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**Original Research Article**

# Sociodemographic determinants of medical termination of pregnancy along with contraceptive practices

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## ABSTRACT

**Background:** Though the most common reasons for medical termination of pregnancy (MTP) is unwanted pregnancy due to nonuse of contraceptives by the women of reproductive age group and other are pregnancy before marriage or due to rape. Several studies indicate that most abortions are sought to limit family size or space the next pregnancy. There is need to study relation of MTP with contraceptive practices.
**Methods:** The present cross-sectional study was conducted at Smt. Kashibai Navale Medical College and General Hospital, Narhe, Pune, to study socio-demographic factors associated with medical termination of pregnancy and its relation with contraceptive practices. Total 1840 women seeking care for medical termination of pregnancy were interviewed after their informed consent during period of January 2015 to December 2017. A detailed history regarding age, religion, income, marital status, parity, history of previous MTP, indications for MTP, use of contraception, gestational age was taken.
**Results:** Statistical analysis-chi square test of significance for qualitative data using SPSS software version 24.0. The proportion of women coming for MTP due to nonuse of contraceptives was 86% the other indications for MTP were medical condition (9%) and contraceptive failure (5%). The factors like age, religion, education and socioeconomic status were significantly associated with MTP.
**Conclusions:** There is need to counsel women of reproductive age group that MTP is not a way to control unwanted birth.

**Keywords:** Age, Contraceptive methods, Medical termination of pregnancy, Religion

## INTRODUCTION

Pregnancy is one of the most important events in the life of an Indian woman. Unfortunately, all pregnancies are not welcomed. Among the 208 million women estimated to become pregnant each year worldwide, 123 million experience a planned (or intended) pregnancy leading to a birth or miscarriage or a stillbirth. The remaining 85 million (41%) of pregnancies are unintended.[1]

Apprehension, denial and ignorance to contraceptive usage lead to unwanted pregnancies which are terminated in unsafe conditions by untrained personnel.

Unsafe abortion is the termination of an unintended pregnancy either by persons lacking the necessary skills or in an environment lacking the minimal medical standards or both.[2] With the legislation of the medical termination of pregnancy (MTP) act in 1971, India

became one of the first countries legalizing abortion on moderately liberal grounds. The MTP act allows abortion for the conditions such as medical reasons which endangers the life of mother, birth of a child with abnormalities, socio-economic, humanitarian and contraceptive failure.[3]

When a woman wants to terminate an unwanted pregnancy various factors are involved in the decision making. The decision to undergo an abortion among married women is taken jointly by the woman and her husband but the obligations to communicate with family members leads to delays in seeking abortion.[4]

Several studies indicate that most abortions are sought to limit family size or space the next pregnancy.[4,5] The misinformation and apprehension about the different contraceptive methods prevents widespread contraceptive use. Though MTP is a safe procedure, it is not free from complications and it is dangerous to use it for spacing.

The socio-demographic factors like age of women, education and income of the family might affect the behavior of women attending MTP services.

Obviously, there is a need to widen the scope of studies that might indicate the cultural and social contexts in which the abortion is sought. The present study is carried out to find out the socio-demographic factors affecting MTP in women and also to find out its relation with contraceptive practices by them.[6]

## METHODS

The present study was conducted at Smt. Kashibai Navale Medical College and General Hosipital, Narhe, Pune., Maharashtra, an approved centre for Medical termination of Pregnancy from January 2015 to December 2017. Approximately 450-500 women were admitted for MTP in a year. Total 1840 women seeking services for MTP were interviewed after their informed consent while maintaining confidentiality of data. The permission was obtained from Medical Superintendent of the hospital along with approval from Institutional Ethical committee.

A detailed history regarding age, religion, income, marital status, parity, history of previous MTP, indications for MTP, use of contraception and gestational age was taken. The data was also collected about decision maker for MTP and various reasons for nonuse of contraceptives by the women.

The early or doubtful pregnancies were confirmed by urine pregnancy test. The gestation age was confirmed by experts by doing per vaginal examination and Ultrasonography. The Modified Prasad's classification updated in the year 2014 was used for socioeconomic status classification.

