

SELF- MANAGED MEDICAL ABORTION

A PRACTICAL GUIDE



TABLE OF CONTENTS

Introduction	6
Background	8
Why is information about misoprostol and mifepristone/ misoprostol needed?	8
Legal rationale for sharing information about misoprostol and mifepristone/misoprostol	11
Overview of the menstrual cycle and pregnancy	13
Menstruation	13
Pregnancy	13
Pregnancy length	14
Contraception and emergency contraception	16
Contraception	16
Emergency contraception (ec)	21
Medical abortion	24
Misoprostol alone availability	25
Mifepristone availability	25
How misoprostol alone works	25
How mifepristone and misoprostol combination work	25
What is supposed to happen	25
Before using the medications	26
What are the few medical conditions that can be a problem?	26
Recommended precautions	27
Prior to using medication	28
Making a plan	29
Doing a self-managed abortion	30
With misoprostol alone	30
With mifepristone and misoprostol	31

Additional information	32
What to expect after medical abortion	34
Needing additional medical care	37
Signs of a complication	37
Possible complications	40
After doing a self-managed medical abortion	41
Making sure it was successful	41
If there is a continuing pregnancy	42
Bleeding and contraception after medical abortion	45
Check-list to support women doing a self-managed abortion	46
Comparing different types of medical abortion methods for a first trimester abortion	48
Frequently asked questions	50
Ectopic pregnancy	50
If the woman is rhesus negative	51
Multiple pregnancy	51
Breastfeeding	51
Previous caesarean section	51
Weight	51
Age	51
Hiv	51
References	52





INTRODUCTION

Medical abortion is the termination of a pregnancy through the use of pills. Using abortion pills to end an unwanted pregnancy is a safe and effective abortion method, especially when used in the first trimester. The medications used for medical abortion are called misoprostol and mifepristone. Misoprostol can be used alone or in combination with mifepristone. These medications cause a process similar to a miscarriage. Medical abortion is also called “abortion with pills” or “medication abortion”.

Self-managed medical abortion is the use of abortion pills to end a pregnancy outside of formal medical settings, by women themselves¹. Women and other pregnant people who want to end their pregnancy need information about how to use the medications effectively, what to expect, the precautions needed and when it is necessary to get medical care. When people have correct information, self-managing an abortion with pills in early pregnancy has been proven to be safe and effective and is common throughout the world. Information about self-managing medical abortion safely can be empowering because it helps women in protecting their lives and health.

The purpose of this guide is to support advocates and community health workers to disseminate information about self-managed first trimester medical abortion. It is a practical guide that has been written by Women Help Women, (www.womenhelp.org), whose staff have worked for more than a decade on programs for self-managed abortions with pills in restrictive settings. This guide was created specifically to support the Mobilizing Activists around Medical Abortion (MAMA) Network, which works in several countries in Sub-Saharan Africa. The network is co-convened by Women Help Women, Trust for Indigenous Culture and Health (TICAH) in Kenya and Giwyn in Nigeria.

Women Help Women would like to acknowledge the excellent materials of the World Health Organization²⁻⁴ and the Gynuity Health Project⁵⁻⁷. We have adapted some of their resources to the context of self-managed abortion.



Note on language:

Women Help Women recognizes that gender-specific terms do not encompass the rights and identities of all people that may seek to end a pregnancy. We believe everyone has the right to feel supported and respected during their abortion experience.



BACKGROUND

**Why is
information
about
misoprostol and
mifepristone/
misoprostol
needed?**



Misoprostol and mifepristone tablets are on the list of essential medicines of the World Health Organization (WHO)⁸. Women can use these medications to have a safe abortion on their own if they have the correct information about how to use them. Misoprostol is also an important medicine for treating incomplete miscarriage and preventing post partum hemorrhage (excessive bleeding) after birth.

According to the World Health Organization, 56 million⁹ women each year choose to have an abortion for many different reasons. Abortion is one of the most common medical procedures for women around the world. Yet many women do not have access to safe abortion services and are forced to risk their lives and health. Unsafe abortion is a leading cause of maternal mortality. Almost all abortion-related deaths occur in developing countries, with the highest number occurring in Africa. Each year between 4.7%–13.2% of maternal deaths can be attributed to unsafe abortion¹⁰.

