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Beena Mahaur

Assistant Professor, Department of
Obstetrics & Gynaecology
Adesh Medical College and
Hospital, Shahbad,
Haryana, India

Satwant Kaur

Professor, Department of
Obstetrics & Gynaecology
Adesh Medical College and
Hospital, Shahbad,
Haryana, India

Nidhi Sharma

Assistant Professor, Department of
Obstetrics & Gynaecology
Adesh Medical College and
Hospital, Shahbad,
Haryana, India

Corresponding Author:

Beena Mahaur

Assistant Professor, Department of
Obstetrics & Gynaecology
Adesh Medical College and
Hospital, Shahbad,
Haryana, India

Awareness and attitude towards contraception among medical students

Beena Mahaur, Satwant Kaur and Nidhi Sharma

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Abstract

Objectives: This study aimed to investigate the awareness, knowledge and attitude towards contraception among medical students.

Methods: A total of 200 students of the Dr. YSPG medical college of Nahan (HP) attending two different academic years participated in cross-sectional study. Study was conducted in December 2019. Knowledge and attitudes of students towards contraception were examined using questionnaire based on previous studies and analysed on percentage bases.

Results: Almost all the students were well aware about contraception, family planning and also emergency contraception. Most preferred method of contraceptive method was condom (72%) followed by OCP (28%). 2nd year students had more knowledge as compared to 1st year. 69% of 1st year think that only female felt responsible for using contraceptives, but this dropped down to 51% in 2nd year reflects that medical teaching improves the knowledge as well as positive attitude of students towards contraceptives.

Conclusions: Students with higher education had positive attitudes towards contraception. They had good knowledge regarding contraceptives. They were more inclined toward condom as compare to OCP. They were very much aware about Emergency contraception. So, our study concluded that condoms and emergency contraceptives were the most popular contraceptive methods among youth.

Keywords: Abortion, attitude, awareness, contraception, emergency, medical students

Introduction

India is the second most populated country in the world. According to the 2017 revision of World Population Prospects the population of India is 1,324,171,354^[1]. India is projected to be world's most populous country by 2024, surpassing China^[2]. Hence, India in 1952, launched 'The National Family Program' which started with the distribution of IEC materials. Clinically, later the focus shifted to education approach to motivate people to use small family norm.

Contraception use is an effective primary prevention strategy for reducing maternal morbidity and mortality^[3]. Spacing between births not only decreases fertility but also improves mother's health. It has been estimated that use of effective contraception could stave off 90% of abortion related & 20% obstetric related mortality globally^[4]. Abortion incidence is inversely proportional to contraceptive use, where the fertility rates are stable^[5].

The unmet need for access to adequate contraception remains too high. This injustice is enhanced by both population explosions and a lack of family planning education. Sexually transmitted diseases (STDs) have become major public health problem globally.

Young adults are susceptible to social and environmental influences which affect their knowledge and attitudes, to lesser or greater extent, in field of sexuality and reproduction. Young adults may experience negative health consequences from early unprotected sexual activity like unintended pregnancy, unsafe or illegal abortion, STIs and pregnancy related complications. Since many students are sexually active and it is important to keep them informed about contraceptive practices as it has the potential to prevent unintended pregnancies that lead to unsafe abortions.

Talking on contraception issues in public is still considered a taboo in India. Reasons of unmet need for contraception include: limited choice of methods; limited access to contraception amongst young people; fear or experience of side effects; cultural or religious animosity; appalling quality of available services; gender-based barriers^[6]. Despite the fact that induced abortion has been legal in India since 1971, most of the induced abortions are performed in an unsafe manner^[7]. India accounts for 20% of maternal deaths world-wide^[8].

Despite the availability of effective contraceptive methods in India, many pregnancies remain unintended. This study aimed to investigate the general knowledge, awareness, and attitudes towards contraceptive use and counselling among medical students in Himachal Pradesh.

Materials and Methods

A cross-sectional survey was over in December 2018 at the Dr Yaswant Singh Parmar Government Medical College & Hospital, Nahan, Himachal Pradesh conducted. It included a total of 200 students attending two academic years (100 in each 1st & 2nd year).