### *Statistical analysis*

The proportions and descriptive statistics were calculated, and the Chi square test was used at 0.05 level of significance with SPSS version 24.0.

## RESULTS

Table 1 shows that majority of the women were between age group 25 to 34 years. No teenage pregnancy was noted in present study. The majority of the women were Hindu by religion (67.4%) followed by Buddhist (20.7%). Fifty one percent of the women resided in urban area. The women who belonged to Nuclear family were 940 (51.7%) followed by joint family were 570 (31.0%). The maximum numbers of women 1320 (71.7%) were from IV social class (Table 1). In present study, the Manual Vacuum Aspiration (MTP-MVA) method of MTP was done in 1110 (60.32%) women followed by other surgical methods in 650 (35.32%) and foley's induction with cerviprime in 80(4.34%) women.

**Table 1: Socio-demographic characteristics of women coming for MTP.**

| Variables | n=1840 | Number | Percent |
|---|---|---|---|
| Age (yrs) | 15-24 | 530 | 28.8 |
| | 25-34 | 1190 | 64.7 |
| | 35-44 | 120 | 6.5 |
| Religion | Hindu | 1240 | 67.4 |
| | Buddhist | 380 | 20.7 |
| | Muslim | 220 | 12.0 |
| Residence | Urban | 1030 | 51.97 |
| | Rural | 780 | 42.39 |
| | Tribal | 30 | 1.63 |
| Education of women | Illiterates | 210 | 11.4 |
| | Below high School | 1270 | 69.0 |
| | Above high school | 360 | 19.6 |
| Education of husband | Illiterates | 240 | 13.0 |
| | Below high School | 1190 | 64.7 |
| | Above high school | 410 | 22.9 |
| Social class | I | 10 | 0.5 |
| | II | 60 | 3.3 |
| | III | 410 | 22.3 |
| | IV | 1320 | 71.7 |
| | V | 40 | 2.2 |
| Type of family | Nuclear | 940 | 51.7 |
| | Joint | 330 | 18.0 |
| | Three generation | 570 | 31.0 |

As shown in Table 2, majority of women coming for MTP were having gravid status more than two (67.93%).

**Table 2: Obstetric history of women coming for MTP.**

| Variables | n=1840 | Number | Percent |
|---|---|---|---|
| Gravida | ≤2 | 590 | 32.06 |
| | >2 | 1250 | 67.93 |
| Gestational age | <12 weeks | 1760 | 95.65 |
| | >12 weeks | 80 | 4.34 |
| Number of living children | None | 40 | 2.17 |
| | 1 | 690 | 37.5 |
| | 2 | 970 | 52.71 |
| | >2 | 140 | 7.60 |
| History of previous MTP | None | 620 | 33.69 |
| | 1 | 570 | 30.97 |
| | 2 | 540 | 29.34 |
| | 3 | 110 | 5.97 |

About 1760 (95.65%) MTP were done before 12 weeks of gestation and only 80 (5.43%) were done above 12 weeks of gestation. The women with two living children availed MTP services in higher proportion (52.71%) than those with single child or nullipara. It was also revealed that out of 1840 women 620 (33.69%) of them approached MTP services for the first time. The proportions of the women having previous single induced abortion were 570 (30.97%) followed by 540 (29.34%) having two abortions and 110(5.97%) having three induced abortions. Out of total 1840 women 1580 (86%) had come for MTP due to nonuse of contraceptives. The other indications for MTP were medical condition 100 (9%) and contraceptive failure 160 (5%) as shown in Figure 1.

