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Original Research Article

Outcomes of early first trimester medical termination of pregnancy: retrospective study

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ABSTRACT

Background: Unsafe abortion is a major public health problem. Globally, 20 million unsafe abortions occur each year, accounting for 13% of all maternal deaths. According to WHO, 56% of abortions in developing countries are still unsafe even though medical abortion methods have been used for over a decade. The main objective of the present study is to compare the efficacy, acceptability, side effects and factors affecting the outcome of early medical abortion with oral and vaginal misoprostol after oral mifepristone in inducing early medical abortion up to 8 weeks of gestation.
Methods: A one-year retrospective, observational study was conducted. A total of 82 post-MTP patients were included in this study. Data retrieved from the hospital database was tabulated and analysed.
Results: The majority of women who underwent the procedure fell into the age group of 26-30 years (32.9%), on observing the parity of the mothers a whopping 82.9% were multiparous. The finished family (41.5%) was the most common reason for MTP. The incidence of RPOC in the study group was 31.7%. About 26.8% of the patients did not come back for follow-up.
Conclusions: The majority of women who underwent the procedure fell into the age group of 26-30 years (32.9%), on observing the parity of the mothers a whopping 82.9% were multiparous. The finished family (41.5%) was the most common reason for MTP. The incidence of RPOC in the study group was 31.7%. About 26.8% of the patients did not come back for follow-up.

Keywords: Abortion, Gestation, Misoprostol, Mifepristone

INTRODUCTION

India is one of the most densely populated countries in the world with a population of 1.4 billion at the end of 2022.[1] A general lack of knowledge and usage of contraception plays a major role in the growing population of India. With that being said, this lack of use of contraception also feeds into the rising rates of MTP in the country. With more and more women joining the Indian workforce and the current economy, medical termination of pregnancy is becoming a commonly used tool that modern women reach for these days.

Although advocation for contraception is being done vigorously, there seems to be a setback in practical implementation of use of contraception leading to unplanned pregnancies.

In 2020, the MTP rate in India was 15.6 per 1,000 women of reproductive age (15-49 years). In the year 2019-2020, a total of 10.5 lakh (1.05 million) MTPs were conducted in India. Out of the total MTPs performed in India in 2019-2020, 58% were carried out in the private sector, and 42% were conducted in the public sector.[2] The highest numbers of MTPs in India were conducted in the age group of 20-

24 years. The most common reason for seeking MTP in India is contraceptive failure, followed by unintended pregnancy due to non-use of contraceptives.[3]

Medical termination of pregnancy (MTP), also known as medical abortion, is a method of ending a pregnancy using medications rather than surgery. MTP involves taking one or more medications, such as mifepristone and misoprostol, to induce abortion and expel the contents of the uterus. MTP follow-up is essential to monitor the physical and emotional well-being of women after the procedure. The follow-up also helps to identify and manage any complication that may arise after the procedure such as infection, bleeding or incomplete abortion. Despite the importance of MTP follow-up many women face barriers to access follow up care due to social stigma, lack of information or inadequate health services and low socioeconomic status. The post MTP scan after one week is very crucial for the patient as it helps to diagnose and identify complication like retained products of conception .While all patients are strongly advised to come back for the follow up scan, not all do.

This is an observational study on the patients that underwent MTP between 2022 and 2023. This study takes into account the age, parity and indication of the patients and post MTP care and complications.

METHODS

This is a retrospective observational study that included all women who underwent medical termination of pregnancy at Vani nursing home, a secondary care hospital in Tambaram between 2022 and 2023. A total of 82 patients were included, and data was collected manually from the hospital database. The study population consisted of all patients who underwent medical termination of pregnancy in 2022 at the hospital, and the inclusion criteria were limited to those patients who had a gestational age of less than or equal to 9 weeks and who opted for medical termination as their first line of treatment. Patients who opted for surgical evacuation as the first line of treatment were excluded from the study.

For patients who opted for medical termination, an ultrasound was performed to confirm the intrauterine location of the gestational sac and the gestational age of the fetus. Mifepristone 200mg was given orally to initiate abortion 48 hours before misoprostol, which was administered vaginally in two doses of 400mcg, four hours apart.

Statistical analysis

The collected data were analysed with IBM SPSS Statistics for Windows, Version 29.0.(Armonk, NY: IBM Corp). To describe about the data descriptive statistics frequency analysis, percentage analysis were used for categorical variables and the mean and S.D were used for continuous variables.

RESULTS

During the study period, a total of 82 medical termination of pregnancies were performed. The highest percentage of women who had the procedure were in the age range of 26-30 years (32.9%), followed by 31-35 years (25.6%) (Table 1). Among the mothers, 82.9% were multiparous and 17.1% were primi gravida (Table 2).

Table 1: Distribution of age in the study group.

Age	Frequency	Percent
18 - 20 yrs	6	7.3
21 - 25 yrs	14	17.1
26 - 30 yrs	27	32.9
31 - 35 yrs	21	25.6
Above 35 yrs	14	17.1
Total	82	100.0

Table 2: Distribution of parity.

Parity	Frequency	Percent
Multi	68	82.9
Primi	14	17.1
Total	82	100.0

Of the 82 patients, 60 (73.2%) had a repeat scan after the MTP, and of those 60 patients, 19 (31.7%) had retained products of conception.

