e-ISSN: 0976-822X, p-ISSN:2961-6042

Available online on http://www.ijcpr.com/

International Journal of Current Pharmaceutical Review and Research 2026; 18(5); 1027-1033

Original Research Article

A Retrospective Study on Socio-Epidemiological Factors of Medical Termination of Pregnancy at a Tertiary Care Hospital

Krishna S. Dhamat[1], Jaykishan J. Gol[2], Birju Chavda[3]

[1]Assistant Professor, Department of Obstetrics and Gynaecology, GMERS Medical College, Porbandar, Gujarat, India

[2]Assistant Professor, Department of Anaesthesiology, GMERS Medical College, Porbandar, Gujarat, India

[3]Junior Resident, Department of Anaesthesiology, GMERS Medical College, Porbandar, Gujarat, India

Received: 01-02-2026 / Revised: 15-03-2026 / Accepted: 21-04-2026

Corresponding author: Dr. Jaykishan J. Gol

Conflict of interest: Nil

Abstract

Background: Medical Termination of Pregnancy Act legalizes abortion to moderate extent and describes various grounds under which termination of pregnancy can be done. Unsafe abortion is a major public health problem and a preventable contributor to maternal death in India despite a supportive legal framework. Main objective of this study is to analyse the socio-demographics factors of medical termination of pregnancy and to analyse the reason of termination, methods of termination and adoption of family planning methods after abortion. Increasing awareness among men and women of reproductive age about the availability of safe abortion services at locality and post-abortion contraception could improve acceptance and success of methods and reduce unsafe practices.

Methods: A one-year retrospective observational study was conducted. A total of 75 post-MTP cases were included in this study. This study was carried out at GMERS Medical College, Maharani Rupaliba Lady Hospital, Porbandar, during a 12-months period from September 2024 to August 2025. Data retrieved from the hospital database/medical records (MTP register in FP unit) was tabulated and analyzed in microsoft excel.

Results: During the study period, a total of 75 cases of medical termination of pregnancy were performed. The incidence of MTP in this study was 21.98% per 1000 deliveries. The maternal age group of 25-29 years was availing MTP services the most (32%) and 29.33% in 20-24 years age group. Most of the study subjects were married (96%) and hindus (90.66%). Induced abortion was more common in 3rd gravida (37.33%) and least in 5th gravida or more (09.33%). Most of cases came for MTP upto 9 weeks of gestational age (64%). Total 59 cases of 1st trimester MTP, of which medical management of abortion done in 36 cases (61.01%). Total 16 cases of 2nd trimester MTP. Majority of women had social reason for termination of pregnancies (42.66%), followed by contraceptive failure (34.66%). Despite the strong recommendations, 40% of women did not use any form of contraception after MTP, while sterilisation (28%), IUCD insertion (10.66%), OCP/ Injectable (5.33%) and condoms (16%) were the other forms of contraception used after abortion.

Conclusion: There is need to counsel women of reproductive age group that MTP is not a way to control unwanted pregnancy and it is not free from risk. Eligible couples have to be educated regarding the availability of different methods of contraceptives and their proper use to avoid pregnancy. All MTP seekers should be counsel for use of post abortion contraceptive methods.

Keywords: Medical termination of pregnancy, Induced abortion, contraception, MTP act.

DOI: 10.25258/ijcpr.18.5.167

Introduction

Abortion is defined as the spontaneous or induced termination of pregnancy before fetal viability. Deliberate termination of pregnancy either by medical or surgical method before the viability of the fetus is called induction of abortion. [1] The induced abortion may be legal or illegal. In India, the abortion was legalized by 'Medical Termination of Pregnancy Act of 1971', and has been enforced in the year April 1972. Unsafe abortion is a significant yet preventable cause of maternal death. Though medical termination of pregnancy (MTP Act) has been legalized in India since 1971, access to services is still a challenge, especially in rural and remote regions of the country. While there is a desire for small families or preventing unwanted pregnancy, this has not translated into

contraceptive usage. The lack of contraception use also feeds into rising MTP rates in the country. Further, no contraceptive is 100% effective; therefore, safe abortion services would always be a necessary component of reproductive healthcare. The Medical Termination of Pregnancy Act, 1971, governs the provision of abortion in India, with a recent amendment to the MTP Act in March 2021 and rules in October 2021. The amendment allows termination of pregnancy up to 24 weeks of gestational age with extended range of indications for any woman, and termination beyond 24 weeks of gestational age for substantial fetal abnormalities as approved by a medical board. [2,3] MTP is induced either by medical or surgical interventions. The most common reason for seeking MTP in India is contraceptive failure, followed by unintended pregnancies due to non-use of contraceptives. This is an observational study on patients undergoing MTP between September 2024 to August 2025, taking into account age, parity, religion, duration of pregnancy, method of termination, marital status, indication/reason of termination, and contraceptive acceptance after MTP.

