

Original Research Article

# SELF INDUCED ABORTION AMONG WOMEN ADMITTED IN A TERTIARY CARE CENTRE - A CROSS SECTIONAL STUDY

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## ABSTRACT

**Background:** While medically supervised abortion adhering to guidelines boasts a success rate of 92-97%, the widespread availability of abortion pills over the counter has led to rampant self-administration, resulting in frequent complications. Despite the perception of unsupervised medical abortion as unsafe, many women utilize it for pregnancy termination and birth spacing. **Aim of the Study:** The aim of this study was to study the implications of self-administration of abortion pills by pregnant women.

**Materials and Methods:** Retrospective cross sectional study done in Government Doon Medical College & Hospital between the period of August 2022- July 2023. Case sheets were analysed to obtain data regarding self-administration of abortion pills and complications secondary to its administration. The following data were collected- Age, marital status, parity, duration of pregnancy as perceived by the women, confirmation of pregnancy, duration between pill intake and visit to hospital, whether any intervention done elsewhere, any known medical or surgical complications, Hb level on admission, whether patient was in shock, USG findings, evidence of sepsis, blood transfusion, treatment given and duration of hospital stay. Descriptive analysis of the collected data was done.

**Results:** Among the 148 cases of abortion in the study period, 75 patients had self-administered abortion pills. Among these 75 patients 26.6% had consumed abortion pills after the approved time period of 63 days of which 20% had consumed pills after 12 weeks of gestation. The most common presentation was excessive bleeding (73.33%) Severe anaemia was found in 37.33% of the patients and 8% of patients presented with shock. **The outcome was as follows:** 66.66% of the patients were found to have incomplete abortion, 13.33% had failed abortion and 5.22% of patients had incomplete abortion with sepsis. Surgical evacuation was performed in 33.33% of the patients whereas 46.66% of the patients required surgical evacuation with blood transfusion. Medical methods were used in 9.33% of the patients whereas 6.66% required transfusion along with medical methods.

**Conclusion:** The study sheds light on the increasing trend of self-administered MTP pill intake among women and underscores the importance of ensuring adequate education, counseling, and support for safe and effective self-administration practices. Further research is warranted to explore the long-term outcomes and implications of self-administered MTP pill intake in diverse healthcare settings.

**Keywords:** Medical termination of pregnancy, Maternal mortality, abortion, complications.

## INTRODUCTION

Every year, thousands of women worldwide lose their lives due to unsafe medical abortion. The issue of self-administered Medical Termination of Pregnancy (MTP) pills has garnered attention recently, prompting discussions about safety, effectiveness, and potential consequences. Over-the-counter availability of MTP kits remains a significant public health challenge globally, especially in developing countries where inadequate medical services and lack of professional oversight contribute to its widespread practice. Annually, approximately 19-20 million women face unsafe abortions globally, with developing countries accounting for 18.5 million.<sup>[1]</sup> In India, the annual abortion figure is 6.4 million, with unsafe abortions comprising 56%, contributing to 8-20% of all maternal deaths.<sup>[1]</sup>

Many cases of self-administered MTP pills go unreported due to widespread and careless usage, resulting in a significant underestimation of the actual number of these abortions. Despite the legalisation of abortions in India, many individuals still seek services from unauthorized sources. Despite the Government of India providing free and readily available comprehensive abortion care services, numerous women fail to access them. It is observed that many women obtain abortion pills over the counter without prior consultation with doctors, leading to serious consequences, including death. Self-administration of abortion pills is prevalent across the country, and complications frequently arise due to the easy availability of these drugs. Medical abortion using Mifepristone and Misoprostol is a safe option for terminating pregnancy, with a success rate of 92-97% when supervised by medical professionals.<sup>[2]</sup> This method is restricted to the early first trimester (up to 63 days), with recommended dosages of 200 mg of Mifepristone orally, followed by 400 mcg of Misoprostol vaginally or orally within 48 hours for pregnancies under 49 days. For pregnancies between 49-63 days, the recommended regimen is 200 mg of Mifepristone orally, followed by 800 mcg of Misoprostol vaginally or orally after 48 hours.<sup>[3,4]</sup> The MTP Act of India stipulates that abortion pills can only be prescribed by Registered Medical Practitioners and not by non-allopathic doctors or pharmacists. WHO recommends that providers prescribing abortion pills should have access to a backup healthcare facility in case of incomplete or failed abortions.<sup>[5]</sup>

While the scientific foundation of MTP pill administration is well-established, self-administration without medical oversight introduces risks and uncertainties. Access to professional guidance, legal awareness, and comprehensive reproductive healthcare services are paramount for safeguarding the physical and emotional well-being of individuals navigating the complexities of abortion. A commitment to advancing reproductive

healthcare ensures that choices are informed, safe, and respectful of individual autonomy.