Data relevant to the study's objectives and research questions were collected using self-administered questionnaire. The questionnaire prepared was based on various studies done prior. The first section consisted of demographic information like age, sex, year of study, etc. The second section consisted of questions regarding "Awareness and Knowledge" of contraception, third section consisted of 'awareness' about types of contraceptive, third section consisted of 'knowledge about emergency contraception' which was closed dichotomous questionnaire ('Yes' or 'No'). The last section consisted of questions with multiple choice answers.

Ethical committee clearance was taken. Informed consent was taken from each individual by informing them about the purpose of study. Confidentiality and anonymity of the participants was

maintained during entire study period.

Results

A total of 200 students completed the questionnaire with a response rate of 100%. Majority of students were between 17 to 20 years of age. The study population was comprised of 90 males and 110 females.

Contraceptive awareness and knowledge

Overall, first year and second year students had good awareness and knowledge regarding contraceptives. The males and females had almost similar awareness. The respondent's response regarding contraception are summarized in tables below.

All of the participants 100% Of 1st & 2nd year students had previously heard of at least one of different types of contraceptive methods, like male condoms (96% & 100%), CuT (78% & 89%), (OCP) oral contraceptive pill (89% & 96%), injectable (36% & 57%), (EC) emergency contraception (100%), female condom (8% & 19%), permanent methods (96% & 98%).

The most commonly known contraceptive method was condom (98%) followed by oral contraceptive pill (92.5%). Most of the students had knowledge of reproductive health including family planning & contraception through their curriculum and other major sources of information were from internet, T.V, radio & advertisement & other awareness programs run by government.

Table 1: Knowledge regarding contraceptives

| | First year Yes/No | Second year Yes/No | Total Yes/No |
|------------------------------------------------------------------------------------------|----------------------|-----------------------|-----------------|
| Have you ever heard of various contraceptive methods? | 97%/03% | 100%/00 | 98.5%/1.5% |
| Is it necessary to know about contraceptive knowledge? | 100%/00 | 100%/00 | 100%/00 |
| Only women take responsibility for using Contraceptives. | 69%/31% | 51%/49% | 60%/40% |
| Contraceptive methods are more harmful than beneficial to health. | 75%/25% | 71%/29% | 73%/27% |
| Contraceptive methods can protect health of family & society. | 89%/11% | 97%/03% | 93%/7% |
| The use of contraceptive methods among young people will increase infertility in future. | 79%/21% | 55%/45% | 67%/33% |
| Discussion about contraceptive methods with a spouse or partner is embarrassing. | 84%/16% | 71%/29% | 77.5%/22.5% |
| Do you think there may be an impact on women's physical & mental health after abortion? | 73%/27% | 93%/07% | 83%/17% |
| Contraception is 100% effective. | 96%/04 | 90%/10% | 93%/7% |
| Do you know about Fertile period? | 74%/26% | 97%/03% | 85.5%/14.5% |

The students studying in second year exhibited better knowledge regarding different contraceptive method than students of first year. But over-all knowledge and awareness are good in all students. Almost all of the participants believed that it is very important to have contraceptive knowledge (100%). About 69% and 51% of 1st year and 2nd year students think that only female take responsibility of using contraceptives.

Majority (75% and 71%) of 1st and 2nd year students believed that contraceptive methods are more harmful than beneficial to health and at the same time, majority of students from both years

also believed (89% & 97%) that contraceptive methods can protect the health of family and society. Like-wise 79% and 55% methods among young people will cause infertility in future. About 84% and 71% of 1st & 2nd students gave 'YES' answer that a discussion about contraception with a spouse is embarrassing despite of having medical education. 73% in 1st year & 93% of 2nd year believed that there is an impact on women's health after abortion. Almost all the 1st year students (95%) & 90% of 2nd year believed that contraception is 100% effective.

