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## PROFILE OF ABORTION SEEKERS IN THE TERTIARY CENTER OF NORTHERN HILLS WITH REVIEW OF MEDICAL TERMINATION OF PREGNANCY ACT IN INDIA

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*The aim of the present study was to investigate the socio-demographic and obstetric profile of pregnant women, seeking medical termination of pregnancy in accordance with the Medical Termination of Pregnancy (MTP) Act and the reasons for undergoing termination of pregnancy in the tertiary care center of the hilly region of Northern India and to further review the amendments in the Medical Termination of Pregnancy Act 1971 along with its future implications in legalizing abortions in India.*

*Materials and Methods:* A registry-based retrospective study was carried out among pregnant women, attending the gynecologic outpatient department for termination of pregnancy at the tertiary care teaching hospital and the referral center for Himalayan foothills in Northern India. The records of women, seeking termination of pregnancy during a 1-year period between October 2020 and September 2021, were reviewed and information on their demographic and obstetric profile, reason for undergoing termination of pregnancy, and acceptance of contraception, following termination of pregnancy was recorded in the data sheet. The information obtained was analyzed using SPSS version 20 (IBM, Chicago, USA) for descriptive statistics.

*Results:* A total of 400 pregnant women underwent Medical Termination of Pregnancy between October 2020 and September 2021. 30.5 % (122/400) women between 26–30 years of age underwent termination of pregnancy, followed by 27.3 % women aged between 31–35 years. Social reasons for termination of pregnancy were more evident in women aged 26 years and above. 84.09 % pregnancies were terminated in the second trimester (>12 weeks) on eugenic ground, while 65.01 % pregnancies were terminated in the first trimester (6–12 weeks) on social grounds. Only 7.75 % (31/400) women opted for sterilization or family planning after MTP, out of which the majority opted for temporary methods of contraception.

*Conclusion:* We conclude from the results of the present study that women in the peak reproductive age (26–30 years) are more likely to seek pregnancy termination and this group of women needs to be the focus of contraceptive counseling and family planning services. Timely ultrasound scans by an expert sonologist may be a step forward towards lowering the rates of late pregnancy termination. There is a need to educate women to avail and use contraceptive methods in an effective manner and to make them aware of utilizing sterilization services, once they complete their families to avoid unwanted pregnancies

*Keywords:* abortion, medical termination of pregnancy, MTP Act, eugenic, fetal malformations, contraceptive failure, humanitarian, medical method of abortion

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### 1. Introduction

Abortion is one of the foremost causes of maternal morbidity and mortality [1]. The access to safe and legal abortion is one of the fundamental women's reproductive rights. It's the responsibility of the state to safeguard their health and to provide a safe environment for practices of abortion and to improve access to the secured services [2]. The access of women to safe abortion services is also one of the imperative components of the Reproductive and Child Health Programme [1]. There is no concrete data on the incidence of induced abortion in the country. In an estimate, it was observed, that abortions were reported in nearly one third of all pregnancies

and almost half of the pregnancies are unintended. About 15.6 million abortions (14.1 million–17.3 million) transpired in India in 2015. Out of these, 81 % abortions were done by medical methods, surgical methods were adopted in 14 %, while 5 % abortions were estimated to be unsafe [3]. In an effort to reduce maternal morbidity and mortality as a result of unsafe abortion, The Medical Termination of Pregnancy (MTP) Act was passed by the Indian Parliament in 1971 [4]. It specifies the guidelines and describes the conditions for termination of pregnancy in accordance with the Indian laws [4]. Although India has legalized abortion on reasonably generous grounds, still the number of legal abortions, performed in India, is

miserable and assessed to be only 0.5 million of the annual estimate of over 6 million abortions [5, 6].

**The aim** of the present study was to investigate the socio-demographic and obstetric profile of pregnant women, seeking medical termination of pregnancy, in accordance with the MTP Act and the reasons for undergoing MTP in the tertiary care center of the hilly region of Northern India and to further review the amendments in the MTP Act 1971 along with its future implications in legalizing abortions in India.

## 2. Materials and Methods

A registry-based retrospective study was carried out among pregnant women, attending the gynecologic outpatient department for MTP at the tertiary care teaching hospital and the referral center for Himalayan foothills in Northern India. Permission was obtained from the Head of the Department of Obstetrics and Gynecology to access the records. The records of women, seeking MTP during a 1-year period between October 2020 and September 2021, were reviewed and information on their demographic and obstetric profile, reason for undergoing MTP, and acceptance of contraception, following MTP was recorded in the data sheet.

