

## Role of Medical Treatment in Abortion-An Observational Study

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DOI: [10.36348/sijog.2024.v07i03.002](https://doi.org/10.36348/sijog.2024.v07i03.002)

Received: 28.01.2024 | Accepted: 06.03.2024 | Published: 14.03.2024

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### Abstract

**Background:** Medical treatment of abortion has been identified as safe and effective Method of evacuation of uterus and is more amenable to provision through primary care facilities, ever where providers may not have the skills to perform a surgical evacuation. Medical treatment of abortion care encompasses the management of various clinical conditions including incomplete abortion missed abortion, blighted ovum, as well as post-abortion contraception. Medical management of abortion generally involves misoprostol. **Objective:** To assess the role of medical treatment in abortion in pregnant women-an observational study. **Methods:** This is an observational study done at Uttara Adhunik Medical College Hospital, Dhaka, Bangladesh from July 2021 to July 2023. 101 patients fulfilling the inclusion criteria were enrolled. This is an attempt to study incomplete abortion after medical treatment of abortion and to observe the success read of this method of taking it among patients, with prescriptions or without it. Questionnaires were prepared and women were interviewed. Questions pertaining to women knowledge, attitude, perception and use of medicine for treatment of abortion, use of emergency contraception were asked. Study was carried out by using responses in the preform given. **Results:** This study was done in duration of two years and 101 patients fulfilling the inclusion criteria were enrolled. Women who had ectopic pregnancy, threatened abortion & excessive P/V bleeding were excluded. In our study, most of the women interviewed, were between 25-34 years of age (51.5%). Out of the 101 women, 99 women (98.01%) were married and 2 (1.99%) were unmarried. 76 women (75.2%) belonged to urban residence. 16 women (15.9%) were working women. 81 women (80.2%) were housewives. 4 (3.9%) interviewed were students. 41 women interviewed were illiterate (40.6%) while only 9 women (8.9%) were graduates. In our study, majority of women 76 (75.2%) had taken abortifacient or spontaneous abortion occur at <12 weeks of gestation. However, 05 (4.9%) women did not know about their gestational age. Main complication after taking medicine for abortion was moderate bleeding mentioned by 60 women (59.4%), incomplete abortion by 10 women (9.90%), Repeat prescription after 1 week 05 women (4.95%), pain by 27 women (26.7%) and need MVA or D&C by 07 women (6.93%). Among the 101 women who used misoprostol with known outcome, 90.09% had complete abortions, 10 (9.90%) had incomplete abortions. The rates of incomplete abortion and surgical intervention were not significantly different among the women with administration of misoprostol. Among blighted ovum after treatment, complete abortion 69.3% and 30.7% incomplete abortion. **Conclusion:** Medical treatment of abortion is safe and effective but complications can occur if not used in accordance. However, the awareness about medical treatment of abortion is increasing. It is therefore of utmost importance to increase the awareness about medical treatment of abortion not only among doctors but also among general population.

**Keywords:** Medical Abortion, Medical Management, Misoprostol.

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## INTRODUCTION

Medical treatment in abortion has been identified as safe and effective method of abortion care [1] and is more amenable to provision through primary care facilities, where providers may not have the skills to perform a surgical evacuation. One reason for limited access is that women are required to make multiple visits

to the clinic, which can be time-consuming, and interfere with housework routines [2]. Approximately, one-third, or 75 million pregnancies ends in stillbirth, spontaneous or induced abortions [3]. About 42 million of induced abortion performed each year, of which 20 million of the total abortions are thought to be unsafe [4]. Post abortion care (PAC) consists of emergency treatment for complications related to spontaneous or induced

abortions, family planning and birth spacing counseling, and provision of family planning methods for the prevention of further mistimed or unplanned pregnancies that may result in repeat induced abortions [5]. The WHO PCPNC outlines the key clinical examinations, treatment and care that should be provided to a woman who has experienced bleeding in early pregnancy or an abortion. If you do not have access to the PCPNC, use the national guidelines for the management of post-abortion care. In this session the focus is on developing your skills to improve counselling with women who have experienced an abortion, and to respond to the information needs of these women [6]. "Improving PAC is an important way to help address the problem of unsafe abortion, reduce maternal morbidity and mortality, and improve women's reproductive health. PAC can be implemented in any country, no matter how prohibitive the law against abortion, as it deals with treating a woman after she had experienced an induced or spontaneous abortion" [7]. Moreover, quality PAC is a relatively simple, effective, and cost-efficient way to lower maternal death rates [8]. Medical treatment in abortion encompasses the management of various clinical conditions including missed abortion blighted ovum, incomplete abortion and, as well as post-abortion case. Medical management of abortion generally involves either regimen of misoprostol or oxytocin regimen [9]. Until recently, most service delivery guidelines recommended clinic visits for administer medical treatment. However, in many other countries, women are still required to return to the clinic for misoprostol. Abortion techniques and contraception have been described throughout history [10]. In the current era, multiple countries place no restrictions on abortion, but most have an upper gestational age limit for when abortion can be performed, ranging from 6–24 weeks [10-15]. However, as of 2021, 24 countries have issued a complete ban on abortions. Post abortion care (PAC) consists of emergency treatment for complications related to spontaneous or induced abortions, family planning and birth spacing counseling, and provision of family planning methods for the prevention of further mistimed or unplanned pregnancies that may result in repeat induced abortions.

