

**MTP AFTER THE AMENDMENT, 2021**

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**ABSTRACT**

**Introduction:** The evolution of abortion laws in India, culminating in the Medical Termination of Pregnancy (MTP) Act, mirrors the global trajectory towards acknowledging women's reproductive rights while grappling with the ethical and medical complexities of abortion. Despite the legislative strides made with the MTP (Amendment) Act of 2021, significant gaps remain in the understanding of the clinical outcomes and broader implications of medical termination of pregnancy beyond 20 weeks. This study aims to fill this gap by systematically examining the maternal outcomes post-amendment, providing evidence-based insights to inform clinical practice and policymaking.

**Aims and objectives**

1. To study maternal outcomes in various gestational ages beyond 20 weeks in all MTP cases.
2. To study various indications for MTP.
3. To study selection of abortifacient in individual patient for termination of pregnancy.

**Materials and Methods:** This study follows a prospective cross-sectional design. The study population included all women presenting to the Obstetrics and Gynaecology OPD of Dr. Shankarrao Chavan Government Medical College and hospital, Nanded, with requests for termination of pregnancy beyond 20 weeks. The study was done for 18 months, spanned from October 2022 to April 2024. Complete enumeration was used as the sampling technique.

**Results**

1. Majority of patients were younger reproductive age group and from rural areas
2. Majority of MTP's were done for eugenic ground (85.91%), but humanitarian (7.04 %) and social grounds (minors and change in marital status) (5.05 %) were also significant grounds in our study.
3. Misoprostol alone or in combination with dinoprostone was found to be equally effective for termination while mechanical method like intracervical foleys catheter proved to be effective in women with prior history of  $\geq 1$  caesarean section.
4. Majority of patients underwent successful and uneventful MTP (success rate 88.02%) with no complications.

**Conclusion:** MTP in later gestational ages as per the amendment is considered safe when done in a tertiary health care centre, by experts, under proper supervision, monitoring and vigilance with individualised and proper selection of abortifacient and prompt management of complications. The amendment of 2021 has proven to be effective in filling the loop holes of initial Act of 1971 taking into account other aspects of female health care along with MTP.

**KEYWORDS:** Medical termination of pregnancy, Amendment 2021.

**INTRODUCTION**

The evolution of abortion laws in India, culminating in the Medical Termination of Pregnancy (MTP) Act, mirrors the global trajectory towards acknowledging women's reproductive rights while grappling with the ethical and medical complexities of abortion. Initially, the Indian Penal Code, 1860, under Section 312, criminalized abortion, only permitting it when necessary to save the woman's life.<sup>[1]</sup>

The MTP Act of 1971 marked a significant departure from these restrictive norms, legalizing abortion under

certain conditions and aiming to curb the public health crisis of unsafe abortions, which were a leading cause of maternal morbidity and mortality.<sup>[2]</sup> The Act was applicable all over India except in the State of Jammu and Kashmir. The State of Jammu and Kashmir adopted this Act in the year 1980. The Act allowed abortions up to 20 weeks of gestation, contingent on the approval of one or two registered medical practitioners, under specified circumstances including risk to the woman's life or health and cases of rape.<sup>[2]</sup>

Technological advancements, especially in prenatal diagnostics, have challenged the original gestational limits set by the MTP Act. The development of sophisticated ultrasound and genetic testing techniques has enabled earlier and more accurate detection of fetal abnormalities, presenting ethical and medical dilemmas when such conditions are identified after the 20-week limit.<sup>[6]</sup>

In response to the evolving medical, ethical, and societal landscape, the Indian Parliament enacted the MTP (Amendment) Act, 2021. This amendment extends the gestational limit for abortion to 24 weeks for specific categories of women, including survivors of rape or incest, minors, and other vulnerable groups, reflecting a significant progression towards enhancing reproductive autonomy and aligning with modern medical practices.<sup>[3,8]</sup>

Despite the legislative strides made with the MTP (Amendment) Act of 2021, significant gaps remain in the understanding of the clinical outcomes and broader implications of medical termination of pregnancy beyond 20 weeks.

This study aims to fill this gap by systematically examining the maternal outcomes post-amendment, providing evidence-based insights to inform clinical practice and policymaking.

#### AIMS AND OBJECTIVES

1. To study maternal outcomes in various gestational ages beyond 20 weeks in all MTP cases.
2. To study various indications for MTP.
3. To study various methods of termination of pregnancy.

#### MATERIALS AND METHOD

This study follows a prospective cross-sectional design to evaluate maternal outcomes of medical termination of pregnancy (MTP) beyond 20 weeks as per the new amendments in the MTP Act 2021.

The study population included all women presenting to the Obstetrics and Gynaecology OPD of our institute with requests for termination of pregnancy beyond 20

weeks. The study period spanned from October 2022 to April 2024.

Complete enumeration was used as the sampling technique, including all eligible cases meeting the inclusion criteria during the study period.

