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Original Research Article

Study of medical methods of abortion and self-attempted abortion

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ABSTRACT

Background: Medical abortion in the early stages of pregnancy is considered safe, but it relies on having accurate information and support from a qualified healthcare professional. Despite this, many women opt to use medical abortion pills independently or with the assistance of unqualified practitioners, or pharmacists, as these drugs are readily available over-the-counter without requiring a medical prescription.

Methods: This retrospective analytical study was undertaken at the department of obstetrics and gynaecology, at Smt. SCL municipal general hospital, Ahmedabad between December, 2022 to December, 2023.

Results: The present study clearly suggests 50% cases of self-attempted medical abortion with drug purchased 'over the counter' needs surgical evacuation, 30% managed with further medical intervention and blood transfusion, while comparing with cases which were prescribed MTP Pills in tertiary health care centre need surgical intervention in only 10% cases and the complete abortion rate was 90%.

Conclusions: In India the drugs for medical abortion are easily available and accessible without prescription, so most women feel it can be carried out in privacy and they only come to hospital when they develop complications. When MTP pills are prescribed under care of properly trained healthcare personnel with proper guidelines, they have a high success rate and fewer complications.

Keywords: Unsafe abortion, Medical abortion, MTP pills

INTRODUCTION

The abortion word is derived from the Latin word *aboriri* to miscarry.¹ Abortion is removal or expulsion of an embryo or fetus from the uterus resulting in or caused by its death. This can occur spontaneously or accidentally as with a miscarriage or artificially induced by medical, surgical or other means.² The national centre for health statistics, the centres for disease control and prevention (CDC), and the world health organisation (WHO) define abortion as pregnancy termination before 20 week's gestation or with a foetus born weighing less than 500 gm.¹

According to WHO, women continue to seek and receive abortion services from unqualified providers that lack awareness of legality of abortion services; limited access

to safe services; poor quality of services and gender roles and norms, lead women to seek services from untrained providers.³

Worldwide, around 73 million women have abortion each year, and about half of these procedures are illegal and considered "unsafe" by WHO.⁴

The WHO describes an unsafe abortion as "a procedure for terminating an unintended pregnancy either by individuals without the necessary skills or in an environment that does not conform to minimum medical standards, or both."⁵

Unsafe abortion is a preventable cause of maternal mortality.

Education regarding complications of unsafe abortion in women is critical for reducing unsafe abortion. Health education messages should be based on the incident and impact of unsafe abortion within communities. They should offer information on the legal status of abortion, how to prevent unwanted pregnancy, how to avoid unsafe abortion and how to recognize and seek appropriate treatment for abortion complication.³ Limited and inaccurate abortion information, particularly in developing nations, has sparked speculation about the prevalence of abortion in these areas.

A major reason that women choose to have abortions is unintended pregnancy. Lack of access to sex education and to contraception is a known cause of unintended pregnancy.⁶ Increasing access to these two entities can alleviate unintended pregnancies and reduce abortion rates.

However, no contraceptive method can provide 100% prevention of pregnancy, but fortunately abortions performed in a controlled environment by well-trained medical professionals are extremely safe.⁷

METHODS

This retrospective, analytical study was conducted at the department of obstetrics and gynaecology, at Smt. SCL municipal general hospital, Ahmedabad between December 2022 to December 2023. The sample size consisted of 50 cases, selected through convenient non-probable sampling. Data entry was performed using MS excel software. The analyzed data were subsequently compared with findings from various studies and subjected to discussion.

Selection of patients

Group A-Patients who came to outpatient department/emergency labour room after consuming abortifacient drugs (either over the counter or by advice of general practitioners/ other pathy practitioners).

Group B-Patients seeking MTP, presenting in outpatient department at our institute were selected for medical methods of abortion according to MoH and FW guidelines.

In group B medical abortion under guidance, the inclusion criteria are as follows: healthy women with less than 9 weeks of gestation, regardless of parity, and confirmation of intrauterine live pregnancy through ultrasound.

Gestation exceeding 9 weeks, ectopic/molar pregnancy, threatened/missed abortion, uterine anomalies and presence of medical disorders were excluded from study.

RESULTS

In our study of 50 patients, 30 patients were taken from self-attempted abortion while 20 patients were given MTP

kit at our institute after investigations. Majority of patients (40%) enrolled under self-attempted abortion were from 26 to 30 years of age group.

Table 1: Parity.

Parity	Self-attempted abortion, (n=30)	Medical abortion under guidance, (n=20)
	N (%)	N (%)
Nullipara	00 (0)	01 (5)
Primipara	9 (30)	04 (20)
Second para	12 (40)	9 (45)
Third para	06 (20)	05 (25)
Grand multipara	03 (10)	01 (5)
Total	30 (100)	20 (100)

In medical abortion under guidance, the majority of patients (45%) were second para as shown in Table 1.

