



AWARENESS ON EMERGENCY CONTRACEPTIVE PILLS AND MEDICAL TERMINATION OF PREGNANCY AMENDMENT ACT, 2021 AMONG MEDICAL STUDENTS

Community Medicine

Dr. Chikitsa D. Amin

M.D., Community Medicine, Assistant Professor

Dr. Nidhi H. Patel*

M.D., Community Medicine, Junior Resident *Corresponding Author

Dr. Rujal D. Bhitoria

M.D., Community Medicine, Junior Resident

Dr. Vibha V. Gosalia

M.D., Community Medicine, Assistant Professor

ABSTRACT

Introduction: In present era, declining age at puberty and increasing age of marriage have created a gap in which young people may engage in premarital sexual relations. Limited knowledge about reproductive health services among adolescents may attribute to increased risk of unwanted pregnancies and unsafe abortion. This study was conducted to assess the knowledge on Emergency Contraceptive Pills (ECP) and Medical Termination of Pregnancy (MTP) Amendment Act, 2021 among medical students. **Methods:** A cross-sectional study was conducted among 369 medical students of I, II, III-year from a government medical college. Using stratified random sampling, 123 students were selected from each year, of which 82 were boys and 41 were girls. Data was collected with preformed, pretested, semi-structured questionnaire using google form. **Results:** Out of 378 students, most-common source of information regarding ECP was medical college (91%). Almost three-fourths (72%) knew correct timing of ECP usage and 52% didn't know that ECP is Over-the-counter drug. Only 23% of students were aware of fact that ECP can't terminate pregnancy. Almost two-third (66%) didn't know that spouse's consent is not required for MTP. Almost 73% were aware that upper limit for MTP has been raised from 20 weeks to 24 weeks for special categories. However only 17% students knew that there is no gestational age limit in congenital anomalies cases. **Conclusions:** Medical students have a lack of correct knowledge about ECP and MTP Amendment Act, 2021.

KEYWORDS

Awareness, Emergency Contraceptive Pill, Medical Students, Medical Termination of Pregnancy

INTRODUCTION

In present era, declining age at puberty and increasing age of marriage have created a gap in which young people may engage in premarital romantic and sexual relations.^[1] Limited knowledge about sexual health and lack of access to reproductive health services among adolescents may attribute to increased risk of unwanted pregnancies and unsafe abortion.^[2] Globally in 2015-19, approximately 121 million unwanted pregnancies were reported each year. Over 60% of unintended pregnancies end in abortion and an estimated 45% of all abortions are unsafe.^[3] Out of total unwanted pregnancies worldwide, more than one in seven occurs in India. Unsafe abortion remains third leading cause of maternal mortality in India resulting in deaths of 8 women per day. Out of all abortions, 67% were classified as unsafe in India during 2007-11.^[4] Prevalence of sexual activity among unmarried adolescent females was found to be 16.9% of 10-19 years in Delhi.^[5] One of the most important tools that can help to prevent unintended pregnancy is timely use of emergency contraception.^[6] To prevent unsafe abortion, Medical Termination of Pregnancy (MTP) Amendment Act, 2021 expands access to safe and legal abortion services by increasing upper gestation limit from 20 to 24 weeks for special categories.^[7]

Medical students are going to be doctors in future. Doctors play important role to reduce morbidity and mortality due to unsafe abortion practices. This role will be played very well only if medical students have in-depth knowledge regarding Emergency Contraceptive Pills (ECP) and MTP Act during their study period. If pillars of future health care system (in the form of medical students) are not strengthened enough, it might lead to adverse effects on health care system. This study was carried out to assess knowledge regarding ECP and MTP Amendment Act, 2021 among medical students.