This retrospective cross sectional study was carried out in Government Doon Medical College and Hospital to study the prevalence, demographic profile and outcome of self-administration of abortion pills by pregnant women to induce abortion.

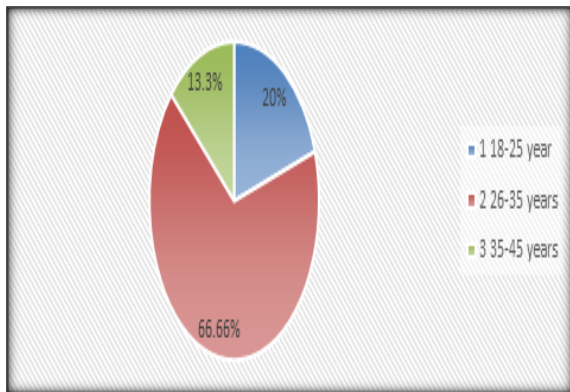
## MATERIAL AND METHODS

This study was a retrospective cross-sectional study carried out in Government Doon Medical College & Hospital after permission from the Institutional Ethical Committee. All case records with the diagnosis of abortion whether spontaneous or induced were analysed between the period of August 2022– July 2023, from labour room registers, OT registers, admission discharge registers and Antenatal OPD registers. Findings of history i.e. Age, marital status, parity, religion, education, socioeconomic status, previous use of MTP pill, recommendation for self-administration, reason for self-administration, duration of pregnancy as perceived by the women, confirmation of pregnancy, duration between pill intake and visit to hospital, whether any intervention done elsewhere, any known medical or surgical complications, Hb level on admission, whether patient was in shock, USG findings of incomplete abortion, complete or failed abortion, ectopic pregnancy, evidence of sepsis like fever and tenderness on pelvic examination, blood transfusion, treatment given, data regarding ICU admission and blood and blood products transfusion were noted. All interventions and complications encountered were tabulated. Management was based on whether patient was bleeding profusely, when surgical evacuation, laparoscopy / Laparotomy was performed whereas when bleeding was less and the amount of retained products as assessed by ultrasound was minimal medical methods were used.

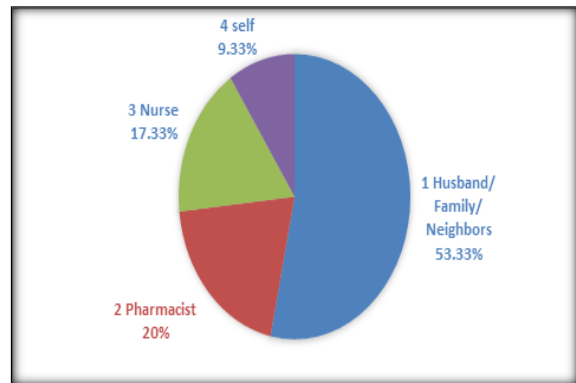
## RESULTS

The total number of abortions in our institution including spontaneous and induced abortions between the period of August 2022 – July 2023 was 148 out of which 75 women had given a history of self-medication with abortion pills obtained without prior medical consultation. In our study we found that 74 women were married, 1 was unmarried. The youngest patient was 18 years old and the unmarried was 20 years old. Most of patients belonged to 26-35 years of age. 80% of the women belonged to rural population whereas 20% were from urban areas.

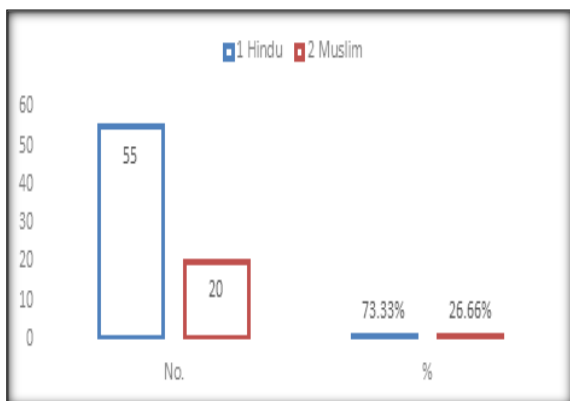
Demographic Profile of patients who had self-administered MTP pills-



