

DOI: <https://dx.doi.org/10.18203/2320-1770.ijrcog20220914>

Original Research Article

Evaluating complications of self-intake of abortion pills among reproductive age group women

Diptika Dodiya, Maitri Shah*, Neethi Nagdev

Department of Obstetrics and Gynaecology, Medical College Baroda, Gujarat, India

Received: 25 February 2022

Accepted: 15 March 2022

*Correspondence:

Dr. Maitri Shah,

E-mail: maitrishah.gynaec@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Abortion is termination of the pregnancy before the period of viability. Induced abortion in most of the cases, is an outcome of unwanted pregnancy. Unsafe abortion is “The termination of unintended pregnancy either by persons lacking the skills or lacking minimum medical standards or both.” and it is strongly associated with Complications. The objective of the study was to evaluate different types of complications (incomplete abortion, failed abortion, septic abortion, ectopic pregnancy) among women with self-intake of abortion pill among women of reproductive age group.

Methods: 70 reproductive age group women with history of self-intake of abortion pills within a period of last one month were included in the study. Socio demographic characteristics, obstetric and menstrual history of these women was recorded. This was followed by diagnosis with help of clinical and transvaginal sonography of these women. All of them were managed according to their diagnosis. Their reply was recorded in pre structured performa.

Results: Majority (70%) presented with incomplete abortion requiring surgical evacuation. Anemia was most common associated co-morbidity in women and 17% women required blood transfusions. Four percentage women presented with life threatening shock. Sepsis was noted in 3% of women.

Conclusions: Incomplete abortion was the major complication after self-intake of abortion pills which had resulted into blood transfusion in 17% of the cases.

Keywords: Self intake of abortion pills, Reproductive age group women, Complications

INTRODUCTION

Abortion is termination of the pregnancy before the period of viability. Induced abortion in most of the cases, is an outcome of unwanted pregnancy. In India, abortion facility is available legally under MTP act, 1971. Despite of this, women who want to terminate a pregnancy, often ignore the legal status of abortions and have unsafe abortions.¹

When person perform her own abortion out of any clinical supervision, it is known as unsafe or self-induced abortion. This includes ingesting herbs and using self-abortion pills. It is defined by WHO as -The termination of unintended

pregnancy either by persons lacking the skills or lacking minimum medical standards or both.²

Every year, worldwide, about 42 million women with unwanted pregnancies choose abortion, and nearly half of these procedures, 20 million, are unsafe. Some 68,000 women die due to unsafe abortion annually, making it one of the leading causes of maternal mortality (13%).³

The Central Drug Standard Control Organisation, Directorate General of Health approved a combi-pack that included 1 tablet of mifepristone 200mg and 4 tablets of misoprostol 200mcg each for the medical termination of

intrauterine pregnancy (MTP) for up to 63 days gestation or 9 weeks.⁴

In a recent amendment to the MTP law, upper gestation limit has been enhanced from 20 to 24 weeks for specially defined categories of women. Opinion of only one provider will be required up to 20 weeks of gestation and of two providers for termination of pregnancy of 20-24 weeks of gestation.⁵

Unsupervised use of medical abortion pills was associated with many complications like higher chances of incomplete abortion, failed abortion, missed abortion, severe anemia, haemorrhagic shock, sepsis, ectopic pregnancy and rupture uterus necessitating blood transfusion.⁶

Safe abortion services are underutilized due to numerous individual and community-level factors, such as lack of awareness, ignorance, lack of pre-abortion counselling.⁷

In spite of guidelines and recommendations, self-intake of these drugs by pregnant women without any medical consultation or supervision has become highly prevalent due to easy availability of these pills. Many women depend on medical abortion and consider it as a method of spacing between pregnancies.⁸

Being a tertiary care centre, even today we receive many women with history of self-intake of abortion pills leading to many complications resulting in maternal morbidity and mortality. So, the present study was undertaken to evaluate complications of self-intake of abortion pills and reasons behind it among reproductive age group women.

METHODS

The present study was a cross sectional study conducted in Tertiary care hospital in central government of Gujarat. The study protocols were approved by institutional Ethics Committee for human research (IECHR), of the same institute. The study was carried out in obstetrics and gynaecology department of Tertiary care hospital in central government of Gujarat from December 2020 to September 2021.

Study Population

Women who had visited outdoor department or labour room of hospital and having a history of self-intake of abortion pills (within a period of last one month) were considered for possible recruitment in the present study. Those women who were willing to give informed consent and were fulfilling inclusion and exclusion criteria were recruited in the study.