MATERIAL AND METHODS

A Cross sectional study was conducted among medical students of P.D.U. Government Medical college, Rajkot after obtaining clearance from Institutional Ethical Committee. Total 369 students were enrolled from I to III year of MBBS using stratified random sampling method. Data was collected over a period of 4 weeks of October, 2022. Study on knowledge of ECP among medical students conducted at PGIMS, Rohtak revealed that 52% medical students had good knowledge about ECP.^[8] Using this prevalence (P) of 52%, with the help of formula $n = \frac{4pq}{d^2}$ and taking 10% of relative error (d) sample size derived was

369. Total 123 students from each year were selected as first strata and from each year 41 girls and 82 boys were selected as second strata using random sampling method (Figure 1).

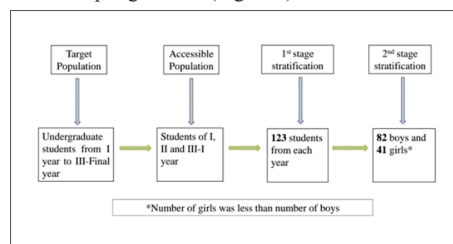


Figure 1: Flowchart Of Sampling Method

Data was collected with preformed, pretested, semi-structured questionnaire using google form. Questionnaire includes; Socio-demographic details like gender and year of study; questions on knowledge about ECP (ideal time of usage, side-effects, requirement of prescription, requirement of pregnancy test before using, protection against sexually transmitted diseases etc.) and questions on knowledge about changes in MTP Act according to Amendment, 2021. Informed consent was taken before questionnaire in the google form.

RESULT

Out of enrolled 369 students, 123 students were from each year of I, II, III-MBBS. From each year, 82 students were boys and 41 students were girls. Most common source of information about ECP among 369 students was college education (91%) followed by media (33%), health care providers (24%) and friends (23%). Out of 369 students, almost 84% students knew that ECP is available at government hospital, 82% students knew that ECP is available at private medical store and 36% students said that ECP can also made available from private practitioners.

Knowledge on ECP and MTP act among I, II and III-year students is shown in Table 1, 2 and 3 respectively. Overall, 267 (72%) students knew that ECP should be used within 72 hours of unprotected sexual activity. While comparing this knowledge between girls and boys of any year, girls had better knowledge than boys in I-year (p-value = 0.008) and II-year (p-value = 0.005) (Table 1, 2). Less than half (47%)

students knew that ECP is Over-the-counter (OTC) drug. Statistically significant difference of knowledge regarding requirement of prescription was seen among girls and boys of I-year (p-value = 0.035) (Table-1).

Table 1: Knowledge On ECP And MTP Act Among I-year Students

Variables	Girls (n=41)	Boys (n=82)	p-value
Ideal time for ECP usage			
Within 72 hours	33 (81%)	46 (56%)	0.008
Others	8 (19%)	36 (44%)	
Requirement of prescription for ECP			
Yes	10 (24%)	21 (26%)	0.035
No	8 (20%)	33 (40%)	
Don't know	23 (56%)	28 (34%)	
Protection of ECP against Sexually Transmitted Diseases			
Yes	2 (5%)	10 (13%)	0.392
No	30 (73%)	58 (70%)	
Don't know	9 (22%)	14 (17%)	
Termination of pregnancy by ECP			
Yes	33 (80%)	60 (73%)	0.508
No	6 (15%)	13 (16%)	
Don't know	2 (5%)	9 (11%)	
ECP is 100% effective			
Yes	12 (29%)	15 (18%)	0.305
No	16 (39%)	42 (51%)	
Don't know	13 (32%)	25 (31%)	
Requirement of spouse's consent for MTP			
Yes	19 (46%)	42 (51%)	0.279
No	12 (29%)	14 (17%)	
Don't know	10 (25%)	26 (32%)	

