

Original Article

SURGICAL TERMINATION OF PREGNANCY: A RETROSPECTIVE STUDY IN A TERTIARY CARE HOSPITAL OF WEST BENGAL

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ABSTRACT

BACKGROUND: Placenta previa is defined as complete or partial covering of cervical internal os with the placenta. Placenta previa is a major risk factor for obstetric haemorrhage. Uterine artery embolization (UAE) reduces blood flow to the lower uterine segment which helps to reduce blood loss during placental separation.

OBJECTIVE: The study aims to evaluate the incidence, indications, age groups, parity distribution, rates of acceptance of contraception after surgical termination of pregnancy. It also enumerates the percentage of patients undergoing surgical abortion and their causes, which are mainly failure of contraception, ignorance, illiteracy, cultural beliefs etc.

METHODS: A retrospective data analysis of one year was undertaken. Data was retrieved from the MTP register of C.O.M.J.N.M. Hospital, in Kalyani, Nadia, West Bengal.

RESULTS: The main reason for surgical termination was failure of contraception which highlights the unmet need of contraception and counselling. Majority of the age group availing the procedures belonged to 25-35 years which is 240 (69.7%) out of total 344 study population. Dilatation and evacuation were the commonest procedure undertaken (201 or 58.4%). Most pregnancy termination-seekers were parous, 288 (83%) patients underwent termination in the first trimester. Mostly OCP (56.3%) was the contraception choice after the intervention.

KEY WORDS: Surgical termination of pregnancy, Dilatation and evacuation, contraception.

INTRODUCTION

The **Medical Termination of Pregnancy Act, 1971 ("MTP Act")** was passed due to the progress made in the field of medical science for safer

abortions. In a historic move to provide universal access reproductive health services, **India amended the MTP Act 1971** to further empower women by providing comprehensive abortion

care to all. The new **Medical Termination of Pregnancy (Amendment) Act 2021** expands the access to safe and legal abortion services on therapeutic, eugenic, humanitarian and social grounds to ensure universal access to comprehensive abortion care [Table1].

Indication	Medical Termination of Pregnancy Act, 1971	The MTP Amendment Act 2021
Contraceptive failure	Only applies to married women	Unmarried women also covered
Gestational age limit	20 weeks for all indications	24 weeks for rape survivors and beyond 24 weeks for substantial fetal abnormalities
Medical practitioner opinions required before termination	One RMP till 12 weeks Two RMP till 20 weeks	One RMP till 20 weeks, Two RMPs 20-24 weeks Medical board approval after 24 weeks
Breach the women confidentiality	Fine up to Rs.1000/-	Fine and/or imprisonment of 1 year

Table 1: Showing difference between MTP Act, 1971 & The MTP Amendment Act 2021

Complications arising from spontaneous and unsafe induced abortions are recognized worldwide as a major public health concern and are one of the important attributes of maternal morbidity and mortality (ACOG 2009).[1] Medical termination of pregnancy (MTP) has been legalized in India since 1971 considering burden of unsafe abortions. Indian women continued to have unsafe abortions and face adverse and fatal consequences.

At this point, only legislative amendments may not be sufficient but along with that, many other aspects need to be considered like awareness, availability, and accessibility, affordability of quality MTP services, and post abortion follow up and contraceptives. People should know the adverse effects of taking un-prescribed medical termination pills. Comprehensive abortion care (CAC) should be provided at every level of health care to ensure the good reproductive health of the women.

MATERIALS AND METHODS

This is a retrospective, observational study of women undergoing surgical medical termination of pregnancy under MTP Act. All the patients who had undergone surgical procedures for pregnancy termination in the Department of Obstetrics and Gynaecology, COM & JNM Hospital, Kalyani, Nadia, West Bengal from January 2021 to December 2021 (1 year period) were included in the study. The data was taken and compiled from the MTP register and was analysed in terms of incidence, indications, causes, parity, age groups and obstetric profile among the patients undergoing surgical termination of pregnancy and the methods of contraception following MTP.

Study area: The Department of Obstetrics & Gynaecology, College of Medicine & J.N.M. Hospital, Kalyani, Nadia, West Bengal.