Inclusion criteria

Women belong to reproductive age group and women who had taken abortion pills within a period of last one month.

Exclusion criteria

Who have been prescribed abortion pills in accordance with MTP law.

Sampling and sample size

According to the Departmental statistics of our institute, approximately 7 women present to us with history of self-intake of abortion pills in a month. Accordingly, the sample size of 70 was considered in the study as the study was to be completed in time bound period of 10 months.

All reproductive age group women with history of self-intake of abortion pills within a period of last one month and presenting to Gynecology OPD or labour room were included in the study.

They were included in the study after written informed consent. The following data was collected. Age, marital status, parity, duration of pregnancy as perceived by the women, History regarding previous pregnancies, confirmation of pregnancy, duration between pill intake and visit to hospital, whether any intervention done elsewhere, any known medical or surgical complications. They were also asked about onset of their complaints in reference to the time when they took abortion pills. Obstetric history, menstrual history and significant past history were be recorded.

On admission, detailed general, systemic and obstetric examination including per abdomen, per speculum and per vaginal examination was carried out and routine investigations were done in all women. Degree of pallor, rise in body temperature, signs of shock and presence of acute abdomen noted.

USG findings of incomplete abortion, complete or failed abortion, evidence of sepsis like fever and tenderness on pelvic examination, blood transfusion, treatment given and duration of hospital stay were noted. Management was based on whether patient was bleeding profusely, when surgical evacuation was performed whereas when bleeding was less and the amount of retained products as assessed by ultrasound was minimal medical methods were used.

Presence of retained products, incomplete abortion and ruptured ectopic pregnancy was documented after ultrasound examination.

Management methods of all the complications, ICU admissions, need for blood and blood product transfusions and development of complications such as shock, ruptured ectopic pregnancy and infection were noted. They were interviewed and their reply was recorded in a pre-structured proforma. While managing these patients we also made them aware of abortion services in the health centres along with various contraceptive methods available. On discharge, they were offered cafeteria

approach for contraceptive practices after ruling out all the queries.

Statistical analysis

Data was collected from individual proforma and entered into an excel file which was kept password protected for data safety. Statistical analysis was done using descriptive statistics like frequency and percentage. Appropriate statistical analytical tools like MS Excel and Statistical Package for the Social Sciences (SPSS) version 20, were used for data analysis and interpretation. Fisher exact probability test was applied to compare percentages for categorical data between two groups. For statistical significance, p value of less than 0.05 was considered as significant.

RESULTS

The study was conducted in Tertiary care hospital in central government of Gujarat. 70 women with self-intake of abortion pill were included in the study.

A careful history, general examination and obstetric examination were carried out and relevant findings were noted and results are as follows.

Table 1: Socio-demographic characteristics of the women.

Socio-demographic profile	Category	Number	Percentage
Age (years)	21 to 25	15	21.4%
	26 to 30	51	72.9%
	31 to 35	4	5.7%
Residence	Urban	51	72.9%
	Rural	19	27.1%
Socioeconomic status	Lower	47	67.1%
	Middle	23	32.9%
Religion	Hindu	40	57.1%
	Muslim	26	37.1%
	Others	4	5.7%
Gravida status	Primi	5	7.1%
	Multi	65	92.9%
Previous uterus Scar	0	50	71.4%
	1	12	17.1%
	2	08	11.4%

Table 2: Presenting symptoms of the women.

Symptoms	Numbers	Percentage
Fever	2	2.9%
Continuous bleeding per vaginum	58	82.9%
Abdominal pain	34	48.6%
Foul smelling discharge	2	2.9%
Continue pregnancy	7	10.0%

The socio-demographic profile of the women. Majority of the women (72.9%) were between 26 to 30 years of age group. Most of the women (92.9%) were multi gravida. Previous two uterus scar was present in 11.4% of the women, one uterus scar was present in 17.1% of the women and uterus scar was not found in majority of the women (71.4%) (Table 1).

Table 3: Diagnosis at time of admission.

Diagnosis at time of admission	Numbers	Percentage
Incomplete abortion	43	61.4%
Complete abortion	11	15.7%
Failed abortion	11	15.7%
Sepsis	02	2.8%
Shock	03	4.2%
Ectopic pregnancy	02	2.8%

Most common presenting symptom was continuous bleeding per vaginum (82.9%) followed by abdominal pain (48.6%), continue pregnancy (10%), fever (2.9%) and foul-smelling discharge (2.9%) among women with self-intake of abortion pills (Table 2).