## MATERIALS & METHODS

This is an observational study done in the Department of Obstetrics & Gynecology, Uttara Adhunik Medical College Hospital, Dhaka, Bangladesh

from July 2021 to July 2023. 101 women with abortion following medical management enrolled were allocated to hospital administration of misoprostol. Questionnaires were prepared and women were interviewed. Questions pertaining to women knowledge, attitude, perception and use of medical abortion, use of emergency contraception were asked. Study was carried out by using responses in the proforma given. Leading question or suggestive questions were not asked to avoid biasing and overestimation. The information collected was then analyzed.

### Inclusion criteria

Women with bleeding per vagina or not with intrauterine pregnancy up to 20 weeks pregnancy with incomplete abortion, missed abortion, Blighted ovum were included.

### Exclusion criteria

Patients diagnosed with ectopic pregnancy, threatened abortion or excessive P/V bleeding were excluded. General, obstetric and menstrual history was taken. They were asked about confirmation of pregnancy, onset and duration of bleeding and any other associated complaints such as pain, fever amount of bleeding, interval between onset and hospital visit and treatment received before admission. Women were asked about source of their medication, were they examined before administration or was any investigation, for example ultra-sonography (USG) & blood test done. Information regarding their schedule of intake and follow up visits was recorded. All the patients received standard individualized treatment according to hospital protocol. Misoprostol pills alone can be used. The misoprostol or oxytocin the right doses, right pt. cause a complete abortion in 96-98% of cases.

### Statistical analysis

Statistical analysis was performed using SPSS version 22. Categorical variables are presented using descriptive statistics and are compared using a chi-squared test. Continuous data were presented as mean (SD) and compared using a t-test. A p-value below 0.05 was considered statistically significant. Multivariate logistic regression analysis was used to compare selected outcomes.

## RESULTS

**Table 1: Demographic characters (n=101)**

Demographic characters	Number	Percentage	
Age group	15-24 years	40	39.6%
	25-34 years	52	51.5%
	35-39 years	9	8.9%
Marital status	Married	99	98.01%
	Unmarried	2	1.99%
Parity	Gravidal, Para 0	14	13.9%
	para one	33	32.6%
	Para two	29	28.7%

Demographic characters		Number	Percentage
Residence	Para three and more	25	24.8%
	Urban	76	75.2%
	Rural	25	24.3%
Education	Illiterate	41	40.6%
	Primary	24	23.8%
	High school	27	26.7%
	Graduation	9	8.9%

This study was done in duration of two years and 101 patients fulfilling the inclusion criteria were enrolled. Women who had ectopic pregnancy, threatened abortion or excessive P/V bleeding were excluded. General characteristics of patients such as age, parity, gestational age is shown in table 1. In our study, most of the women interviewed, were between 25-34 years of

age (51.5%). Out of the 101 women, 99 women (98.01%) were married and 2 (1.99%) were unmarried. 76 women (75.2%) belonged to urban residence. 16 women (15.9%) were working women. 81 women (80.2%) were housewives. 4 (3.9%) interviewed were students. 41 women interviewed were illiterate (40.6%) while only 9 women (8.9%) were graduates (Table-1).

**Table 2: Gestational age at abortion (n=101)**

Gestational age	No.	Percentage
<12 weeks	76	75.2%
12-20 weeks	20	19.8%
Not known	5	4.9%

In our study, majority of women 76 (75.2%) had taken abortifacient or spontaneous abortion occur at <12 weeks

of gestation. However, 05 (4.9%) women did not know about their gestational age (Table-2).

**Table 3: Medication according to hospital guidelines (N=101)**

Method of Medication	Number (%)
Misoprostol	89 (88.1)
Oxytocin	12(11.9)

All the patients were treated as per standard individualized protocol of hospital. There was no

mortality and all patients were discharged from hospital successfully (Table-3).