Table 2: Knowledge On ECP And MTP Act Among II-year Students

Variables	Girls (n=41)	Boys (n=82)	p-value
Ideal time for ECP usage			
Within 72 hours	36 (88%)	52 (63%)	0.005
Others	5 (12%)	30 (37%)	
Requirement of prescription for ECP			
Yes	4 (10%)	19 (23%)	0.139
No	21 (51%)	41 (50%)	
Don't know	16 (39%)	22 (27%)	
Protection of ECP against Sexually Transmitted Diseases			
Yes	3 (7%)	4 (4%)	0.829
No	34 (83%)	71 (87%)	
Don't know	4 (10%)	7 (9%)	
Termination of pregnancy by ECP			
Yes	30 (73%)	51 (62%)	0.479
No	8 (20%)	23 (28%)	
Don't know	3 (7%)	8 (10%)	
ECP is 100% effective			
Yes	6 (14%)	14 (17%)	0.316
No	27 (66%)	60 (73%)	
Don't know	8 (20%)	8 (10%)	
Requirement of spouse's consent for MTP			
Yes	14 (34%)	43 (52%)	0.101
No	12 (29%)	13 (16%)	
Don't know	15 (37%)	26 (32%)	

Table 3: Knowledge On ECP And MTP Act Among III-year Students

Variables	Girls (n=41)	Boys (n=82)	p-value
Ideal time for ECP usage			
Within 72 hours	32 (78%)	68 (83%)	0.513
Others	9 (22%)	14 (17%)	
Requirement of prescription for ECP			
Yes	10 (24%)	16 (20%)	0.221
No	19 (46%)	51 (62%)	
Don't know	12 (30%)	15 (18%)	
Protection of ECP against Sexually Transmitted Diseases			
Yes	1 (2%)	5 (6%)	0.620
No	36 (88%)	71 (87%)	
Don't know	4 (10%)	6 (7%)	
Termination of pregnancy by ECP			

Yes	30 (74%)	54 (66%)	0.577
No	10 (24%)	23 (28%)	
Don't know	1 (2%)	5 (6%)	
ECP is 100% effective			
Yes	12 (29%)	12 (15%)	0.141
No	22 (54%)	56 (68%)	
Don't know	7 (17%)	14 (17%)	
Requirement of spouse's consent for MTP			
Yes	6 (15%)	29 (35%)	0.056
No	30 (73%)	45 (55%)	
Don't know	5 (12%)	8 (10%)	

Almost 19% students had no idea that ECP is not protective against Sexually Transmitted Diseases (STDs). Only about one fourth (23%) students had a knowledge that ECP can't terminate pregnancy. Less than half (44%) students answered that ECP can cause side effects. Almost 26% students didn't know that ECP can't be used as routine contraceptive method. Less than one third (31%) students believed that pregnancy test is mandatory before using emergency contraception. Almost 13% students have suggested ECP to some non-medical person.

Out of 369, only 138 (38%) knew that ECP can be used when abstinence period is miscalculated. Most commonly answered indication [304 (82%)] was unprotected sex (Figure 2). Less than one fifth (17%) students knew that there is no upper gestational age limit for congenital anomaly. Of these 62 (17%) students, almost 47% were from III-year. Although 269 (73%) had an idea that gestational age limit for special cases has been extended to 24 weeks according to Amendment, 2021 (Figure 3). Knowledge on each criterion for MTP among all 369 students is shown in figure 4.

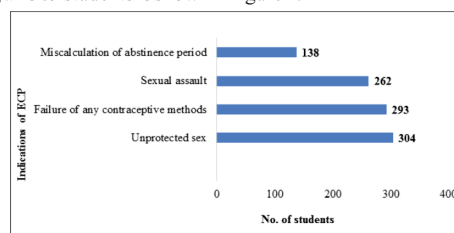


Figure 2: Knowledge Regarding Indications Of ECP Among Medical Students (n=369)