Table 2: Period of gestation.

Period of gestation	Self-attempted abortions, (n=30)	Medical abortion under guidance, (n=20)
	N (%)	N (%)
<7 weeks	15 (50)	14 (70)
7 weeks 1 day-9 weeks	06 (20)	6 (30)
9 weeks 1 day-12 weeks	04 (13.33)	-
>12 weeks	05 (16.66)	-
Total	30 (100)	20 (100)

In the present study, 25 women (83.33%) attempted abortion in the first trimester while 16.66% women attempted termination of pregnancy after 12 weeks of gestation as shown in Table 2.

Majority of patients (60%) took MTP pills from medical store, 10% took I-pills as an abortifacient.

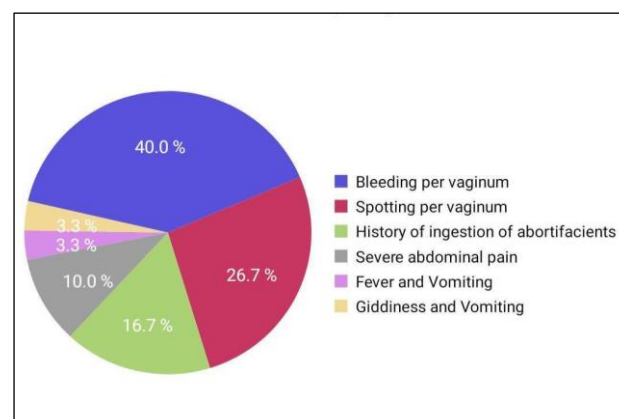


Figure 1: Presenting complains of patients with self-attempted abortions, (n=30).

Majority of patients presented with complain of bleeding per-vaginum within a few days after ingestion of abortifacient. As shown in Figure 1, 5 patients (16.7%) came without any complains only giving a history of ingestion of abortifacient.

Majority of patients (56.66%) had incomplete abortion.

Two patients had complete abortion.

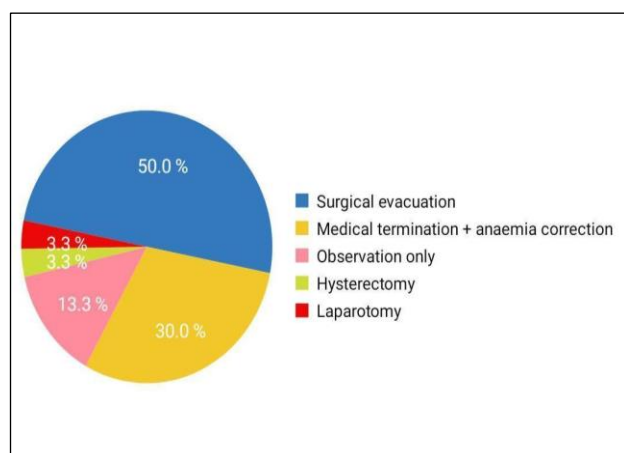


Figure 2: Management of patients presented with self-attempted abortion, (n=30).

Out of 30 cases of self-attempted abortion, 15 cases (50.00%) required surgical evacuation while 1 patient (3.3%) required laparotomy for ruptured ectopic pregnancy shown in Figure 2.

Table 3: Complications in patients with self-attempted abortion.

Complications	Self-attempted abortions, (n=30) N (%)
Moderate to severe anaemia	09 (30)
septicaemia	01 (03.33)
Ruptured tubal ectopic pregnancy	01 (03.33)

Among total cases of self-attempted abortion, 36.66% cases had complications like moderate to severe anaemia (30%), septicaemia (03.33%) and ruptured tubal ectopic pregnancy (03.33%) as shown in Table 3.

Table 4: Adverse effects of drug in patients underwent medical abortion under guidance

Adverse effects of drug	Medical abortion under guidance, (n=20) N (%)
Abdominal pain	16 (80)
Vomiting	02 (10)
Fever with chills	01 (5)

As per Table 4, 80% cases had abdominal pain, 10% cases had vomiting and 5% cases had complained of fever with chills. Adverse effects of drug in patients underwent medical abortion under guidance.

DISCUSSION

This is a study of medical methods of abortion and self-attempted abortion conducted at tertiary care hospital, Ahmedabad over a period of 1 year.