The reasons given for undergoing MTP were classified as therapeutic, eugenic, humanitarian, social, and environmental [7]. Therapeutic reasons included conditions, carrying a risk to the life of the pregnant woman. Eugenic causes comprised of pregnancies, carrying the child being born with severe physical or mental abnormalities. Pregnancies, resulting from alleged rape, constituted humanitarian reasons. Pregnancies, resulting from failure of contraceptive methods, were covered under social grounds. When social or economic environment, actual or reasonably expected, can injure the mother's health comprised of the environmental reasons for MTP. The reasons for seeking MTP were further analyzed amongst the different age groups. The information obtained was analyzed using SPSS version 20 (IBM, Chicago, USA) for descriptive statistics, such as mean, standard deviation and percentage.

## 3. Results

A total of 400 pregnant women underwent MTP between October 2020 and September 2021. Table 1 depicts the socio-demographic and obstetric profile of the study population. The mean age of the women was 29.70±5.70 years (range, 13–45 years). 30.5 % (122/400) women between 26–30 years of age underwent MTP, followed by 27.3 % women aged between 31–35 years. Only 4 % (16/400) women were less than 20 years old. 3.5 % (14/400) women were unmarried. Maximum (97.3 %) women belonged to the Hindu community. Maximum women, attending MTP clinic, were graduates or postgraduates (34.5 %, 138/400) and only 8 % women were illiterate. The majority (78.8 %, 315/400) of women was housewives and only 17.5 % were working.

Regarding the obstetric profile, the majority (41.3 %, 165/400) were para 2, while 17.5 % (70/400) were nulliparous. 80 % of women (320/400) underwent MTP in the first trimester (Table 1). The surgical method of MTP was adopted in majority (63.5 %, 254/400) (Table 2).

Table 1  
Socio-demographic & obstetric profile of pregnant women seeking MTP

Characteristics	Number (%)
Age Group (years)	
≤20	16 (4 %)
21-25	89 (22.3 %)
26-30	122 (30.5 %)
31-35	109 (27.3 %)
>35	64 (16 %)
Marital Status	
Married	386 (96.5 %)
Unmarried	14 (3.5 %)
Religion	
Hindu	389 (97.3 %)
Muslim	7 (1.8 %)
Sikh	4 (1 %)
Educational status	
Illiterate	32 (8 %)
Primary	61 (15.3 %)
Secondary	64 (16 %)
Higher secondary	105 (26.3 %)
Graduate and above	138 (34.5 %)
Work status	
Housewife	315 (78.8 %)
Working	70 (17.5 %)
Unmarried	15 (3.8 %)
Parity	
0	70 (17.5 %)
1	111 (27.8 %)
2	165 (41.3 %)
>2	54 (13.5 %)
Current period of gestation	
1 <sup>st</sup> Trimester	320 (80 %)
2 <sup>nd</sup> Trimester	80 (20 %)

Table 2

### Methods of MTP

Methods of MTP	Number (%)
Medical	146 (36.5 %)
Surgical	254 (63.5 %)

Table 3

### Reasons for seeking medical termination of pregnancy

Reason	Number (%)
Therapeutic	21 (5.3 %)
Eugenic	44 (11 %)
Humanitarian	3 (0.8 %)
Social	323 (80.8 %)
Environmental	9 (2.3 %)

The reasons for the termination of the current pregnancy are detailed in Table 3. Social reasons were cited as the most common reason (323/400, 80.8 %), followed by eugenic grounds (44/400, 11 %).

Table 4 depicts reasons for seeking pregnancy termination according to age. Social reasons were more evident in women aged 26 years and above. 84.09 % pregnancies were terminated in the second trimester (>12 weeks) on eugenic ground, while 65.01 % pregnancies were terminated in the first trimester (6–12 weeks) on social grounds.

Table 4

Reason	Age in years				
	<20 (n=16)	21–25 (n=89)	26–30 (n=122)	31–35 (n=109)	>35 (n=64)
Therapeutic	0	4 (4.49 %)	9 (7.38 %)	5 (4.59 %)	3 (4.69 %)
Eugenic	3 (18.75 %)	16 (17.98 %)	8 (6.56 %)	12 (11.01 %)	5 (7.81 %)
Humanitarian	3 (18.75 %)	0	0	0	0
Social	7 (43.75 %)	64 (71.91 %)	105 (86.06 %)	91 (83.49 %)	56 (87.5 %)
Environmental	3 (18.75 %)	5 (5.62 %)	0	1 (0.92 %)	0

The termination of pregnancy on therapeutic grounds was also higher in the second trimester (57.14 %) (Table 5). Only 7.75 % (31/400) women opted

for sterilization or family planning after MTP, out of which the majority opted for temporary methods of contraception (Table 6).

