side effects, dizziness and headache. Other studies done in young females too have reported similar side effects along with irregular bleeding, fatigue and breast tenderness¹³.

Emergency contraception is the undoubtedly the only mode to prevent unwanted pregnancy as none of the contraceptive

methods are 100% reliable. It is of great help in sexual assault cases or after contraceptive accident¹⁴. In our study 1/3rd of the participants answered that it is effective in victims of sexual assault. However 1/10th of them felt that EC has adverse effect on fertility.

Opponents of increased awareness and increased access to EC assert that it will increase the sexual risk behaviour in young women. Concerns have been raised that easy availability may lead to excessive use of EC that is meant only for emergency purposes. But to the contrary, there is no scientific evidence, to substantiate any of these statements. Rather, a wealth of research clearly negates the misconception of an increase in any form of sexual risk-taking behaviour^{15,16}. Even in our study though almost half of the girls knew that it could be made available from over the counter but none had ever used it. A lot of research also supported the fact that use of EC act as the vehicle for bringing the young women into contact with health professionals and hence providing opportunities for counselling on responsible sex behaviour, contraception and prevention of sexually transmitted diseases including HIV/AIDS.

LIMITATIONS

The young women pursuing higher studies comprises the study population, that may not be truly representative of young females of Chandigarh. It was planned as an exploratory study only. Hence, many aspects of EC were not covered in detail eg disadvantages of EC in being unpreventable for HIV and STDs, menstrual problems, ectopic pregnancy, thrombotic consequences, problems of repeated use, contraindications of its usage, efficacy of different methods of EC etc. As only 2.2% of females were married Information on Depoprovera and Nor plant was not obtained. However, all these aspects were covered in the educational sessions conducted after collection of data from girls.

The positive aspect of our study is that it emphasizes on the young females, who are in fact the real candidates for awareness generation, rather than focussing only on adult married females¹⁷. Moreover, in a country like India where the society is too conserved and sex being a tabooed topic for discussion, the evaluation of the concept of promotion of sexual promiscuity by encouraging awareness of EC in this

study aces over the other studies.

CONCLUSIONS

Awareness of EC in preventing unwanted pregnancies in college going female students was found to be minimal. Efforts should be put in for awareness promotion, improving access and usage in potential users. Health professionals should be involved as many of the respondents relied on them for information on contraceptive methods.

References

1. Kanojia K, Nirbhavane NC, Toddywala VS. Dynamics contraceptive practice amongst urban Indian Women, *Int J of Gynae and Obst* 2002;197- 8.
2. More than a quarter of India's youngsters have premarital sex, *BMJ* 2001; 322:575
3. Harper C, Ellertson C. The emergency contraceptive pill: A survey of knowledge and attitudes among students at Princeton University. *Am J Obst Gynecol* 1995; 173:1438-45.
4. Gy Bartfai. Editorial Emergency oral contraception in Global Perspective In *J of Gynae and Obs*, 2002;191-8.
5. Raine T, Harper C, Leon K. Emergency contraception: advanced provision in a young, high risk clinic population. *Obstet Gynaecol*. 2000;96:1-7
6. Grimes DA, Raymond EG. Emergency Contraception over the counter: the medical and legal imperatives. *Obstet Gynaecol* 2001;151-55
7. Belzer M, Yoshida E, Tejirian T. Advanced supply of emergency contraception for adolescent mothers increased utilization without reducing condom or primary contraception use. *J Adolesc Health*. 2003;32:122-23
8. Graham, Green, Glasier . Teenager's knowledge of emergency contraception. Questionnaire survey in southeast Scotland. *BMJ* 1996; 312: 1567-9
9. Cynthia C, Harper MA, Ellertson K. The emergency contraceptive Pill -A survey of Knowledge and Attitudes among students at Princeton University *Am J Obst Gynaecol*.1995 :1438-44
10. Pearson Vah, Owen MR, Phillips DR, Periera G Ray DJ. pregnant teenagers Knowledge of use of Emergency Contraception. *BMJ* 1995; 40:326-30
11. Crosier A. Women's knowledge and awareness of emergency contraception. *Br J Fam Plann*, 1996; 22:87-90.
12. Harper, Cynthia C., et al. (2005). "The Effect of Increased Access to Emergency Contraception Among Young Adolescents." *Obst & Gynae.*, 106(3), 483-91.
13. Knowles, Jon and Marcia Ringel. (1998). *All About Birth Control*. New York: Three Rivers Press.
14. Gold MA, Schein A, Coupey SM, Emergency contraception: a national survey of adolescent health experts. *Fam Plann Perspect*. 1997;29:15-24
15. Lo SS, Fan SY. Effect of advanced provision of emergency contraception on women's behavior : a randomised control trial. *Hum Reprod* 2004;2404-10
16. Jackson RA, Bimla E. Advance supply of emergency contraception : effect on use and usual contraception-randomised control trial .*Obstet gynaecol* 2003;8-16
17. Takkar N, Goel P , Saha P K. Contraceptive practices and awareness of emergency contraception in educated working women. *Indian j Med Sci* 2005; 143-7

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