Target population: All the young women (18-45 years) attending the Obstetrics & Gynaecology outdoor clinic, admitted in the Maternity ward, College of Medicine & J.N.M. Hospital, Kalyani, Nadia, West Bengal.

Study population: All women aged between 18 to 45 years, requiring surgical abortio in 1st and 2nd trimesters of pregnancy.

RESULTS

In our study, total 344 candidates availed the service for surgical termination of pregnancy over 1 year (January – December 2021). Out of total 344 studied patients, majority (240 i.e., 69.7%) were in age distribution of 25-35 years. Among the rest, 72 (20.9%) belonged to 18-25 years, and 32 (9.3%) to 35 to 45 years of age groups [Table 2].

Age group	Number	percentage
18-25 years	72	20.9%
25-35 years	240	69.7%
35-45 years	32	9.3%

Table2: Age distribution of patients undergoing surgical termination of pregnancy.

In terms of education, 142 (41.3%) completed secondary education whereas 68 (19.76%) were illiterate and 134 (38.9%) completed primary education. [Figure1].

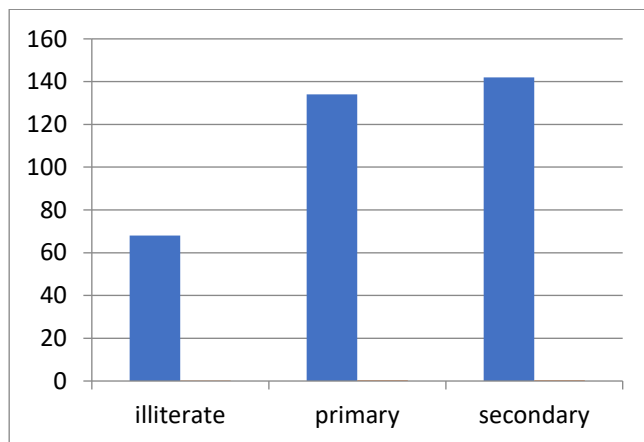


Figure 1: Educational background of patients undergoing surgical termination of pregnancy.

Out of the total 344 patients, 288 (83%) underwent surgical evacuation in the first trimester while 56 (16%) cases of termination were performed in the second trimester [Figure 2].

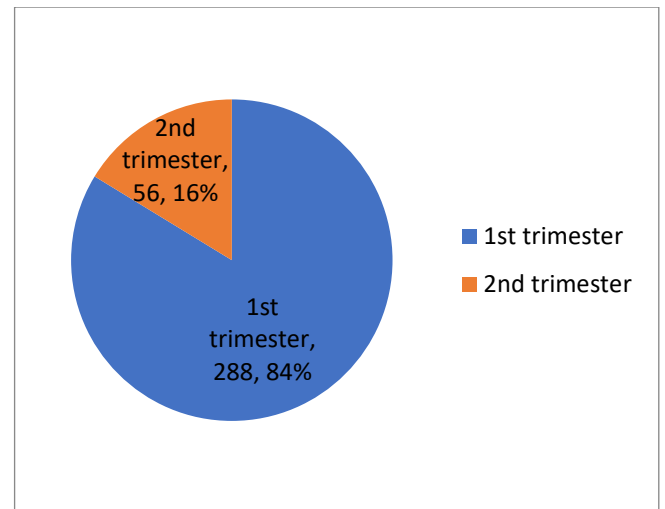


Figure2: Diagram showing trimester-wise distribution of surgical termination of pregnancy.

In our institute mostly we performed manual vacuum aspirator (MVA), suction evacuation (S&E) and dilatation evacuation (D&E) as methods surgical abortion. Among 344, MVA done in 57 (16.5%) patients, S&E required in 86 patients (25%), and rest 201 patients D&E done (58.4%) [Figure 3].