Table 2: Knowledge about types of contraception

| Knowledge | First year students Yes/No | Second year Yes/No | Total |
|----------------------------------------------------------------------|-------------------------------|-----------------------|-------------|
| Contraceptive pills do not 100% guarantee the avoidance of pregnancy | 67%/33% | 75%/25% | 71%/29% |
| To get contraceptive pills, a woman must undergo pelvic examination | 20%/80% | 25%/75% | 22.5%/77.5% |
| There is increased risk of cancer in women taking estrogen. | 71%/29% | 82%/18% | 76.5%/23.5% |
| Contraceptive pills are inconvenient to use. | 80%/20% | 54%/46% | 67%/33% |
| Contraceptive pills cause weight gain & mood swings. | 87%/13% | 91%/09% | 89%/11% |
| Can Copper T cause weight gain | 32%/68% | 19%/81% | 25.5%/74.5% |
| Can copper T cause perforation of uterus and displaced in abdomen. | 62% / 38% | 75% . / 25% | 68.5%/31.5% |
| Can copper T cause pain abdomen & HMB. | 71%/29% | 86%/14% | 78.5%/21.5% |
| Have you heard of female condom | 8%/92% | 19%/81% | 13.5%/86.5% |

| | | | |
|--------------------------------------------------------------|---------|---------|-------------|
| Male condom can protect against STD. | 96%/04% | 100%/00 | 98%/2% |
| Have you heard of injectable type of Contraceptive methods? | 36%/64% | 57%/43% | 46.5%/53.5% |
| Have you heard of permanent method of contraceptive methods? | 96%/04% | 98%/02% | 97%/3% |

About 67% of 1st year and 75% of 2nd year knew that oral contraceptive pills do not 100% guarantee the avoidance of pregnancy. Most of the students have knowledge that to get OCP women do not required pelvic examination (80% and 75%). A large proportion of student expressed negative perceptions of pills due to unwanted side effects like weight gain, mood swings & also due to increased risk of breast cancer. Most of the

students had knowledge of side effects of CuT like pain & heavy menstrual bleed (71% in 1st year & 86% in 2nd year), & perforation of uterus and displaced in abdomen 62% in 1st year & 72% in 2nd year), and at the same time some students have wrong information that CuT causes weight gain 19% in 1st year & 10% in 2nd year.

Table 3: Knowledge about emergency contraceptives

| Knowledge | First year Yes/No | Second year Yes/No | Total Yes/No |
|--------------------------------------------------------------------------------------------------|----------------------|-----------------------|-----------------|
| Have you heard about Emergency Contraception? (Yes) | 100%/00 | 100%/00 | 100%/00 |
| Are emergency Contraception can be substitute for regular contraception. (Yes/No) | 24%/76% | 17%/83% | 20.5%/79.5% |
| Emergency contraceptive pill (ECP) also known as morning after pill. (Yes/No) | 95%/05% | 99%/01% | 97%/03% |
| Emergency contraceptive pill can be taken several times a month? | 69%/31% | 86%/14% | 77.5%/22.5% |
| Is EC pill 100% effective in preventing pregnancy? (Yes/No) | 45%/55% | 31%/69% | 38%/62% |
| Can EC be used for protection against pregnancy in case of condom slippage or breakage ?(Yes/No) | 45%/65% | 29%/71% | 37%/68% |
| Can Copper T be used as emergency contraceptives (Yes/No) | 15%/85% | 100%/00 | 57.5%/42.5% |
| Do you know any other method of emergency contraception? | 00/100% | 8%/92% | 4%/96% |
| Do you know EC is provided free by government hospital? | 28%/72% | 87%/13% | 57.5%/42.5% |

Knowledge about emergency contraception (Table-3)

Most of the students had heard about emergency contraceptive pill (ECP) suggesting that there is good awareness of its existence among teenagers. Most of the students in both years (77% & 90%) knew about correct timing of taking ECP i.e. within 72 hrs. Most of the students (69% and 86%) of the 1st and 2nd year were very well aware that ECP can be taken several times in a month. 55% Of 1st year and 69% of the 2nd year students knew that ECP not 100% Effective in preventing

pregnancy. CuT as an alternative EC was known to all of the 2nd year students while only few students of 1st year 15% knew about CuT. Most of the students were totally unaware about any other methods of EC. Most of the 2nd year students knew that EC also provided free by government hospital. Regarding availability of drug only 48% of the 1st year knew that it obtained either from doctor or pharmacist as compared to 2nd year (65%).