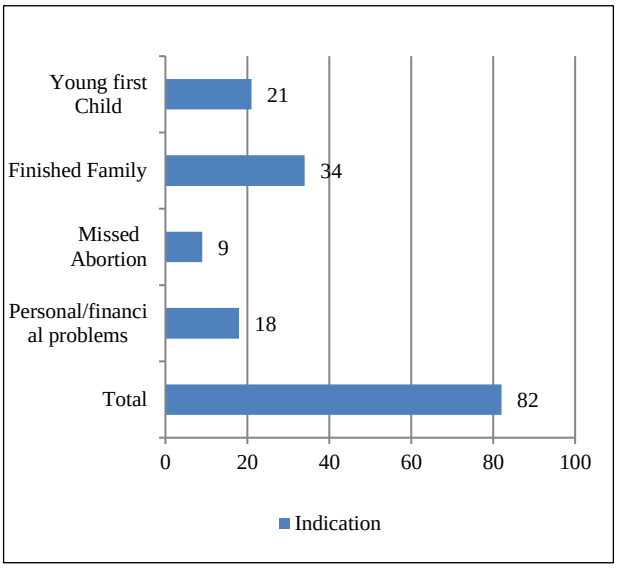

Figure 1: Distribution of indications of mtp.

The primary reason for the MTP in this group was completed family (41.46%), followed by young first child (25.61%), while personal/financial problems (21.9%) and missed abortion (11.0%) were other indications (Figure 1).

Despite strong recommendations, the majority of patients (87.8%) did not use any form of contraception after the MTP, while sterilization (9.8%), IUD insertion (1.2%),

and abstinence (1.2%) were the other forms of contraception used (Figure 2).

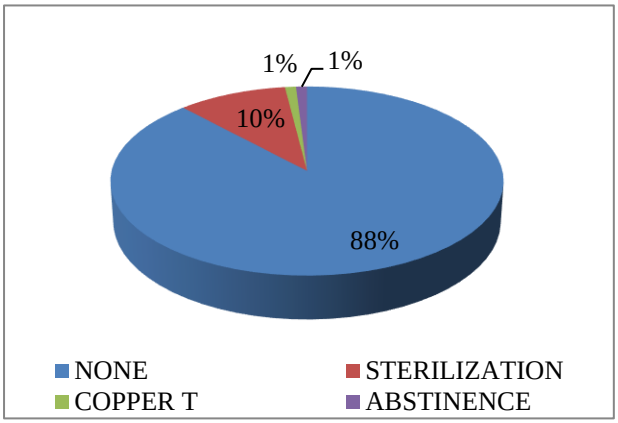

Figure 2: Distribution of types of contraception used in the study group.

DISCUSSION

The study aimed to investigate the outcomes of medical termination of pregnancy (MTP) among patients and identify potential factors that may contribute to complications. A total of 82 patients underwent MTP, and only 73.2% of them had their repeat follow-up scan done. Among the patients who underwent the follow-up scan, 31.7% had retained products of conception (RPOC), which can lead to complications such as continuous vaginal bleeding, pelvic pain, infection, and even sepsis. A study done by Pawde et al showed RPOC rate of 30%.[4]

The remaining 22 patients who failed to do a repeat scan due to various reasons may have a chance of having RPOC. Failure to detect and treat RPOC can result in long-term complications such as infertility.[5] The study highlights the importance of follow-up scans to ensure that patients receive appropriate care and treatment.

In this study most women were multi gravida (82.9%) and the rest (17.1%) were primi gravida. This indicates now most women who want to limit family size and decrease future expenses relied on MTP services rather than contraceptive measures. This enforces health care providers to focus on unmet need of family planning services as majority were preventable by contraceptives. These observations are consistent with the studies of Shivkumar et al where majority patients 63.3% were having 1-3 deliveries followed by 22.7% women with 4-7 deliveries and only 14% cases came for termination of pregnancy without having any single delivery.[6]

The study also found that the most common reason for MTP among the study group was the completion of family, accounting for 41.5% of cases. This was followed by young first child, accounting for 25.6% of cases. Despite efforts to improve contraception awareness in India, the study found a failure to use contraception. A lack of knowledge and understanding about the benefits of family planning and contraception, particularly in rural areas, was identified as a major contributing factor to unintended pregnancies.[7]

The study revealed that there are still many taboos and a lack of understanding about the usage of contraceptives, even among the educated population.[8] Traditional beliefs and cultural norms can also play a role in limiting the use of contraception. Additionally, gender disparities and lack of education can prevent women from making informed decisions about their reproductive health. This lack of contraception awareness can result in unintended pregnancies, unsafe abortions, and an increased risk of maternal and infant mortality.[9]

According to the study, most patients in the study group were between 26-49 years of age, reflecting the average marrying age of women in India and their active reproductive years.[10] Holla R et al also showed in his study mean age of 27.96[+ or -]5.41 years.[11] The study also identified other indications for MTP, including personal and financial problems (21.9%) and missed abortions (11%).

The study findings suggest that there is a need to improve awareness about the benefits of family planning and contraception in India. This includes addressing cultural beliefs and norms, gender disparities, and improving access to education and healthcare. One potential solution to improve contraception awareness is by providing education and counseling services to women and men.

Education and counseling can help individuals make informed decisions about their reproductive health and improve their knowledge of contraceptive options. This may also help reduce the number of unintended pregnancies and the need for MTP. The study highlights the importance of access to contraception services and the need for follow-up care to detect and treat complications such as RPOC.

This study has some limitations. This study was conducted at a single center and only includes data of one year. It is a retrospective study. The study population is limited.

CONCLUSION

In conclusion, the study highlights the importance of follow-up care and treatment for patients undergoing MTP. Failure to detect and treat complications such as RPOC can lead to long-term complications such as infertility. The study findings also suggest a need to improve awareness about the benefits of family planning and contraception in India. Improving access to education and counseling services can help individuals make informed decisions about their reproductive health, reducing the number of unintended pregnancies and the need for MTP.

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