**Table 4: Complaints after medical treatment abortion (n=101)**

Type of complications	Number	Percentage
Bleeding	60	59.4%
Pain	27	26.7%
Fever	15	14.8%
Loose motion	10	9.90%
Incomplete abortion	10	9.90%
Repeat prescription after 1 week	5	4.95%
Need MVA or D&C	07	6.93%

Main complication after taking medicine for abortion care was moderate bleeding mentioned by 60 women (59.4%), incomplete abortion by 10 women (9.90%),

Repeat prescription after 1 week 05 women (4.95%), pain by 27 women (26.7%) and need MVA or D&C by 07 women (6.93%) (Table-4).

**Table 5: Outcome of medical treatment of abortion (N=101)**

Outcome of medical abortion	N	%
Outcomes among those who used misoprostol	101	100%
Complete abortion	91	90.09%
Incomplete abortion	10	9.90%
<b>Additional intervention</b>		
Surgical intervention	07	6.93%
Additional dose of misoprostol	20	19.8%
Complete abortion	70	69.3%
Incomplete abortion	31	30.7%

Among the 101 women who used misoprostol with known outcome, 90.09% had complete abortions, 10 (9.90%) had incomplete abortions. The rates of incomplete abortion and surgical intervention were not significantly different among the women with administration of misoprostol. Among blighted ovum after treatment, complete abortion 69.3% and 30.7% incomplete abortion (Table-5).

## DISCUSSION

Medical treatment of abortion plays a crucial role in safe, effective, accessible and acceptable post abortion care. It is highly effective if used in correct way. However, incomplete abortion is a known side effect. This study was done in duration of two years and 101 patients fulfilling the inclusion criteria were enrolled. Women who had ectopic pregnancy, threatened abortion & excessive P/V bleeding were excluded. This study was done in duration of two years and 101 patients fulfilling the inclusion criteria were enrolled. General characteristics of patients such as age, parity, gestational age is shown in table 1. In our study, most of the women interviewed, were between 25-34 years of age (51.5%). Out of the 101 women, 99 women (98.01%) were married and 2 (1.99%) were unmarried. 76 women (75.2%) belonged to urban residence. 16 women (15.9%) were working women. 81 women (80.2%) were housewives. 4 (3.9%) interviewed were students. 41 women interviewed were illiterate (40.6%) while only 9 women (8.9%) were graduates. Mean age and mean gestational age were 25 years and 9±2 weeks respectively. In our study, majority of women 76 (75.2%) had taken abortifacient at or spontaneous abortion occur <12 weeks of gestation. However, 05 (4.9%) women did not know about their gestational age. Alagarajan M, Sundaram [16] noted majority of the abortion cases (56%) in first trimester and 32.6% of cases in second trimester. In the study of Shivkumar et al (5) 84.7% women presented during 5-12 weeks of pregnancy followed by 13-20 weeks (15.3%) [17]. The blighted ovum & missed abortion leading to failure/incomplete abortions. Main complication after taking medicine for treatment of abortion was moderate bleeding mentioned by 60 women (59.4%), incomplete abortion by 10 women (9.90%), Repeat prescription after 1 week 05 women (4.95%), pain by 27 women (26.7%) and need MVA or D&C by 07 women (6.93%). However, if protocol is not followed and used inadvertently it can also lead to high rate of incomplete abortion and related complications, which can sometimes be life threatening. Adverse events were rare in both groups and occurred more than 4h after misoprostol administration. Studies from different settings have revealed poor knowledge of medical treatment of abortion among healthcare providers [18,19]. Among the 101 women who used misoprostol with known outcome, 90.09% had complete abortions, 10 (9.90%) had incomplete abortions. The rates of incomplete abortion and surgical intervention were not significantly different among the women with administration of misoprostol. Among blighted ovum

after treatment, complete abortion 69.3% and 30.7% incomplete abortion. Service providers are often reluctant to recommend home use of misoprostol for rural women, or those with limited communication facilities. The most serious concern in the minds of providers is acute hemorrhage; however, this is rare, occurring in less than 0.2% cases, and mostly after 4h following misoprostol administration [20,21]. Therefore, clinic use of misoprostol with an observation period of 12h might reduce the risk of hemorrhage. Hence, irrespective of place of misoprostol use, all women should be informed about the possibility of heavy bleeding and what to do in such a situation.

## CONCLUSION

Post Abortion care holds great potential for increasing the accessibility of women to safe abortion services in Bangladesh. However, the awareness about medical treatment of abortion is significantly rising. Women routinely seek information about abortion services from friends and relatives. However, these friends and local clinic often do not know that safe treatment option of abortion, so they sometime recommend surgical methods for treatment of abortion, endangering the life of the women. It is therefore of utmost importance to increase the awareness about medical treatment of abortion not only among doctors but also among general population. Lack of knowledge, sex discrimination, low status of women in our society, mentality of local clinic, lack of awareness about safe treatment of abortion, lack of qualified persons in rural areas are some important causes, why women take unsafe treatment dilatation and curettage (D&C) for abortion care. By increasing Medical treatment of abortion we can reduce the life complications arise from surgical methods (D&C, MVA) We should improve PAC (Post abortion care) in our country & globally.