Table 5

Duration	Reasons				
	Therapeutic (n=21)	Eugenic (n=44)	Humanitarian (n=3)	Social (n=323)	Environmental (n=9)
<6 weeks	1 (4.76 %)	1 (2.27 %)	0	87 (26.93 %)	2 (22.22 %)
6-12 weeks	8 (38.09 %)	6 (13.63 %)	1 (33.33 %)	210 (65.01 %)	3 (33.33 %)
>12 weeks	12 (57.14 %)	37 (84.09 %)	2 (66.67 %)	26 (8.05 %)	4 (44.44 %)

Table 6  
Sterilization method adopted for family planning after MTP

Sterilization method used	Number (%)
Temporary	28 (7 %)
Permanent	3 (0.75 %)
None	369 (2.25 %)

## 5. Discussion

Before 1971, abortion was criminalized under Section 312 of the Indian Penal Code, 1860 [8]. The morbidity and mortality was on higher side because of illegal, unsafe abortion practices in a hidden manner. The medical termination bill was introduced and passed by the parliament in 1971 and was instigated in the country from 1972 with the vision to enable safer abortions in a legalized manner under certain situations. Under this act, a pregnancy could be terminated by a registered medical practitioner up to 20 weeks of gestation. However, a second doctor's opinion was a prerequisite for termination of pregnancy beyond twelve weeks of gestation. A pregnancy could be terminated in a Government hospital or a place for the time, being permitted for the purpose of this Act by the Government [4]. In an attempt to simplify the registration of private doctors as abortion service providers and thereby to further expand access to safe abortion services, amendments to the MTP Act and Regulations were made in 2002 and 2003. It devolved the regulation of abortion facilities from the state level to District Level Committees [9, 10].

In 2014, Ministry of Health and Family Welfare shared the Medical Termination of Pregnancy Amendment Bill 2014 in the public domain to seek suggestions from stakeholders and general public. It was advocated to incorporate medical practitioners with bachelor's degree in Ayurveda, Siddha, Unani or Homeopathy as legal MTP providers, thereby enhancing the availability of safe and legal abortion services for the public. It was

also suggested to utilize the services of nurses, registered with the Nursing Council of India, for safe abortion practices [11].

In the present study, we have observed that maximum women who underwent MTP were in the age group of 26–30 years (30.5 %). Similar observations were seen in a study, conducted at Rajkot, Gujrat, where 55.6 % women, seeking MTP, were between 20–30 years of age [12]. Another study in South India also observed that one-third of women (37.8 %), seeking MTP, was aged between 26 and 30 years [13]. The Majority of women, attending MTP clinics (97.3 %) in the present study, were Hindus, as the predominant population of the region is of Hindus. In our study, 34.5 % of women were educated up to graduation or above, while only 15.3 % patients were having primary education and only 8 % were illiterate. While in a study, conducted in South India, it was observed, that 45.2 % women were having primary education [14]. The difference could be explained, as various regions of the country have different literacy rate. 78.8 % of women were housewives and only 17.5 % were working in the present study. The majority (41.3 %) were having two children, which is in contrast to the study, conducted in Gujrat, where 64.5 % women, seeking MTP, were having less than 2 children [12]. It was also observed in another study, that the majority of women, opting for MTP in the present study, were parous, having >2 living children (86.8 %), 12 % had a single living child and only 1.2 % were having no living children [15].

80 % of pregnancies were terminated in the first trimester and only 20 % were terminated in the second trimester. The results were similar to other studies, conducted in different regions, where 79.5 % women [13] and 87 % women [15] underwent MTP in the first trimester. Only 36.5 % pregnancies were terminated by medical methods, and majority (63.5 %) were terminated by surgical methods in the present study. Most of the

patients (88 %) were successfully managed medically and only 68 (12 %) patients required surgical treatment in a study, conducted at Uttrakhand [15].

The contraceptive failure was reason in majority (80.8 %) for seeking MTP in the present study, while 11 % were due to eugenic grounds (fetal abnormality) and 5.3 % were due to therapeutic reasons, that is due to underlying maternal health issues where pregnancy continuation threatens the health of the mother. Similar observations were made by another researcher in a study where the reason for MTP in majority (83.2 %) of the patients was failure of contraception, 13 % women sought MTP for congenital anomalies and 2.24 % women required MTP for maternal conditions, threatening the life of the mother [15].

Only 7.75 % women adopted for sterilization post MTP in the present study. Concurrent contraceptive methods adopted were Cu-T and permanent sterilization by 23.3 % and 55.9 % women respectively in a study, conducted at Gujr in [12]. Similarly a high percentage of women (52.9 %) opted for post-MTP contraception in a study, conducted in southern India [13].