**Table 3: Association of socio-demographic factors with various indications for medical termination of pregnancy.**

| Variable | | Non-use of contraceptives (n=1580) | Medical (n=100) | Contraceptive Failure (n=160) | Total | p value |
|---|---|---|---|---|---|---|
| Age | 15-24 | 420 (79.24) | 20 (3.77) | 90 (16.98) | 530 | $\chi^2$= 18.66, d(f)= 4, p= 0.00091 |
| | 25-34 | 1090 (91.59) | 50 (4.20) | 50 (4.20) | 1190 | |
| | 35-44 | 70 (58.33) | 30 (25) | 20 (16.66) | 120 | |
| Residence | Urban | 920 (89.32) | 50 (4.85) | 60 (5.82) | 1030 | $\chi^2$=2.68, d(f)=2, p=0.260 |
| | Rural | 660 (81.48) | 50 (6.17) | 100 (12.34) | 810 | |
| Religion | Hindu | 1100 (88.70) | 50 (4.03) | 90 (7.25) | 1240 | $\chi^2$=14.29, d(f)=4, p=0.0064 |
| | Buddhist | 300 (78.94) | 10 (2.63) | 70 (18.42) | 380 | |
| | Muslim | 180 (81.81) | 40 (18.18) | Nil | 220 | |
| Education of women | Illiterate | 180 (85.71) | 20 (9.52) | 10 (4.76) | 210 | $\chi^2$=17.85, d(f)=4, p=0.0013 |
| | Below high school | 1160 (91.33) | 20 (1.57) | 90 (7.08) | 1270 | |
| | Above high school | 240 (66.66) | 60 (16.66) | 60 (16.66) | 360 | |
| Socio-economic class | I, II, III | 340 (70.83) | 40 (8.33) | 100 (20.83) | 480 | $\chi^2$=13.72, d(f)=3, p=0.001 |
| | IV, V | 1240 (91.17) | 60 (4.41) | 60 (4.41) | 1360 | |

Table 3 shows that out of 530 women having age 25-34 years, 91.59% of coming for MTP due to nonuse of contraceptives.

Out of 120 women in the age group of 35-44 years, 25% of them decided to terminate the pregnancy due to medical conditions threatening to health of the mother and child.

The difference was found to be significant (p<0.05). The significant difference was not found among the women coming from different area whether urban or rural. The MTP due to nonuse of contraceptives was higher 1100 (88.70) among Hindu women than other religion. Out of total 220 Muslim women, 40 (18.18) of them had to terminate their pregnancies due to various medical conditions.

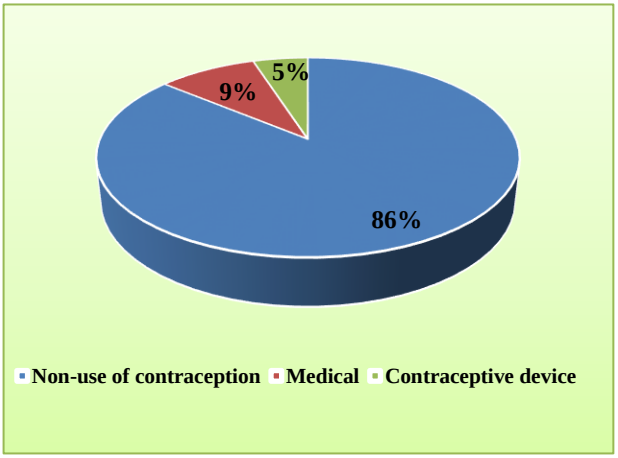


**Figure 1: Indications of MTP.**

The observed difference was statistically found to be significant ($p<0.05$). Out of 210 illiterate women, 85.71% of them decided MTP due to non-use of contraceptives and among those having education below high school the proportion was 91.33% out of 1270. The observed difference was found to be statistically significant ($p<0.05$). Out of 1360 women from socioeconomic class IV and V, 1240 (91.17) of them decided to terminate the pregnancy due to nonuse of contraceptives as compared to those from class I, II and III. The observed difference was found to be statistically significant ($p<0.05$) as shown in Table 3.

## DISCUSSION

The present study was conducted with the objective to map a comprehensive picture of relation between a woman's attitude about use of contraceptive methods available and actions taken by women for unwanted pregnancy. The MTP rate was higher in the age group 25-34 years as found in a study.[7] There was not even a single case of unmarried women in our study who availed abortion service. This could be because of the fact that they preferred private hospitals for confidentiality. Hindu women sought MTP services in higher proportion as compared to Muslim women. The similar observations were noted in other studies.[7,8] However in this area majority were Hindu population. Hence, very few of them seek abortion service due to their religious value and custom. The women from lower socioeconomic class approached for MTP in higher proportion as compared to upper class. Bahadur and Shivkumar in their studies also observed higher incidence (53.4%) of women belonging to the lower class.[8,9] The proportion of MTP was less among the women having education above high school as compared to those having education below high school. The highly educated women might be using appropriate contraceptive methods to space or avoid their pregnancies.