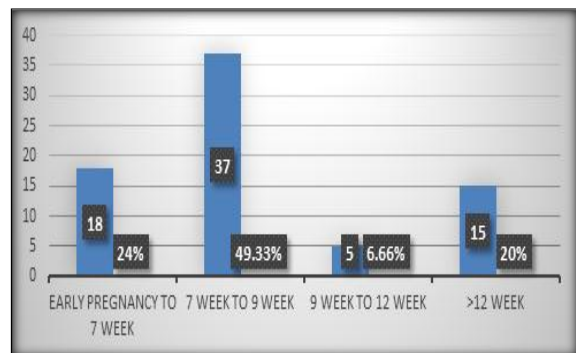
**Figure 1: Age group of patients who had self-administered MTP pill**



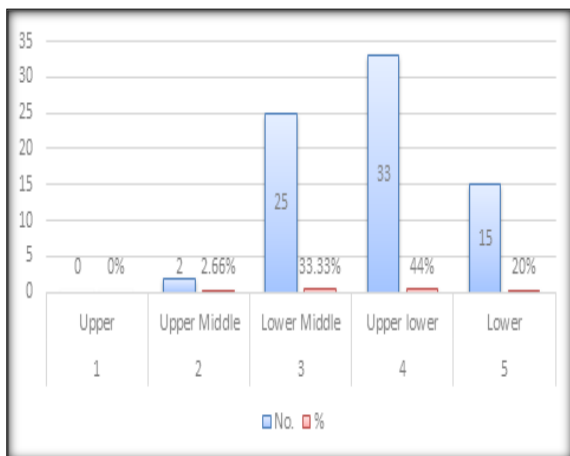
**Figure 4: Recommendation for self-administration of MTP pill was given by**



**Figure 2: Religion of patients who has self-administered MTP pill**



**Figure 5: Gestational age at time of consumption of MTP pill**



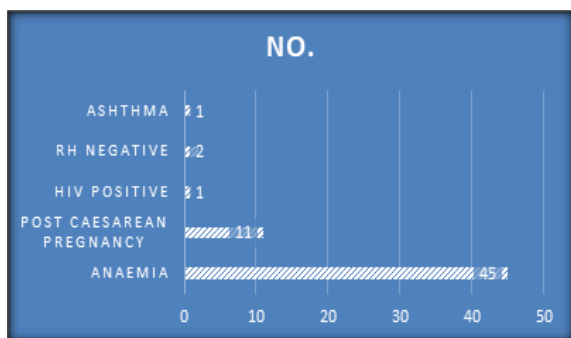
**Figure 3: Socio-economic status of patients who has self-administered MTP pill**

The finding that 26.66% of patients had consumed abortion pills after 9 weeks of pregnancy is significant, as medical abortion is permitted only upto 63 days of gestation. The maximum period of gestation of self-administration was done at 20 weeks of pregnancy and this patient was G3P2L2 with previous 2 LSCS with HIV positive with sepsis who presented with shock and scar dehiscence in ultrasound. She underwent Exploratory Laparotomy and went to ICU, where she was kept on inotropes. She developed wound dehiscence on post-operative day 10 which was further managed by dressing and resuturing and patient got discharged on post-operative day 25 in satisfactory condition.

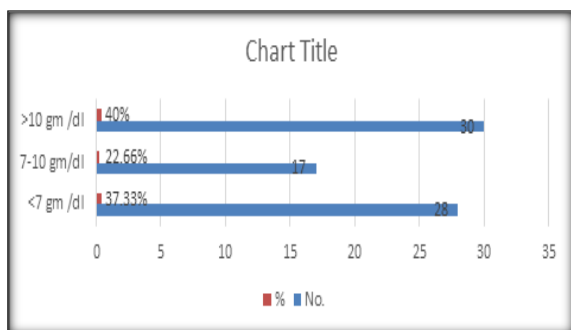
Pregnancy was confirmed by 75 women with urine pregnancy test and no woman had undergone Ultrasound along with UPT before taking MTP pills.

One patient had an intervention in the form of D and C elsewhere but still presented with irregular bleeding and diagnosed to have incomplete abortion with septic shock with anuria and shifted to ICU, kept on inotropes and managed by ICU team. She was discharged later in satisfactory condition.

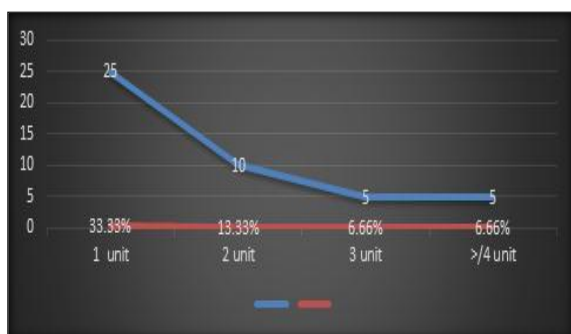
Among the 75 patients at least 80% had some associated medical or surgical disorders the details of which were obtained from the past history and from investigations.