In the present study, the majority (84.09 %, 37/44) of pregnancies, terminated on eugenic ground, were in the second trimester. Most of the fetal abnormalities were spotted late on ultrasonography, even more than 20 weeks of intrauterine life. The majority of the Indian population resides in rural area and lacks access to healthcare facilities, including sonologists and qualified obstetricians. It was observed, that it is not uncommon in a reasonable number of patients to be diagnosed with fetal malformation beyond 20 weeks. They observed in their study on pregnant women with fetal malformations that 66.9 % of fetal abnormalities were diagnosed after 20 weeks. 109 out of 312 patients had their first USG after 20 weeks and 100 had USG prior to 20 weeks but the malformations were missed [16]. There exist fetal malformations, which are difficult to diagnose before 20 weeks of gestation. These abnormalities are agenesis of corpus callosum; cystic congenital adenomatoid malformation, extralobar sequestration; Dandywalker malformation and variants; duodenal atresia; hydronephrosis, renal agenesis, duplex kidney; bowel obstruction [16]. Under these circumstances women have no option left except to have their pregnancy aborted at substandard centers, as they fail to access safer abortion in a legalized manner as per the legal provisions of the MTP act. Most of such patients deteriorate due to septic abortion and may have to undergo emergency laparotomy and unnecessary hysterotomy.

The Government of India introduced the MTP Amendment Bill 2020, which was passed in the year 2021 and notified after getting the President's approval on March 25, 2021. As per the earlier provisions under the MTP Act, a pregnancy could be terminated by only a married woman in the case of failure of a contraceptive method or device. Now, unmarried women can also access safe abortion services on grounds of contraceptive failure. Presently, women can terminate their pregnancy up to 20 weeks on the opinion of one doctor and in cases where persistence of the pregnancy would involve a risk to the life of the pregnant woman or affect her physical or mental health; or in case of substantial fetal abnor-

mality; termination can be done up to 24 weeks. A pregnancy can be terminated anytime during the gestation period in case of fetal anomalies, as diagnosed by the Medical Boards. The current amendments direct the constitution of Medical Boards in all the states and union territories for diagnosing substantial fetal anomalies. The medical board, comprising of gynecologist, radiologist/sonologist, pediatrician and other members, notified by the government, will decide if a pregnancy may be terminated after 24 weeks [17].

The access to the abortion in a legalized manner has been extended from 20 weeks to 24 weeks; still the right to terminate the pregnancy does not lie with the women.

A constitutional bench of the Supreme Court of India, comprising of nine-judges, in the landmark Puttaswamy judgment on the right to privacy in the year 2017, held that "There is no doubt that a woman's right to make reproductive choices is also a dimension of "personal liberty" as understood under Article 21 of the Constitution of India. The crucial consideration is that a woman's right to privacy, dignity and bodily integrity should be respected." [18].

The amendments in the act were made, keeping in view of a rising number of pleas in the court for seeking abortion post 20 weeks of gestation. The women who wish to terminate a pregnancy beyond 24-weeks without any 'fetal abnormality' may still have to seek respite from the courts, yet again.

Several lacunae and issues were raised against the bill by the public representatives and opposition party members. One of the issues was, for a woman it is as such difficult to decide whether to abort or not, and simultaneously asking her to get a medical board opinion is undignified and an invasion of her privacy and choice. As per the earlier laws, for abortion beyond 20 weeks, women had to obtain the permission from the court, and even now also they require clearance of the medical board for pregnancy termination beyond 24 weeks. Another issue was that the Bill is unrealistic for the population, residing in rural area. It would be extremely difficult for the women to have an opinion from two doctors if she wants to abort beyond 20-weeks. The scarcity of the specialist qualified doctors in the rural area is another dark area [19].

**Research limitations:** The retrospective nature is the foremost limitation of the study.

**Prospects for further research:** Further study should be contemplated to see whether the implementation of recent amendments in Medical Termination Act 1971 will be beneficial to the women, seeking abortion on eugenic grounds.

## 6. Conclusion

The latest amendments in the MTP Act, give a ray of hope to the women who wish to abort their pregnancies on eugenic grounds in the latter gestation. They can have access to safer abortion facilities, which is their fundamental right. Some of the possible lacunae in the present bill need to be focused as and when the rules are formulated. We conclude from the results of the present study that women in the peak reproductive age (26–30 years) are more likely to seek pregnancy termination and

this group of women needs to be the focus of contraceptive counseling and family planning services. Timely ultrasound scans by an expert sonologist may be a step forward towards lowering the rates of late pregnancy termination. There is a need to educate women to avail and use contraceptive methods in an effective manner and to make them aware of utilizing sterilization services, once they complete their families to avoid unwanted pregnancies. Moreover, over the counter availability of the drugs and self prescription should be strictly prohibited as many women come for termination of preg-

nancy at a late gestation with the history of pill intake beyond 9 weeks of gestation. There is still a long way to enforce and implement the safe abortion practices in the present scenario.

#### Conflict of interest

The authors declare that they have no conflicts of interest.

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