Methodology

This was a retrospective observational study conducted at GMERS Medical College & Maharani Rupaliba Lady Hospital, Porbandar, over periods of 12 months duration from September 2024 to August 2025. This included all women who underwent medical termination of pregnancy at this hospital during the study period. Data was collected manually from the MTP register in family planning unit and hospital database and data was entered in microsoft excel and analysed. To describe about the data descriptive statistics; frequency analysis and percentage analysis were used.

Inclusion Criteria:

1. Pregnant women belonging to 1st and 2nd trimesters of pregnancy seeking MTP in the family planning unit at GMERS Medical College, Porbandar during the study period were included in this study.

Exclusion Criteria:

1. Pregnant women with missed abortion, inevitable abortion and incomplete abortion.
2. Medicolegal cases

Social parameters like age, marital status, religion, numbers of living children's were included. Obstetrics parameters like weeks of pregnancy, reason for MTP, method of termination and adoption of family planning methods were included. Detailed history and general and systemic examination was performed. Basic investigations like UPT, CBC, BT, CT, RFT, RBS, blood group, urine routine, HIV, HBsAg, VDRL, and HCV was done. Obstetric examination was done and ultrasound (USG) was performed to confirm intrauterine pregnancy and weeks of gestation. Relevant departmental opinions were sought for women with medical disorders. For first trimester medical termination: T. Mifepristone 200 mg orally followed by T. Misoprostol 800 µg per vaginally or 400 µg orally on day 3 and USG done on day 14 to confirm emptiness of the uterus.

In surgical methods procedures such as manual vacuum aspiration, dilatation and evacuation and suction evacuation were performed. T. Misoprostol 400 µg was used pre-procedure before 6 hours for cervical ripening and dilatation.

For second trimester termination of pregnancy dilatation and evacuation, hysterotomy, prostaglandins (misoprostol or dinoprostone gel) was used and combined with oxytocin infusion drip as per protocol, followed by check curettage after expulsion of products of conception if required.

Post-procedure CuT or permanent sterilization was offered and performed with informed consent, with counseling as per comprehensive abortion care guidelines.

Results:

During the study period, a total of 75 cases of medical termination of pregnancy were performed.

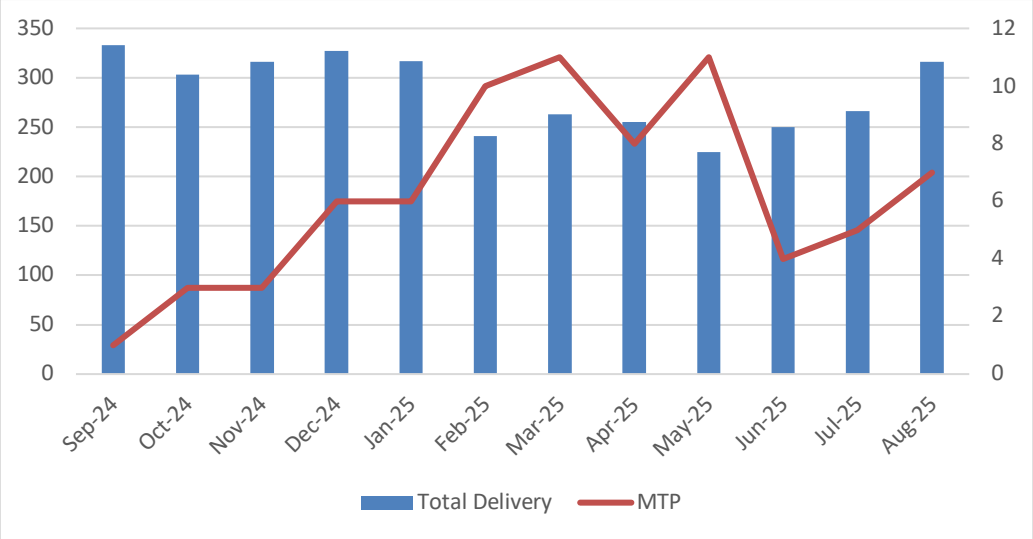

Figure 1:

Total number of delivery during study period was 3412 and Total number of MTP was 75. The rate of incidence of MTP in current study was 21.98% per 1000 deliveries.