**Figure 6: Past medical and surgical history of patients who had self-administered MTP pills**

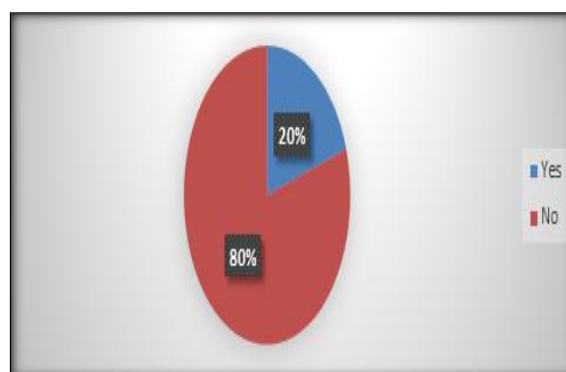


**Figure 7: The hemoglobin level on admission**



**Figure 8: Requirement of blood and blood products**

Among 60% of the patients who required blood transfusion 5 patients required more than 4 units of blood and blood products, 5 required 3 units of blood and blood products, 10 patients were given 2 unit of packed cells, 25 patients were given 1 unit of packed cells. Incomplete abortion with features of associated sepsis was found in 5.22% of the patients. Patients who presented with profuse bleeding were managed by immediate surgical evacuation whereas when bleeding was minimal and with the USG showing minimal products of conception vaginal misoprostol was used to complete the procedure. 20% of patients needed ICU admission and 4 patients of these 20% needed inotropes in ICU. Features of hemorrhagic shock were present and resuscitative measures were required in 13% of the patients.



**Figure 9 : Need of ICU care in patients who self-administered MTP pills**

**Table 1: Education of patients who has self-administered MTP pills**

S.No.	Education	No.	%
1.	Illiterate	20	26.66%
2.	Primary	30	40%
3.	High school	12	16%
4.	Intermediate	8	10.66%
5.	Graduation and Post-graduation	5	6.66%

**Table 2: Previous use of MTP pills by patients who had self-administered MTP pills**

S.No.	Previous MTP pill usage	No.	%
1.	Yes	10	13.33%
2.	No	65	86.66%

**Table 3: Reason for self-medication of MTP pill**

S.No.	Reason for self-medication	No.	%
1.	Time Saving	35	46.66%
2.	Easily available and affordability of MTP pill	20	26.66%
3.	Poor public health services nearby	10	13.33%
4.	High cost of visiting doctor	5	6.66%
5.	Not taken it seriously	5	6.66%

**Table 4: The percentage of parous women who had self-administered abortion pills was 86.66% and 13.33 % were primigravida**

S.No.	Parity	No.	%
1.	Primigravida	10	13.33%
2.	Gravida 2	20	26.66%
3.	Gravida 3	30	40%
4.	>/Gravida 3	15	20%

**Table 5: The interval between pill intake and hospital visit**

S.No.	No. Of days since pill consumption to hospital visit.	No.(75)	%
1.	1 -5	30	40%
2.	6-10	25	33.33%
3.	11-15	10	13.33%
4.	16-30	08	10.66%
5.	>30	2	2.66%

**Table 6: The complaints with which women came after self-administration of abortion pills**

S.No.	Complaints	No.	%
1.	Excessive bleeding per vaginum	55	73.33%
2.	Irregular bleeding per vaginum	9	12%
3.	Bleeding with abdominal pain	4	5.33%
4.	Products not expelled	3	4%
5.	Abdominal pain	2	2.66%
6.	Abdominal pain with irregular bleeding with fever	2	2.66%

**Table 7: The outcome following consumption of abortion pills is shown below**

S.No.	Outcome	No.	%
1.	Incomplete abortion	50	66.66%
2.	Incomplete abortion with shock	6	8%
3.	Incomplete abortion with sepsis	4	5.22%
4.	Complete abortion	2	2.66%
5.	Failed abortion	10	13.33%
6.	Ectopic Pregnancy	3	4%

**Table 8: The management of complications in these patients who had self-administered abortion pills is shown below**

S.No.	Management	No.	%
1.	Medical methods only(Misoprostol repeated)	7	9.33%
2.	Medical method and blood transfusion	5	6.66%
3.	Suction & Evacuation only	25	33.33%
4.	Suction & Evacuation and blood transfusion	35	46.66%
5.	Laparoscopy/Laparotomy	3	4%

**Table 9: Distribution of participants according to their awareness about contraception**

S.No.	Contraceptive awareness	No.	%
1.	Yes	65	86.66%
2.	No	10	13.33%

## DISCUSSION

The self-administration of MTP pills has become a noteworthy phenomenon in India, reflecting changes in healthcare access, awareness, and societal dynamics. This study is conducted within the Indian landscape to provide an overview of the prevalence, experiences, and outcomes associated with self-administered MTP pills.