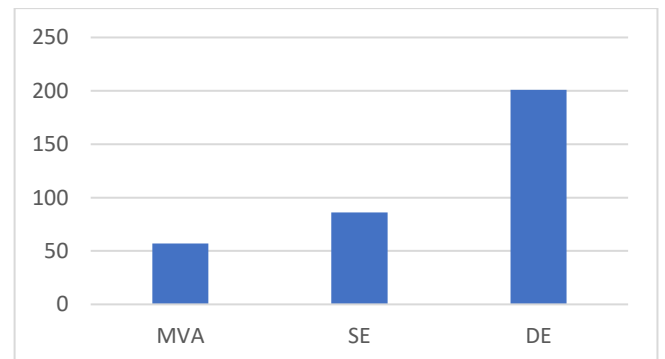


Figure 3: Distribution according to methods of surgical abortion

The primary antecedent cause in majority, (302 or 87.8%) was failure of contraception. 24 (6.9%) patients required pregnancy termination for foetal congenital anomalies, 16 (4.6%) for maternal life-threatening conditions and 2 (0.58%) patients came with ligation failure [Figure 4].

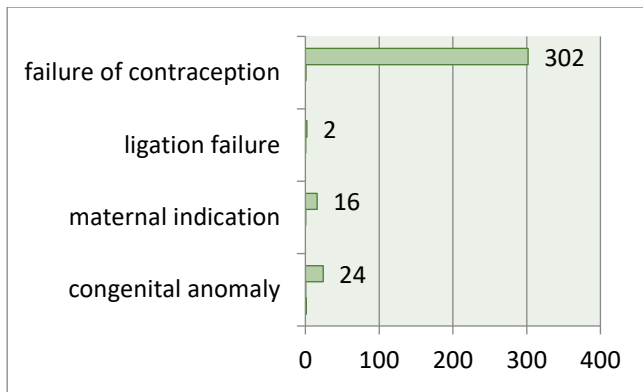


Figure 4: Distribution of underlying causes of surgical termination of pregnancy.

Among the total study population, history of previous one episode of Dilatation and Evacuation (D&E) was present in 89 (25.8%) patients, ≥ 2 episodes in 47 (13.6%). The rest (208 or 60.4%) experienced D&E for the first time [Table 3].

Number of previous Dilatation and evacuation	Number of people	Percentage
nil	208	60.4%
1	89	25.8%
≥ 2	47	13.6%

Table 3: Number of previous Dilatation and evacuation.

Out of 344 patients, 235 had a previous history of vaginal delivery, 92 had previous history of caesarean section and there was no previous viable pregnancy in 17 cases [Figure 5].

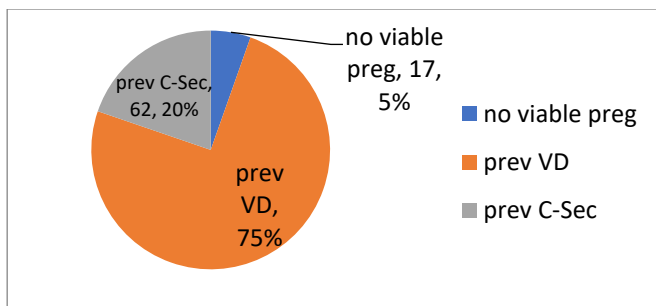


Figure 5: Mode of delivery in previous pregnancy In the study population, 15 (4.36%) were primi-

gravida, 329 (95.64%) were multi-gravida and 46 of them were multipara.

Gravida	Number of people	percentage
Primi gravida	15	4.36%
Multigravida	329	95.64%

Table 4: Distribution of study population on the basis of gravida and parity

After the procedure, maximum patients opted for oral contraceptive pills (194 or 56.3%) as a post-abortal contraception. 26 (7.5 %) consented for permanent sterilization, 42 (12.2%) for IUCD, 19 (5.5%) for DMPA, 32 (9.3%) for barrier method and there were 31 (9%) patients who were unwilling for any measure of birth control [Figure 6].