Out of all womens 17% of the women were severe anemic and required blood transfusion.

In this study majority of women (61.4%) had incomplete abortion required suction and evacuation, while rare outcome present was sepsis (2.8%), shock (4.2%) and ectopic pregnancy required laparotomy (2.8%). (Table 3)

In case of self-intake of abortion pills these 3 factors (gravida status, previous uterus scar and advance gestational age) inversely correlated with completeness of abortion. (Table 4)

DISCUSSION

This study had been conducted in Tertiary care hospital in central government of Gujarat.

The mean age of women with history of self-intake of abortion pills in present study was 26 years which shows that predominantly young women in reproductive age group are at risk of complications arising out of it. National Institute for health and Welfare in 2009 found that most women seeking abortion are younger than 25 years of age.⁹

In present study, most of the women belonged to urban area which might be due to easy access to abortion pills. We also found that self-intake of abortion pills was more among low socio-economic status women (47%) which might be because of their ignorance and unawareness.

In present study, 28% women had history of one or more prior caesarean sections.

Table 4: Association of Outcome with maternal characteristics.

Maternal characteristics		Outcome		Total	P value (Fisher exact test)
		Incomplete/failed abortion	Complete abortion		
Gravida status	Primi	2 (40%)	3 (60%)	5 (100%)	0.025
	Multi	57 (87.7%)	8 (12.3%)	65 (100%)	
Previous uterus scar	No	39 (78%)	11(22%)	50 (100%)	0.027
	Yes	20 (100%)	0 (0%)	20 (100%)	
Gestational age at pill intake	4-9 week	40 (78.4%)	11 (21.6%)	51 (100%)	0.029
	≥9-12 week	19 (100%)	0 (0%)	19 (100%)	

This category is more vulnerable to life threatening complications as there is high risk of scar rupture but in our study no women had major complication like scar rupture or scar pregnancy. In Bhalla et al study, 20% women had one or more uterus scar while in study by Potdar, incidence of uterine rupture of a previous caesarean section scar during medical abortion in early pregnancy was reported as 3 in 768.^{10,11}

In present study, most common presenting symptom was continuous bleeding per vaginum (83%) followed by abdominal pain (48%). Similar result was present in Sarojini et al study where bleeding per vagina was present in 69% followed by pain in abdomen in 25% of cases. Similar results were also reported by Thacker et al where 89% of women presented with bleeding per vaginum.^{12,13}

Based on clinical and ultrasonographic findings, incomplete abortion was seen in 61% of women, failed abortion and complete abortion in 15% each and 3% of women had come with features of sepsis. Similarly, Grossman et al interviewed 30 women in clinic waiting rooms who had attempted self-induction and only three had successful abortion.¹⁵ Similarly, in study by Bajwa et al, incomplete abortion was found in 41.5 % and failed abortion in 1.15%.so, Incomplete abortion with bleeding was most common presentation after unsupervised abortion pills.¹⁹

On presentation we found that 17% of women were severely anemic and 39% of women had moderate anaemia. Three women had presented with hemorrhagic shock requiring more than 2 units of blood transfusion. In a similar study by Rajal et al, 13.5% of their study group had severe anaemia and 56.7% had moderate anaemia and two women had presented in shock after self-administration of abortion pills.¹⁶

On the contrary, when abortion pills were given under supervision, both Richard et al and Deshpande et al reported very less or no requirement of blood transfusion.^{17,18}

In this study there were 2 cases of ruptured ectopic, both underwent laparotomy and partial salpingectomy. Both women had neither undergone clinical examination nor ultrasound evaluation before consuming the abortion pills. This clearly suggests importance of clinical examination. Similar result was found by Sarojini et al who also found cases of ruptured ectopic pregnancy in their study.¹²

Based on diagnosis, 70% of women required suction and evacuation to complete the abortion process. This is similar to studies by Bhalla et al where surgical curettage was required in 53% and 50% of the cases respectively.^{10,14}

We have found that there is a statistically significant association between these maternal characteristics namely gravida status, previous uterus scar and advance gestational age with completeness of abortion. All these three factors were inversely correlated with completeness of abortion. This association was not seen in any of the previous studies.

As it was time-based study, sample size was small. And as the present study was a hospital-based study, and reflects only the tip of the iceberg. Large scale studies are required to assess the burden of the problem in the society.