Table 4: Attitude towards contraception

| Attitude | First year | Second year | Total |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------|-----------------------|
| Which contraceptive method do you think suitable for college students? | Condom - 75% OCP - 25% | 69% 31% | 72% 28% |
| The priority of choosing contraceptive methods. (Effectiveness/ Safety/Convenience of buying or using) | Effectiveness - 24% Safe - 18% Convenience - 58% | 41% 11% 48% | 32.5% 14.5% 53% |
| From where you can get EC? (Doctor/Pharmacist/ Both) | Doctor - 35% Pharmacist - 17% Both - 48% | 14% 21% 65% | 24.5% 19% 56.5% |
| How long after having UPSI can the EC pill be taken (12/48/72/don't know) | 24 hrs - 3% 48hrs - 20% 72hrs - 77% | 3% 7% 90% | 3% 13.5% 83.5% |
| Contraceptives can reduce the fear of unwanted pregnancy | 86%/14% | 95%/05% | 90.5% |
| Is it embarrassing to ask for condoms from pharmacies, shops or dispensaries (Yes/ No) | 63%/37% | 43%/57% | 53%/47% |

Among them most commonly preferred contraceptive method was condom (75% 1st year & 69% 2nd year) followed by combined OC pills (25% & 31%). Most common reason for adopting contraceptive was because of its convenience 58% & 48%), safety (18% & 11%) and effectiveness (24% & 41%). Girls were more in favour of effectiveness in second year while boys were in favour of convenience of buying and using of contraceptives. Even medicos (63% & 43%) think that it is embarrassing to ask for condom from pharmacies /dispensaries/shops. Most of students said 'Yes' that contraceptives can reduce the fear of unwanted pregnancy (86% and (95%) in 1st and 2nd year.

Discussion

Over all, the participants showed good awareness & knowledge

regarding contraceptives. The study suggested that students were very knowledgeable about different methods of contraception, like condoms, intrauterine device, emergency contraceptive pills and also permanent methods. Medical students are more aware of methods of contraceptives like condoms (98%), CuT (83.5%), OCP (92.5%) as compared to engineering college students, a study conducted by Ankita singh *et al* [9], where awareness of condom (88%) was similar but awareness of CuT (15%), and OCP (38%) was poor. Study indicated that condoms were the most commonly preferred method of contraception due to its advantages, simplicity and convenience [10]. Condoms were considered to decrease the risk of sexually transmitted diseases [11, 12]. Sixty-nine percent of 1st year think that only female felt responsible for using contraceptives, but this dropped down to 51% in 2nd year reflects that education improves positive attitude

of students towards contraceptives.

In this study 76.5% of the students agreed that contraceptive pills containing estrogen might cause breast cancer, which was similar to cross-sectional survey conducted in Maharashtra where more than 70% participants responded correctly to this question^[13]. The students in this study exhibited a good level of knowledge regarding emergency contraceptive i.e. 100% in both year students. Similar trend (100%) was noted by Amisha Dogra *et al*^[14]. Awareness about EC was nil in a study done by Monika Gupta *et al*^[15] at in a population of female of age group of 18-49 yrs attending OPD at a tertiary care centre in Himachal Pradesh. Knowledge about correct timing of ECP was 83.5%, similar to Monika Jindal *et al*^[16] (78%) & Archana *et al*^[17] (82%) study's pattern. EC pill can be taken several times and overall correct response was 77.5% in contrast to study conducted in Maharashtra only 25.5% responded correctly^[13].

About 84% and 71% of 1st & 2nd year students felt embarrassed about discussion of contraceptives as compared to study done by Sara *et al*^[13]. (58%).

Over-all Our study showed a significant correlation of 'medical students' awareness and knowledge towards contraception and their level of medical education. Previous studies have also shown that students' awareness on contraception were largely influenced by medical education they acquire. As the education is longer and the clinical exposure is larger, attitudes on contraception were more likely to be positive^[18]. A significant change in attitude during the study could be further researched by examining the same group of students at the starting and at the end of the study. Such research could determine whether student's knowledge increases and attitude become more positive as they progress in their medical training. It could be assumed that higher education and appropriate training could improve attitudes about contraception, which would lead to its wider use.