Despite the legalisation of Medical Termination of Pregnancy (MTP) through the MTP Act in 1971 to curb unsafe abortions and reduce maternal deaths, 8% of maternal deaths in India are still attributed to unsafe abortions.<sup>[6]</sup> Shockingly, 75 (50.67%) of patients seeking abortions at our hospital during the

study period admitted to self-administering abortion pills, disregarding clear guidelines mandating medical supervision for their usage. Bajwa et al. studied 260 patients over 2 years, while Thacker et al. focused on 37 women over one year.<sup>[7,8]</sup>

The majority of patients were aged 26-35, with 86.66% being second or third-time mothers. Alarmingly, despite being aware of contraceptive measures, 90.52% did not utilize any method of contraception regularly. Chief complaints included bleeding or spotting per vaginum in 64% of cases, with 60% requiring instrumental evacuation, while in Thacker et al 89.1% patients presented with bleeding per vaginum and 75.6% needed instrumental evacuation. Ectopic pregnancies

accounted for 4% in our study, 5.4% in Thacker et al and 1.15% in Bajwa et al.<sup>[7,8]</sup>

1.33% were unmarried and reason of not visiting a doctor could be fear of social dishonor. Patients who consumed MTP pills after 12 weeks of gestation was 20%. Studies indicate that complications of second trimester is high with increased risk of surgical evacuation and infection and prolonged hospital stay.<sup>[9]</sup> We found that 13.33% were failed and 79.88% were incomplete, 4% landed up in laparotomies.

The duration of bleeding post-medical abortions varied widely, lasting between 1 to 54 days with a median of 7 days. Higher gestational age correlated with prolonged bleeding.<sup>[10]</sup> Due to inadequate pre-abortion counselling, many women (40%) visited the hospital within 1-5 days, while some delayed seeking medical attention for over 15 days, experiencing prolonged bleeding and complications. A minimal percentage (1.33%) experienced uterine rupture, with negligible risk during first-trimester medical abortions but a 0.28% risk in the second trimester.<sup>[11]</sup> In our study, 13% of patients suffered reversible hemorrhagic shock, contrasting with 5.4% reported by Thacker et al.

The prevalence of anemia among pregnant women in our country is alarmingly high at 87%, with an estimated 22,000 maternal deaths annually attributed to anemia-related complications. Self-medication of abortion pills in severely anemic women could prove fatal. Our study found that 37.33% of women were severely anemic and 22.66% had moderate anemia upon presentation. Furthermore, 13.32% required more than 2 units of blood transfusion. Similarly, another study reported 13.5% severe anemia and 56.7% moderate anemia among self-medicated abortion pill users, with two cases presenting in shock.<sup>[13]</sup>

Comparative studies between supervised medical abortion and self-administration revealed higher rates of serious complications such as anemia, sepsis, and incomplete abortion among self-administered cases.<sup>[14]</sup> In our study, 5.22% of patients exhibited features of incomplete abortion and sepsis, necessitating surgical evacuation and antibiotics.

Moreover, we had coexistent medical disorders like Anaemia, post caesarean pregnancy, HIV positive and bronchial asthma in patients which would make the whole process further unsafe and highly risky.

There are several factors influencing the decision of pregnant women to self-administer MTP pills. These include barriers to accessing formal healthcare, social stigma, legal considerations, and varying levels of awareness about the process. Understanding these factors is crucial for designing targeted interventions and improving reproductive healthcare accessibility.

## CONCLUSION

There is need to implement strict policy and practice in the realm of reproductive healthcare. Access to abortion pills for the public should be only through centres approved for MTP. Society needs to be educated for risk of self-intake of abortion pills and their dangerous consequences. Medical termination of pregnancy should be done under strict vigilance. Insights gained from these studies can help in the development of guidelines, educational campaigns, and interventions aimed at promoting safe and informed decision-making regarding MTP pill intake.

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**Conflict of interest:** None declared

**Ethical approved:** The study was approved by the institutional ethics committee.

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