Table 1: Distribution of cases according to Maternal Age

Age in years	Number of cases	Percentage (%)
15-19	01	01.33
20-24	22	29.33
25-29	24	32.00
30-34	15	20.00
35-39	10	13.33
≥ 40	03	04.00
Total	75	100 %

Percentage of MTP is highest in the age group of 25-29 years, contributing to 32% and 29.33% in 20-24 years age group. High fertility in this age group reflect increased rate of pregnancy and termination of pregnancy. This reflect the average marrying age of women in India.

Table 2: Distribution of cases according to Marital status

Marital Status	Numbers of cases	Percentage (%)
Married	72	96.00
Unmarried	00	00.00
Separated	01	01.33
Divorced	02	02.66
Total	75	100

Majority 96% of women seeking MTP were married. No any case of unmarried, 1.33% women were separated and 2.66% were divorced who seeking MTP.

Table 3: Distribution of cases according to Religion

Religion	Number of cases	Percentage (%)
Hindu	68	90.66
Muslim	07	09.33
Christian	00	00.00
Others	00	00.00
Total	75	100

Percentage of MTP was highest in hindu women (90.66%) as compared to muslim (09.33%). This disparity is because majority people of India are hindu. Muslim have their religious value and custom and stigma associated with induced abortion.

Table 4: Distribution of cases according to Parity

Parity	Number of cases	Percentage (%)
Primi	11	14.66
G2	16	21.33
G3	28	37.33
G4	13	17.33
≥G5	07	09.33
Total	75	100

Percentage of MTP was highest in 3rd gravida (37.33%) and least in 5th gravida or more (09.33%). This disparity may be due to high parity women seeking self induction being underreported.

Table 5: Distribution of cases according to duration of pregnancy

Duration of Pregnancy	Number of cases	Percentage (%)
Up to 9 weeks	48	64.00
9–12 weeks	11	14.66
12–20 weeks	07	09.33
20–24 weeks	08	10.66
≥ 24 weeks	01	01.33
Total	75	100

Maximum women came for termination of pregnancy up to 9 weeks of gestation, accounting for 64%. Least number of cases at or after 24 weeks of gestation.

Table 6: Distribution of cases according to methods of 1st trimester MTP

Method of MTP	Number of cases	Percentage (%)
Medical	36	61.01
Vaccum aspiration	05	08.47
Suction evacuation	10	16.94
Dilatation and evacuation	08	13.55
Total	59	100

Total 59 cases of 1st trimester MTP, of which medical management of abortion done in 36 cases (61.01%). Vaccum aspiration in 5 cases, suction evacuation in 10 cases and dilatation and evacuation in 8 cases was done.

Table 7: Distribution of cases according to methods of 2nd trimester MTP

Method of MTP	Number of cases	Percentage (%)
Induced abortion (medical)	05	31.25
Dilatation and evacuation	07	43.75
Hysterotomy	04	25.00
Total	16	100

Total 16 cases of 2nd trimester MTP, of which 5 cases of induced abortion with prostaglandins, 7 cases of dilatation and evacuation and 4 cases of hysterotomy.

Table 8: Distribution of cases according to Indication of termination

Indication of termination	Number of cases	Percentage (%)
Social	32	42.66
Eugenic	12	16.00
Medical	02	02.66
Contraceptive failure	26	34.66
Change of marital status	03	04.00
Total	75	1000

42.66% cases had social reason for termination, 34.66% were due to contraceptive failure, 16% due to eugenic, 2.66% due to medical reason to save life of pregnant women and 4% due to change of marital status.

Table 9: Distribution of cases according to adoption of family planning method

Family planning method	Number of cases	Percentage (%)
Sterilisation	21	28.00
IUCD	08	10.66
OCP/Injectable	04	05.33
Condoms	12	16.00
None	30	40.00
Total	75	100

Despite the strong recommendations, the majority of patients (40%) did not use any form of contraception after MTP, while sterilisation (28%), IUCD insertion (10.66%), OCP/ Injectable (5.33%) and condoms (16%) were the other forms of contraception methods being used after abortion.