Majority of the women approached during 5-12 weeks denoting a better awareness about MTP services. The delay in seeking abortion after 12 weeks may be due to undiagnosed pregnancy and poor decision making by women. Similar results were observed in a study.[9] The higher proportion of the women with gravida more than two undergone MTP due to not using contraceptive methods. Even though, women having previous history of one or more than one MTP, they again approached MTP centre for current pregnancy termination without using any family planning methods. The facility of MTP is easily available and they were unaware of risk associated with MTP procedures. In the present pregnancy 4 women not having a single child had come for MTP due to opportunities of higher education and better employment.

The present study revealed that majority of the women had decided for abortion due to non-use of contraceptives. Several studies indicated that most abortions are sought to limit family size or space the next pregnancy.[4,10] A review by Ganatra showed that only a small proportion of women seeking abortion (less than 5%) reported contraceptive failure as the reason for an abortion.[11] This finding was consistent with present study.

The current health system is failing to motivate the women to use contraceptives. The present study revealed that over 75% of women undergoing abortion were not motivated to use contraception by health service providers. That was reflected in women coming for MTP again due to non-use of contraceptives. This was similar to report given in other study4 the women instead of using contraceptives approached to health system for termination of unwanted pregnancy.

## CONCLUSION

The most common reason for medical termination of pregnancy was nonuse of contraceptives. The proportion of women coming for MTP due to nonuse of contraceptives was higher in age group 25-34 years, a most fertile period, Hindu women less education and belonging to lower socioeconomic status. The health workers should provide adequate counseling to women for using appropriate family planning methods to avoid unwanted pregnancy. There is need to counsel women of reproductive age group that MTP is not a way to control unwanted birth and it is not free from risk. They should be motivated for various methods of contraception.

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## REFERENCES

1. World health Organization. Safe abortion care: the public health and human rights rationale. In: Safe Abortion: Technical and Policy Guidance for Health Systems second edition: 19. 2012.
2. Gupta S, Dave V, Sochaliya K and Yadav S. A Study on socio-demographic and obstetric profile of MTP seekers at Guru Govind Singh Hospital, Jamnagar. Healthline 2012;3(1):50-54.
3. Shankaraiah RH, Annadani RR, Vijayashankar V and Undi M. Medical termination of pregnancy and subsequent adoption of contraception. International J Rep Contracep Obstetr Gynecol 2013;2(3):367-71.
4. Malhotra A, Parasuraman S and Nyblade L. Realizing Reproductive Choices and Rights: Abortion and Contraception in India. International Centre for Research on Women (ICRW), 2003.
5. Ganatra B, Coyaji KJ and Rao VN. Too far, too little, too late: a community-based case-control study of maternal mortality in rural west Maharashtra, India. Bulletin of the World Health Organization 1998;76(6): 591-8.

6. Dudala SR, Reddy KA, Prabhu GR. Prasad's socio-economic status classification-An update for 2014. Int J Res Health Sci. 2014;2(3):875.
7. Agarwal S, Salhan S. Septic abortion-current scenario in a tertiary care hospital. J Obstet Gynecol India. 2008;58(2):147-51.
8. Bahadur A, Mittal S, Sharma JB, Sehgal R. Socio-demographic profile of women undergoing abortion in a tertiary centre. Arc Gynecol Obstetr. 2008;278(4):329-32.
9. Shivakumar BC, Vishvanath D, Srivastava PC. A profile of abortion cases in a tertiary care hospital. J Indian Acad Forensic Med. 2011;33(1):33-8.
10. Elul B, Barge S, Verma S, Kumar N, Sadhwani H, Bracken H, et al. Unintended pregnancy and abortion: a community-based study in Rajasthan-summary report. New Delhi: Population Council. 2003.
11. Ganatra B. Abortion research in India: What we know, and what we need to know. In: Women's Reproductive Health in India edited by Ramasubban R and Jejeebhoy SJ (Jaipur: Rawat Publications) 2000;186-235.

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