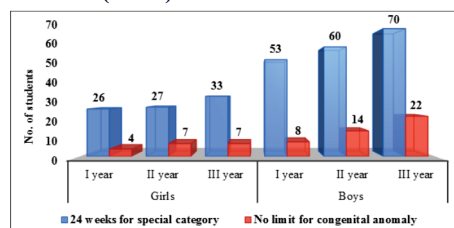


Figure 3: Knowledge Regarding Upper Gestational Age Limit According To MTP Amendment Act, 2021 (n=41 For Girls And N=82 For Boys For Each Year)

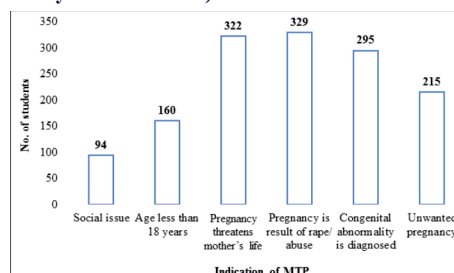


Figure 4: Knowledge Regarding Criteria For MTP Among All Medical Students (n=369)

All students except 9 (2%) students agreed that sex education should be included in school education. Over 88% students were aware that unsafe abortion is a serious health problem in India.

DISCUSSION:

Though numerous contraceptive techniques are available and there has been steady increase in contraceptive rate, there is large number of

unplanned pregnancies either due to regular contraceptive failure or incorrect method use. Emergency contraception is safe and effective method which helps to prevent unwanted pregnancies which in turn helps in reducing maternal morbidity and mortality due to unsafe abortions. The Government of India introduced ECP in the National Family Welfare Programmes in 2003. It is available as an Over-the-counter (OTC) product. However, its uptake has been limited due to lack of awareness among users as well as providers. Service providers play a key role in providing Emergency Contraception services and it is essential that they have complete and accurate information about the methods available.^[9] Hence this study was carried out assess awareness regarding ECP and MTP Amendment Act, 2021 among medical students.

In the present study, common source of information was medical education (91%) unlike study conducted by Verma KK et al^[10] in Tamil Nadu where common source was television. In contrast with study conducted by Garg R et al^[11] in Uttar Pradesh, more students (82%) from this study were aware that ECP is available free of cost in government hospitals. Almost 72% students had knowledge on correct time of ECP usage which is almost equal to the finding in the study conducted by Garg R et al^[11] in Uttar Pradesh but more than found in the study conducted by Gupta et al^[12] in North-west India and Asul et al^[13] in Nicosia. This knowledge is lower than the study conducted by Giri et al^[14] in Maharashtra.

Only 48% students were aware with the fact that ECP is an OTC product which shows poor awareness than study conducted by Verma KK et al^[10] in Tamil Nadu where 78% were aware. Almost 19% students didn't know that ECP doesn't protect against STDs. This finding is almost consistent with the finding of study conducted by Giri et al^[11] in Uttar Pradesh where 14% students were not sure about this fact.

Only 7% students know all correct indications for ECP which is in contrast with the study finding conducted by Gupta et al^[12] in North-west India where 88% of students answered indications accurately. In present study, over three fourth (78%) students misbelieved that ECP terminates pregnancy which is contradictory with results found in study by Giri et al^[14] in Uttar Pradesh where only 25% responded that ECP is abortifacient. Almost one third (34%) students knew that spouse's approval is not required for MTP which is almost consistent with the study conducted by Palo LB et al^[15] in Puducherry where 36% students found to be aware of this fact.

CONCLUSION

This study suggested that knowledge of ECP and MTP Amendment Act, 2021 is increased as we move towards hierarchy in years. But all-over, results depicted that medical students have a lack of correct and adequate knowledge about ECP and MTP Amendment Act, 2021. To strengthen pillars of future health care system, we need to include ECP and MTP Act in first year curriculum and it should be revised yearly to brush up existent knowledge and keep medical students updated with latest changes.

Limitation

Only students from one medical college were included in the present study. Other medical colleges might show different scenario. So similar multi-centric study should be conducted including students of different medical colleges.

Financial Support And Sponsorship: NIL

Conflicts Of Interest: There are no conflicts of interest.

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