#### Inclusion Criteria

- Women requesting MTP beyond 20 weeks of gestation.
- Cases referred by private practitioners, court orders, or self-referred patients.
- Women providing written informed consent.

#### Exclusion Criteria

- Women with contraindications for MTP as per medical guidelines.
- Cases where the medical expert committee deemed MTP unsafe.
- Patients declining to provide consent.

#### Study procedure

The study spanned from October 2022 to April 2024. Each case was meticulously evaluated by a senior obstetrician and gynaecologist or medical expert committee (for gestational age >24 weeks) to ensure eligibility based on the inclusion and exclusion criteria. Women were included in the study after their written informed consent. Detailed demographic information was collected, including age, parity, and residence (rural or urban). The gestational age was determined based on the first day of the last menstrual period (LMP) and confirmed by ultrasonography. The indications for MTP were recorded, encompassing medical, fetal, and social reasons in line with the amended MTP Act 2021. The methods of termination were then documented. Throughout the termination process, maternal outcomes were closely monitored. This included recording any complications, immediate recovery status, and overall health outcomes post-procedure. Following the procedure, all collected data were subjected to rigorous statistical analysis. Throughout the study, ethical standards were rigorously upheld and study was approved by the institutional ethical committee.

#### OBSERVATIONS AND RESULTS

Table no. 1: Age distribution analysis.

AGE	FREQUENCY	PERCENTAGE
≤ 19 years	15	10.56%
20-29 years	109	76.76%
30-39 years	15	10.56%
40-49 years	3	2.11%
TOTAL	142	100.00%

Table No. 2: Residence of Study Participants.

RESIDENCE	FREQUENCY	PERCENTAGE
RURAL	90	63.38%
URBAN	52	36.62%
TOTAL	142	100.00%

**Table No. 3: Grounds For Termination (Gestation 20 To 24 Weeks) Of Study Participants.**

Gestation 20-24	Frequency	Percentage
Survivor of sexual assault or rape	6	6%
Minors	2	2%
Change of marital status during ongoing pregnancy	3	3%
Women with physical disabilities	1	1%
Mentally ill women	1	1%
Foetal malformation that has substantial risk of being incompatible with life or may suffer from physical or mental abnormalities after birth	87	87%
TOTAL	100	100%

**Table no. 4: Grounds For Termination (Gestation More Than 24 Weeks) Of Study Participants.**

Gestation More Than 24 Weeks	Frequency	Percentage
Survivor of sexual assault or rape	4	9.52%
Minors	2	4.76%
Foetal malformation with substantial risk	35	83.33%
Change of marital status during ongoing pregnancy	1	2.38%
Total	42	100.00%

**Table No. 5: Methods Of Induction And Outcome Among Study Participants.**

Method of induction	Successful induction	Failure of induction	Percentage
Misoprostol induction	72	1	73 (51.41%)
Dinoprostone gel plus misoprostol induction	57	1	58 (40.85%)
Foleys catheterisation (in patients of previous lscs)	9	2	11 (7.75%)
TOTAL	138	4	100.00%

**Table No. 6: Interval Between Induction and Complete Abortion Of Patients.**

METHOD OF MTP	< 24 hours	24-48 hours
Misoprostol only	70	2
Dinoprostone + Misoprostol	55	2
Intracervical Foleys catheterisation + oxytocin	6	3

**Table No. 7: Maternal Outcomes Of Patients.**

Outcome	Cases	Percentage
Complete abortion (vaginal route)	111	78.17%
Preterm vaginal delivery	15	10.56%
Hysterotomy	4	2.82%
Exploratory laparotomy	1	0.70%
Incomplete abortion	11	7.75%

**Table No. 8: Complications of Patients.**

Complication	Cases	Percentage
None	123	86.62%
Failure of induction	4	2.82
Rupture uterus	1	0.7%
Hemorrhage	3	2.11%
Incomplete abortion	11	7.75%
Total	142	100%

## DISCUSSION

Medical termination of pregnancy is a complex process which has undergone many major changes from 1971 to 2021 under MTP act. Some of these changes involve extension of gestational age limit from 20 to 24 weeks and beyond, grounds for termination, legal aspects including penalties for malpractices, record keeping, affiliation of MTP centres and doctors who can perform the procedure.<sup>[3]</sup> The new amendment has liberalised the

grounds for termination of pregnancy, taking into consideration the various physical, social, psychological, emotional and medicolegal aspect in life of women. But do all these aspects make MTP safe and accessible for all women?

Not many studies have been seen in this field after the amendment took place. Our institute is one of the pioneers in this field of study and has proudly taken an

initiative answer certain questions and doubts regarding the recent amendment in MTP Act 2021.