CONCLUSION

Incomplete abortion was the major complication after self-intake of abortion pills which had resulted into blood transfusion in 17% of the cases.

Recommendations

Further population-based studies with large sample size are recommended to evaluate the actual rate of complications and to assess reasons for self-intake of abortion pills. The results of which can be utilized by policy makers to strength then already existing MTP law.

Funding: No funding sources

Conflict of interest: None declared

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

REFERENCES

1. Cunningham FG, Leveno KJ, Bloom SL, Haulh JC, Gilstrap LC, Wenstrom KD, editors. *Abortion. Williams Textbook of Obstetrics*, 24th ed. New York: McGraw-Hill. 2014;215-35.
2. Moseson H. Self-managed abortion: A systematic scoping review, *Best Practice & Research Clinical Obstetrics and Gynaecology*. 2009;2(2):110-12.
3. Haddad LB, Nour NM. Unsafe abortion: unnecessary maternal mortality. *Reviews in obstetrics & gynecology*. 2009;2(2):122-6.
4. Jani PS. Use of MTP kit (Mifepristone and Misoprostol combination pack) for 1st trimester MTP (up to 63 days) at GMERS Dharpur, Patan, Gujarat, India. *Int J Reprod Contracept Obstet Gynecol*. 2018;7:3615-8.
5. Ministry of Health and Family Welfare Rajya Sabha passes The Medical Termination of Pregnancy (Amendment) Bill. 2021.
6. Giri A, Srivastav B, Sharma B. A Study of Complications following Self-administration with Medical Abortion Pills. *Journal of Obstetrics and Gynaecology*. 2015;11:12-4.
7. Hirve SS. Abortion law, policy and services in India: a critical review. *Reprod Health Matters*. 2004;12:114-21.
8. Nivedita K, Shanthini F. Is It Safe to Provide Abortion Pills over the Counter? A Study on Outcome Following Self-Medication with Abortion Pills. *J Clin Diagn Res*. 2015;9(1):QC01-4.
9. National Institute for Health and Welfare. Induced abortions 2008 -Preliminary data. 2009.
10. Bhalla S, Goyal LD, Bhalla S, Kaur B. Self administered medical abortion pills: evaluation of the clinical outcome and complications among women presenting with unsupervised pill intake to a tertiary care hospital in Malwa region of Punjab, India. *Int J Reprod Contracept Obstet Gynecol*. 2018;7:1537-42.
11. Potdar J. Medical abortion with mifepristone misoprostol in previous caesarean section, up to seven weeks gestation-a retrospective analysis of data. *Indian Obstet Gynaecol*. 2011;1(4):330-1.
12. Sarojini, Ashakiran TR, Bhanu BT, Radhika. Over-the-counter MTP Pills and Its Impact on Women's Health. *J Obstet Gynaecol India*. 2017;67(1):37-41.
13. Thaker RV, Deliwala KJ, Shah PT. Self medication of abortion pill: women's Health in Jeopardy. *NHL J Med Sci*. 2014;3(1):26-31.
14. Kumari R, Sharma A, Najam R, Singh S, Roy P. Mortality and morbidity associated with illegal use of abortion pill; a prospective study in tertiary care center. *Int J Res Med Sci*. 2016;4:2598-602.
15. Grossman D, Holt K, Pena M, Lara D, Veatch M. Self- induction of abortion among women in the United States. *Reproductive health matters*. 2010;18(36):136-46.
16. Rajal VT, Kruti JD, Parul TS. Self-medication of abortion pill: Women's health in Jeopardy. *NHLJMS*. 2014;3:26-31.
17. Hausknecht R. Mifepristone and Misoprostol for early medical abortion: 18 months experience in United States. *Contraception*. 2003;67:463-5.
18. Deshpande S, Yelikar K, Deshmukh A. Comparative study of medical abortion by Mifepristone with vaginal Misoprostol in women <49 days versus 50-63 days of amenorrhoea. *J Obstet Gynecol India*. 2010;60(5):403-7.
19. Bajwa SK, Bajwa SS, Ghai GK, Singh N, Singh A, Goraya SPS. Medical abortion: is it a blessing or curse for the developing nations? *Sri Lanka Journal of Obstetrics and Gynaecology*. 2011;33:84-90.

Cite this article as: Dodiya D, Shah M, Nagdev N. Evaluating complications of self-intake of abortion pills among reproductive age group women. *Int J Reprod Contracept Obstet Gynecol* 2022;11:1249-53.