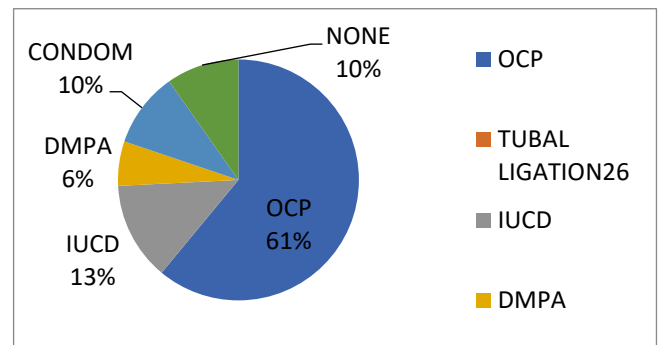


Figure 6: Distribution of post-abortal contraception.

DISCUSSION

Till 2017, there was a dichotomous classification of abortions safe and unsafe. However, with abortion technology now becoming safer, this has been replaced by a three-tier classification, which is as follows:[2]

- Safe abortion: Provided by healthcare workers and with methods recommended by the WHO.
- Less safe abortion: Done by trained providers using non-recommended methods or using a safe method (e.g., misoprostol) but without adequate information or support from a trained individual
- Least safe abortion: Done by a trained

provider using dangerous, invasive methods. Young population opting for MTP indicates the unmet need of contraception and counselling suggesting that implementation and integration of MTP services should be at the root level. D&E made second trimester surgical abortion safer, faster and more cost-effective than the available medical alternative.[3]

Among total 344 cases 288(84%) were done in 1st trimester and 56(16%) were in 2nd trimester, which is comparable to the study of Ramesh et al where also 82% cases were done in 1st trimester.[4] The prime indication to undergo MTP in the present study was failure of contraception (87.8%) which is comparable to the study of Katke RD et al where also the failure of contraception was the most common indication .[5] This highlights the unmet need of contraception in the society also the need of proper counselling and uninterrupted use of method of contraception.[6] The barriers which impede women from reaching the required safe abortion services include illiteracy especially female illiteracy, lack of awareness, lack of access to health facilities, distance, lack of confidentiality, anonymity, privacy and respect towards women.

The present study finding indicates that majority (69.7%) of the study population belonged to the age group of 25-35 years with mean age was 30.7±8.3 years which was more than a study conducted by Adera et al at Ethiopia 6 among Women of Reproductive age group (37.8%), Bamnia et al at Mewar, Issue2, July-2020 Rajasthan (56%).[7]

In our study 19% were illiterate which was almost similar to Ethiopia (16%) [8], but lower than Rajasthan (40%). This study revealed that 66% had no abortion history, whereas in Bihar and Jharkhand 85.7% had no spontaneous abortion and 95.4% had no induced abortion.[9] About 14% of women reported at least one spontaneous abortion, while induced abortions were reported by only 5% of women in Bihar and Jharkhand.

The main reason for undergoing abortion was failed contraception (87. 8%) in Mewar [10] and Indore (38.1% and 32.38%).[11]

Not all providers use ultrasound during dilatation and evacuation (D&E) or have this technology

available in the procedure room. Completion of the D&E therefore relies on a clinician's sensation. [12] Under-estimation of gestational age is also associated with perforation, so accurate determination of gestational age is essential.[13] But in our study we have done TAS before and after D&E in every case.

LIMITATIONS

Like other studies, our study also has some limitations. Self-reported information may be subjected to reporting errors, missed values, wrong gestational age may affect study results of this hospital. The findings of this study are based on only attending, obstetrics & gynaecology outdoor clinic, admitted in the maternity ward, thereby missing a bulk of the population who attended private clinics and nursing homes.

CONCLUSION

Information, education, and communication could be an effective tool regarding the generation of awareness about the medical termination of pregnancy (MTP) Act. Distribution of contraceptives and detailed information of surgical abortion, abortification pills, and follow-up care after abortion can be achieved effectively and efficiently through grass root level health care workers. Thus, along with Government legislation, several other factors need to be re-considered for achieving comprehensive abortion care (CAC) for women in this country.

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Received: 23.5.2022

Accepted: 31.16.22

Published: 15.7.2022

Citation: Maji M, Mukherjee J, Chowdhury R R, Bera G. Surgical termination of pregnancy: A retrospective study in a tertiary care hospital of West Bengal. *J Indian Acad Obstet Gynecol.* 2022;3(2):16-21

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