The age distribution findings depicts that younger women, are more likely to seek MTP compared to older age groups. 10.56% pregnancies were  $\leq 19$  years of age out of which 10 cases were of sexual assault with very extremes of age (13 years). The various social reasons and lack of awareness about the complications related to this sexual assault, low level of education, lack of knowledge about contraception are the reasons behind this. As such cases got included under POCSO act, doctor did not have complete right for decision of termination. So, the examination reports were submitted to police which were in turn submitted to Honourable High court. Hon. High court gave directives to expert doctor about termination of pregnancy and fitness for procedure. Expert committee would take the decision of termination in case of life-threatening fetal anomalies. Age distribution in this study shows similar trends to Robson et al.<sup>[10]</sup>

Majority of the patients were from rural areas. This depicts that women in urban areas have easy approach to official MTP centers in private set up, as only 36.62 % patients came to government hospital for MTP. This implies that rural areas have less expertise services for MTP at  $>20$  weeks. With the pressure of PCPNDT act, new amendment in MTP law and need of expert committee for MTP, majority of patients seeking MTP are referred to government hospital. Furthermore, rural women may face additional barriers such as longer travel distances to healthcare facilities, lower levels of health literacy, and fewer options for family planning services, which can contribute to the higher rate of late-term MTPs observed in this study.

For gestational age  $> 20$  weeks and  $< 24$  weeks, 87% were found to have fetal malformations. The high percentage of terminations due to fetal malformations emphasizes the role of prenatal diagnosis in guiding these difficult decisions. Survivors of sexual assault or rape comprised 6%, while 2% were minors. 3% experienced a change in marital status during the ongoing pregnancy, 1% had a physical disability and mentally illness respectively. These social factors highlight the importance of personalized care and ethical considerations in the management of late-term abortions.

For gestational age  $>24$  weeks, 83.33% had fetal malformations with a substantial risk of being incompatible with life or leading to physical or mental abnormalities after birth. 4.76% were minors while Survivors of sexual assault or rape accounted for 9.52% and lastly, 2.38% experienced a change in marital status during the ongoing pregnancy. Medical board expert committee plays an important role in decision making for this category of MTP. Fetal malformations is the predominant reason for termination in this category, indicating a critical need for robust prenatal diagnostic

services and ethical frameworks to support decision-making. This also underscores the importance of a multidisciplinary approach in managing such cases, combining medical care, psychological support, and ethical considerations to optimize outcomes for both patients and healthcare providers.

Three methods of induction were used: Misoprostol, Dinoprostone gel combined with misoprostol, Intracervical foleys catheterisation (used specifically for patients with a history of lower segment cesarean section (LSCS)). Overall, most inductions were successful, with only 4 failures out of 142 cases.

The induction to abortion interval was less for misoprostol and dinoprostone with misoprostol combination than with intracervical foleys catheterisation. Majority of patients aborted within 24 hours of induction. While all three methods are effective, this study highlights the importance of mechanical method of induction which proved to be safer in patients with history of previous cesarean section.<sup>[9]</sup> These findings emphasize the need for a individualized and tailored approach to induction, guided by patient history and clinical examination by experts present at recognised MTP centres like our's, to achieve the best possible outcomes in MTP.

Majority of patients had complete abortion and preterm vaginal delivery. Out of these 2.11% patients experienced postpartum haemorrhage which was successfully managed by medical methods. Some other outcomes encountered were: incomplete abortion in 7.75% cases (managed by medical methods), hysterotomy in 2.82% (for failure of induction), and exploratory laparotomy in 0.70% cases (for uterine rupture). There was no maternal death or long term morbidity due to MTP in our study. This successful management of complications and subsequent improvement of maternal outcomes at our institute attributes to availability of obstetrician and gynaecologist expertise, blood investigations, radiologist, anaesthesiologist, physicians and blood bank. The factors contributing to effective management include vigilant intrapartum monitoring, prompt identification of complications, early intervention and senior expertise in multiple fields of health care.

## CONCLUSION

Abortions in late gestation as per the extended gestational age limit in MTP law 1971 amendment of 2021 can be done safely with a multidisciplinary approach including the medicolegal, ethical, psychological and emotional aspects of the pregnant female in a tertiary healthcare facility like our institute. Proper prenatal counselling and diagnosis, prenatal care, decision making in selection of method of induction, individualising healthcare to patients, supervision of experts, vigilant intrapartum monitoring, facility of operation theatre and availability of blood banks, anaesthetist and physician, prompt detection of

complication and timely treatment are responsible for successful outcomes in medical termination of pregnancies.

Setting up of medical board committee which involved various expert opinion of Obstetrician and Gynaecologist, Physician, Anaesthesiologist, Radiologist, Psychiatrist, Paediatrician is important for such cases. This committee took combined decision for MTP gave important inputs in management of patient and prediction of fetal outcome and decision making.

Thus, our study concludes that, MTP in late gestational age is considered safe. The amendment of 2021 in MTP Act of 1971 has proven to be effective in filling the loop holes of initial Act of 1971 taking into account other aspects of female health care along with MTP. This approach towards Medical termination of Pregnancy is in the right direction and also has potential for greater hope and development in future.

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