Conclusion

The result of study revealed that students are very well aware about the contraceptives and family planning. Over-all Our study showed a significant connection of 'medical students' awareness and knowledge towards contraception and their level of medical education. We have found positive attitudes towards contraceptive methods and family planning. Training in contraceptive counselling should be implemented in basic medical education in India in order to increase women's access to evidence based maternal health services. Students with higher education had positive attitudes towards contraception. They had good knowledge regarding contraceptives. They were more inclined toward condom as compared to OCP. They were very much aware about Emergency contraception. So, our study concluded that condoms and emergency contraceptives were the most popular contraceptive methods among youth.

References

1. United nations. Department of economic & social affairs, population Division. Revision, Key findings and advance Tables. Working paper No. ESA/P/WP/248 2017. World population Prospects: the 2017 Revision. ESA UN.org
2. United Nations Department of Public Information. http://www.un.org/en/development/desa/population/events/pdf/others/21/21June_FINAL%PRESS%20RELEASE_WPP17.pdf
3. Ahmed S, Li Q, Liu L. Maternal deaths averted by contraceptive use: an analysis of 172 countries. *Lancet* 2012;380:111-25.

4. Collumbian M, Gerressu M, Cleland J. Non-use and use of ineffective methods of contraception. In: Ezzati M, Lopez AD, Murray CJL.eds. Comparative quantification of health risks: Global and regional burden of disease attributable to selected major risk factors. Geneva: World Health Organisation 2004, P1255-320.
5. Marson C, Cleland J. Relationship between contraception and abortion: a review of the evidence. *Int Fam Plan Perspect* 2003;29:6-13.
6. WHO. Family Planning Contraception 2017. <http://www.who.int/mediacentre/factsheets/fs351/en/>
7. Parliament of India Medical Termination of Pregnancy Act (MTP Act), Act No. 34 Revised version Delhi: Commercial Law Publishers 1971.
8. WHO, UNICEF, UNFPA. World Bank Group and the United Nations Population Division Trends in Maternal Mortality: 2000 to 2017. Sexual and reproductive health 2019.
9. Singh A, Niranjana AS, Singh A. Knowledge, Attitude and Practice of Family Planning and Contraception Among the Engineering College Students in District Mirzapur, Uttar Pradesh. *International Journal of Resent scientific Research* 2019;10(3):31346-31351.
10. Hall T, Hogben M, Carlton AL, Liddon N, Koumans EH. Attitudes towards using condoms and condom use: Difference between sexuality abused and non-abused African American female adolescents. *Behav Med* 2008;34:45-54.
11. Pinkerton SD, Abramson PR. Effectiveness of condoms in preventing HIV transmission. *Soc Sci Med* 1997;44:1303-12.
12. Bernabe-Ortiz A, Carcamo CP, Scott JD, Hughes JP, Garcia PJ, Holmes KK *et al*. HBV infection in relation to consistent condom use: A population-based study in peru. *PLoS One* 2011;6:e24721.
13. Hogmark S, Klingberg-allvin M, Gemzell-Danielsson K, Ohlsson H, Essen B. medical student's knowledge, attitude and perceptions towards contraceptive use and counselling: a cross-sectional survey in Maharashtra, India. *BMJ Open* 2013;3:e003739.
14. Dogra A, Wankhede UN. Knowledge, attitude of medical undergraduate, interns and post graduate students towards emergency contraception. *Int J reprod contracept Obstet gynecol* 2017;6:2944-7.
15. Gupta M, Jindal M, Sood A, Goraya SP, Chawla S, Matreja PS. Knowledge, Awareness and Practice (KAP) Regarding contraception among females attending a tertiary care hospital, Himachal Pradesh. *Int J. Med Res Prof* 2017;3(4): 70-74.
16. Jindal M, Kaur J, Minhas S, Chawla S. Awareness of Emergency contraception among first year and final year medical under: Graduates of a private medical college in HP. *Int J clinical Obstet & gynaecol* 2019;3(4):223-227.
17. Chandna A, Nath J, Dhingra D. Awareness of emergency contraception among 1st year medical students. *Int J Contemporary Med Res* 2016;3(6):1568-70.
18. Ugogi FN. A examination of University Students Attitude to Contraceptive Use. *Am J of Social Sci* 2013;2:18-22.