Discussions

Termination of pregnancy is an integral part of the reproductive healthcare system. Safe and legal abortion is considered a key intervention for improving women's health and quality of life. There is a gradual increase in MTP acceptance over the years due to liberalization and awareness about MTP act, changing attitude of women towards abortion, improvement in the availability of hospital facilities and declining social stigma attached to abortion. The present study focused on socio demographics factors, methods of MTP, reasons for MTP and adoption of contraception following MTP. The rate of incidence of MTP in current study was 21.98% per 1000 deliveries. The numbers of MTP is increasing in government set up year by year. The MTP rate was higher in the age group 25-29 years which was 32% and 29.33% in 20-24 years age group. High fertility in this age group reflect increased rate of pregnancy. Similar finding was seen in study conducted by Dhumale DM et al [4] were majority of women between age group 25-34 years (64.7%) undergoes MTP, In Sehgal et al study [5] mean age of women undergoing MTP was 27.6 years and in Jyoti rokade et al [6] study observed that 43.39% of women undergoing MTP , age ranged between 20-24 years. In Ramesh Holla et al [7] study 37.8% were aged between 26-30 years. This shows that younger women seeks MTP more frequently rather than older women, which may be attributed to lack of motivation and decision making among these younger women for accepting contraceptive measures either to postpone pregnancy or to complete the family.

Highest percentage of women underwent MTP were married that was 96%. 2.66% were divorced and 1.33% were separated. Similar study was conducted by Patel et al [8] observed that most 99.4% women were married, 0.35% were unmarried, 0.17% separated and 0.08% were widows. In Sellathamby SG et al [9] study 84% women seeking MTP were married. There was not even a single case of unmarried women in this study who availed abortion services. This could be because of fact that they preferred private hospital for confidentiality.

Hindu women sought MTP services in higher proportion, 90.66% as compared to muslim women (9.33%). The similar observations were noted in other studies done by Dhumale DM et al [4] (67.4% were hindu), Nirmala JL et al [10] (60% were hindu). This disparity is because major population of India are hindu and muslim have their religious value and custom.

Percentage of induced abortion was highest in 3rd gravida that was 37.33% and least in 5th gravida that was 9.33%. Similar finding was seen in study of Sellathamby SG et al [9] were 42% induced abortion done in 3rd gravida and least in 6th gravida patients. In Chakkarwar PP et al [11] study 51.26% were 3rd gravida and 1% was 5th gravida. This indicate now most women who want to limit family size and decrease future expenses relied on MTP services rather than contraceptive measures. This influences health care providers to focus on unmet need of family planning services as majority were preventable by contraceptives.

Maximum women came for MTP up to 9 weeks of gestational age that was 64%. 14.66% in 9-12 weeks , 9.33% in 12-20 weeks, 10.66% in 20-24 weeks and 1.33% in ≥24 weeks of gestational age. Similar finding was reported by Rokade et al [6], conducted a 10 years duration retrospective study , reported that numbers of patients undergoing first trimester abortion has been rising from 51% to 94.25% while second trimester abortion reduced from 48.99% to 5.76%. In Chakkarwar PP et al [11] study were 57.79% women came for MTP at < 9weeks of gestational age.

In this study 59 cases of 1st trimester MTP and 16 cases of 2nd trimester MTP. In 1st trimester MTP most common method used was medical management with Tab. Mifepristone and Tab. Misoprostol which account for 61.01% and in 38.99% cases surgical methods used. In 2nd trimester MTP induced abortion was done in 31.25% cases, D & E in 43.75% and hysterotomy in 25% cases. A study of Sellathamby SG et al [9] contradict with this study were surgical method were used in 97% of cases.

The primary reason for MTP in this study was social reason (42.66%) , followed by contraceptive

failure (34.66%), 16% were due to fetal anomaly, 4% due to change of marital status and 2.66% due to medical reasons. In Mittal et al [12] study reported that in 59.9% women indication for MTP was unplanned pregnancy and in 43.1% women indication was failure of contraception. In study of Shankaraiah R H et al [13] mentioned that most of their study subject (39.8%) sought MTP for socioeconomic reasons. A study conducted by Khokhar A et al [14] in Delhi, reported reasons for MTP were unplanned pregnancy, inadequate income and completed family.

In Dhillon BS et al [15] study most common reason for terminating pregnancy was did not want any more child (42%). The reason behind this could be the lack of awareness regarding correct and consistent use of contraception. Reason for non use of contraceptive method was lack of awareness, fear of side effect, husband's disapproval, reported by Rahel et al.[16] Majority of women were using barrier and hormonal method of contraception which needs sustained motivation for their regular and appropriate use. There is increasing number of detection of fetal anomalies are evidence for betterment of availing sonological modalities and diagnostic services for inborn error in fetus.