**Funding:** No funding sources.

**Conflict of interest:** None declared.

## REFERENCES

1. WHO. Safe abortion: technical and policy guidance for health systems, 2nd edn. Geneva: World Health Organization, 2012.
2. Stillman, M., Frost, J. J., Singh, S., Moore, A. M., & Kalyanwala, S. (2014). Abortion in India: a literature review. New York: Guttmacher Institute, 12-14.
3. Clark, W. H., Gold, M., Grossman, D., & Winikoff, B. (2007). Can mifepristone medical abortion be simplified: A review of the evidence and questions for future research. *Contraception*, 75(4), 245-250.
4. Berer, M. (2005). Medical abortion: issues of choice and acceptability. *Reproductive Health Matters*, 13(26), 25-34.
5. Kopp Kallner, H., Fiala, C., Stephansson, O., & Gemzell-Danielsson, K. (2010). Home self-administration of

- vaginal misoprostol for medical abortion at 50–63 days compared with gestation of below 50 days. *Human reproduction*, 25(5), 1153-1157.
6. Kallner, H. K., Fiala, C., & Gemzell-Danielsson, K. (2012). Assessment of significant factors affecting acceptability of home administration of misoprostol for medical abortion. *Contraception*, 85(4), 394-397.
  7. Guleria, K., Bansal, S., Agarwal, N., & Grover, V. (2006). Women with septic abortion: Who, how and why? A prospective study from tertiary care hospital in India. *Indian Journal of Public Health*, 50(2), 95.
  8. Bahadur, A., Mittal, S., Sharma, J. B., & Sehgal, R. (2008). Socio-demographic profile of women undergoing abortion in a tertiary centre. *Archives of Gynecology and Obstetrics*, 278, 329-332.
  9. Shivani, A., & Sudha, S. (2008). Septic abortion-current scenario in a tertiary care hospital. *Hindu*, 58, 77-3.
  10. Bhattacharya, S., Mukherjee, G., Mistri, P., & Pati, S. (2010). Safe abortion—Still a neglected scenario: a study of septic abortions in a tertiary hospital of Rural India. *Online Journal of Health and Allied Sciences*, 9(2).
  11. Wiebe, E. R., & Sandhu, S. (2008). Access to abortion: what women want from abortion services. *Journal of Obstetrics and Gynaecology Canada*, 30(4), 327-331.
  12. Coyaji, K. (2000). Early medical abortion in India: three studies and their implications for abortion services. *Journal of the American Medical Women's Association* (1972), 55(3 Suppl), 191-194.
  13. Dhillon, B. S., Chandhiok, N., Kambo, I., & Saxena, N. C. (2004). Induced abortion and concurrent adoption of contraception in the rural areas of India (an ICMR task force study).
  14. Fikree, F. F., Rizvi, N., Jamil, S., & Husain, T. (1996). The emerging problem of induced abortions in squatter settlements of Karachi, Pakistan. *Demography India*, 25, 119-130.
  15. Singh, S., Hussain, R., Shekhar, C., Acharya, R., Moore, A. M., Stillman, M., ... & Ball, H. (2018). Abortion and unintended pregnancy in six Indian states: findings and implications for policies and programs.
  16. Alagarajan, M., Sundaram, A., Hussain, R., & Acharya, R. (2018). Unintended pregnancy, abortion and Postabortion care in Tamil Nadu, India—2015. New York: Guttmacher Institute.
  17. Kopp Kallner, H., Fiala, C., Stephansson, O., & Gemzell-Danielsson, K. (2010). Home self-administration of vaginal misoprostol for medical abortion at 50–63 days compared with gestation of below 50 days. *Human reproduction*, 25(5), 1153-1157.
  18. Henderson, J. T., Hwang, A. C., Harper, C. C., & Stewart, F. H. (2005). Safety of mifepristone abortions in clinical use. *Contraception*, 72(3), 175-178. Bhutta, S. Z., Aziz, S., & Korejo, R. (2003). Surgical complications following unsafe abortion. *J Pak Med Assoc*, 53(7), 286-9.
  19. The Medical Termination of Pregnancy (Amendment) Bill, 2020. 2020
- <https://www.prsindia.org/billtrack/medical-termination-pregnancy-amendment-bill-2020>. Accessed on 10 October, 2020. The medical termination of pregnancy amendment act, 2002. No. 64 of 2002. 2002. Accessed on 10 October, 2020.