In our study of 50 patients, 30 patients came with self-attempted abortion and 20 patients underwent medical abortion under guidance after investigations. In present study, majority of women (40%) came with self-attempted abortion are from age group 26 to 30 years while the majority of women (35%) willing MTP under guidance belongs to the age group 21-25 years, which is comparable to Yadav et al study.⁸

In the present study, the majority of cases (40%) with self-attempted abortion were second para while in study of Yadav et al primipara, second para and third para patients were 32.85%, 31.43%, and 30% respectively.⁸ In medical abortion under guidance, the majority of patients (45%) were second para; which is comparable to Yadav et al study, in which 45% patients were second para.⁸

In the present study, 25 women (83.33%) attempted abortion in the first trimester while in study by Rahim et al 92% self-abortions were carried out in the first trimester.⁹ 16.66% women attempted termination of pregnancy after 12 weeks of gestation. The 70% patients willing for medical abortion came within 7 weeks of pregnancy.

Out of 30 patients, 18 patients (60%) came with self-ingestion of confirmed MTP pills from the medical store. 3 patients (10%) took I-pills as an abortifacient while 9 patients came with ingestion of an unknown drug for self-abortion.

Majority of patients (40%) presented with complain of bleeding per vaginum within few days after ingestion of abortifacient. In Mishra et al 74% cases had presenting complain of bleeding per vaginum.¹⁰ The 26.7% patients had complain of spotting per-vaginum only. Five patients (16.7%) came without any complains; only giving a history of ingestion of abortifacient while in Mishra et al study 23.14% cases came without any complains; only giving history of ingestion of abortifacient. One patient presented with complain of giddiness, vomiting and severe abdominal pain, which was diagnosed with ruptured ectopic pregnancy with moderate hemoperitoneum. The 3.3% cases in present study and 8.3% cases in Mishra et al study presented with complain of fever.¹⁰

Majority of patients (56.66%) had incomplete abortion after self-attempted abortion. Two patients had complete abortion. The 13.33% of cases had missed abortion. One patient had ruptured ectopic pregnancy, reason being

attempt of abortion without confirming Intrauterine pregnancy. In a study by Mishra et al 68.5% cases showed incomplete abortion, while 9.7% cases had missed abortion and 1.8% cases had ruptured ectopic pregnancy.¹⁰

The 50.00% cases required surgical evacuation after self-attempted abortion, which is comparable to Armo et al study; in which 50.25% cases required surgical evacuation.¹¹ 30% cases in present study and 27.75% cases in Armo et al study managed with medical interventions and blood transfusion. 03.3% cases in present study and 0.50% cases in Armo et al study required laparotomy for ruptured ectopic pregnancy. 1 case (03.3%) in the present study and 0.75% cases in the Armo et al study required hysterotomy.

In 30 patients of self-attempted abortion, 17 patients (56.66%) required surgical intervention for further management, 43.33% cases managed conservatively. Out of 17 patients, 15 patients required surgical evacuation, 1 patient needed laparotomy for ruptured ectopic pregnancy and 1 patient needed hysterotomy for failure of self-attempted abortion at 16 weeks of gestation. Among cases of medical abortion under guidance, the complete abortion rate was 90%, while 10% cases required surgical intervention, the reason being failure of medical abortion. This is comparable to Hertzen et al study, in which the complete abortion rate was 93.5%.¹² Among total cases of self-attempted abortion, 09 patients (30%) had excessive blood loss and required one or more blood transfusions while in study by Armo et al 35.25% patients were diagnosed with moderate to severe anaemia after self-attempted abortion, required blood transfusion.¹¹ Not a single patient required blood transfusion among 20 patients with medical abortion under guidance.

Among total cases of self-attempted abortion, 30% patients in present study and 32.25% patients in study by Armo et al diagnosed with moderate to severe anaemia due to excessive blood loss requiring blood transfusion. 03.33% cases had septicaemia in present study which is comparable to Armo et al study 2.75%. the 03.33% cases in present study and 0.50% cases in study by Armo et al had ruptured ectopic pregnancy.

After observation of patients with medical abortion under guidance, 80% cases had abdominal pain, 10% cases had vomiting and 5% cases had complained of fever with chills.

Limitations

Although the sample size of this retrospective study is limited, the issue of self-medication with abortion drugs and its repercussions are of substantial magnitude. Large-scale studies involving governmental organizations are necessary to accurately evaluate the prevailing scenario. Factors such as financial constraints for travel or abortion expenses, the necessity to maintain secrecy about the abortion, and fear of violence impacting their welfare were

found to be significantly linked with attempts at self-attempted abortion.

CONCLUSION

Supervised first-trimester medical abortions are safer and more effective, yet many in India resort to unsupervised methods due to media exposure and over-the-counter availability. Urgent legislation is needed to regulate the sale of abortion drugs, ensuring they are accessible only through healthcare facilities to reduce maternal mortality. Simultaneously, there's a crucial need for widespread contraception education to prevent unwanted pregnancies, lowering the demand for abortions and associated health risks. Strengthening national health programs at the grassroots level can provide proper medical guidance, particularly for the economically disadvantaged and less educated, preventing reliance on untrained practitioners and quacks.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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