Adoption of contraception following MTP was seen among 45 subjects only. In which 28% cases had permanent sterilization, 10.66% used IUCD and 30 subjects (40%) did not use any form of contraceptive method. Similarly study done by Shankaraiah R H et al [13] showed that post abortion contraception was accepted by 50.4% of women and in study done by Dhillon BS et al [15] showed that acceptance of post abortion contraception was only among 48.9% of the women. In Prabhalya S et al [17] study 87.8% did not use any form of contraception after MTP, sterilization in 9.8%, IUCD in 1.25% only. This can be avoided by educating eligible couples regarding the availability of different methods of contraceptives and their proper use to avoid pregnancy as long as they want. Therefore health care providers should provide information and counselling for post abortal contraceptive use and enable these women to make an informed and voluntary choice and thus avoid the need of a repeat abortion.

Conclusion:

Termination of pregnancy is an integral part of the reproductive healthcare system. Women access MTP for various reasons throughout their reproductive years. This study analysed the incidence of MTP, success of the method of abortion and adoption of family planning methods. The incidence of MTP in this study was 21.98% per 1000 deliveries. The present study showed that the important factors responsible for seeking MTP was unwanted pregnancy due to socioeconomic reasons in 42.66%. This fact highlights the huge unmet need of contraception and counselling. This can be avoided by addressing cultural belief and norms, gender disparities and educating eligible couples regarding the availability of different methods of contraception and their proper use to avoid pregnancy as long as they want. Education and counselling can help individuals make informed decision about their reproductive health. This may also help to reduce numbers of unintended pregnancy and need for MTP.

References

1. DC Dutta's Textbook of Obstetrics. 9th edition, Jaypee publisher; 2019.pg- 164.
2. Comprehensive Abortion Care Training and Service Delivery Guidelines, Ministry of Health and Family Welfare. New Delhi. Government of India, 2023
3. The Medical Termination of Pregnancy Act 1971. Ministry of Health and Family Welfare India. Available at tcw.nic.in › Acts › MTP-Act-1971. Last accessed on 20.01.2024
4. Dhumale DM, Lokare PO, Jawarkar AK, Karanjekar VD. International Journal of Basic and Applied Medical Sciences. 2014;4(2):126-31
5. Sehgal R, Mittal S, Aruna J. Medical termination of pregnancy and concurrent contraceptive adoption in a tertiary referral hospital in Delhi. Indian J Public Heal. 2009;53(4):246–9
6. Rokade J, Date S, Mule VD. Determinants of Induced Abortion at Referral District Hospital and Preventive Steps to Reduce Them. Int J Sci Res Publ. 2013;3(3):1–4
7. Holla R, Kanchan T, Unnikrishnan B, Kotian MS, Kumar N, Thapar R, et al. Profile of women seeking medical termination of pregnancy in South India. Int J Gynecol Obstet. 2014;125(3):253-5
8. Tejal P, Bakul L. of India A 17 year review of voluntary termination of pregnancy (MTP). J Obstet Gynecol India. 2006;56(6):522–8
9. Sellathamby SG, Janakiraman JP, et al. Prospective analytical study on the medical termination of pregnancies in a tertiary care centre. J. Evid. Based Med. Healthc. 2017; 4(44), 2696-2700
10. Lakkawar NJ, Magon S, Alaganandam P. Attitude and experiences of young women towards medical abortion a hospital-based study. Scholars Journal of Applied Medical Sciences. 2014;2(6B):2034-41
11. Chakkarwar PP, Fernandes SD. An epidemiological study to assess the determinants influencing decision of medical termination of pregnancy among women undergoing medical termination of pregnancy

in maternity homes, in a metropolitan city. Int J Community Med Public Health 2018; 5:4882-8
12. Mittal S, Bahadur A, Sharma JB, Uygulamaları B. Survey of the Attitude to, Knowledge and Practice of Contraception and Medical Abortion in Women Attending a Family Planning Clinic. 2008;9(1):29– 34
13. Shankaraiah RH, Annadani RR, Vijayashankar V and Undi M (2013). Medical termination of pregnancy and subsequent adoption of contraception. International Journal of Reproduction, Contraception, Obstetrics and Gynecology 2(3) 367-371
14. Khokhar A, Gulati N. Profile of Induced Abortions in Women from an Urban Slum of Delhi. Indian J Comm Med. 2000;25(4):10-12
15. Dhillon BS, Chandhiok N, Kambo I, Saxena NC. Induced abortion and concurrent adoption of contraception in the rural areas of India (An ICMR task force study). Indian Journal of Medical Sciences. 2004;58(11):478-84
16. Rahel Abebe MD. Global Journal of Medicine and public health. Glob J Med Public Heal. 2012; 1:24– 8
17. Prabhalya S, Kumar AVM, Murugesan U, Prasiddha S. Outcomes of early first trimester medical termination of pregnancy: retrospective study. Int J Reprod Contracept Obstet Gynecol 2023; 12:2109-12.