30 in every 100 000 women who have an unsafe abortion die from complications. That number rises to 220 deaths per 100 000 unsafe abortions in developing regions and 520 deaths per 100 000 unsafe abortions in sub-Saharan Africa⁹.

Globally, 22,500 to 44,000¹¹ women die unnecessarily each year due to unsafe abortion. Many more women suffer long-term complications such as infertility and chronic pain.

The average maternal mortality ratio is three times higher in countries with more

restrictive abortion laws (223 maternal deaths per 100 000 live births) compared to countries with less restrictive laws (77 maternal deaths per 100 000 live births)¹¹.

When considering all causes of maternal death, almost all (99%) occur in developing countries. More than half of these deaths occur in sub-Saharan Africa and almost one third occur in South Asia¹².

Information about safe abortion options helps women protect their lives and health. Abortion using mifepristone plus misoprostol has proven to be safe and is effective 95-98%¹³ of the time if taken during the first 12 weeks of pregnancy. Abortion using misoprostol alone has also been shown to be very safe and to be effective 75-90%¹³ of the time if done during the first 12 weeks of pregnancy. Abortion with this medications is a safe way to end a pregnancy. Many times women use unsafe methods when desperately trying to end an unwanted pregnancy.

Misoprostol is inexpensive and heat-resistant. It has many uses, including the treatment of stomach ulcers, and for postpartum hemorrhage prevention and treatment, incomplete abortion, missed miscarriage and labor induction. It is available in most countries. It is sold under several brand (commercial) names including Cytotec, Arthrotec, Isovent and many other brands around the world. It can be stored at room temperature¹⁴ and is thought to be effective after the printed expiration date^{Q15} if kept in the original blister.

Misoprostol was originally registered in many countries for prevention of gastric ulcers. In some Latin American countries, such as Brazil, women realized that the label read “Do not use if pregnant; may cause a miscarriage”¹⁶. Women with unwanted pregnancies began using misoprostol. Later, physicians and scientists established the most effective doses of the medicine for first trimester abortion (abortion in the first 12 weeks of pregnancy).

Mifepristone was developed as an abortifacient in the 80's and was first used in France in 1987. It is now widely used in countries where access to abortion is less restricted. Mifepristone is usually not registered or available in countries with very restrictive abortion laws. However, internet providers are a source of mifepristone in many countries where it is not legally registered.



Research shows that many solid dosage formulations stored under reasonable conditions in their original unopened containers retain 90% of their potency for at least 5 years after the expiration date on the label, and sometimes much longer¹⁵.

WHO information about how to use misoprostol for safe abortion can be found here:

<https://apps.who.int/iris/bitstream/handle/10665/278968/9789241550406-eng.pdf>

https://www.who.int/reproductivehealth/publications/unsafe_abortion/en/

Information about mifepristone plus misoprostol, as well as clear protocols for using misoprostol alone, can be found at the Women Help Women website here:

<https://mamanetwork.org/resources/>

<https://consult.womenhelp.org/en/page/378/in-collection/377/medical-abortion>

<https://consult.womenhelp.org/en/page/540/what-are-the-instructions-for-doing-a-medical-abortion-with-Misoprostol-alone>

Legal rationale for sharing information about misoprostol and mifepristone/ misoprostol

“

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

”

Article 19
Universal Declaration
of Human Rights

Article 19 of the Universal Declaration of Human Rights states, “Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.” Even in countries that have not signed the International Treaty of Human Rights, one can always share scientific information that is widely available on websites and established by the World Health Organization (WHO).

It is important to understand that the sharing of **information** about misoprostol and mifepristone/misoprostol is not the same as giving advice or encouraging women to perform an illegal act. In this way, those that give information are protected from being prosecuted for

inciting, participating in, or being an accessory to a crime. While in many countries around the world it is not legal for a woman to manage her own abortion without a physician, it is generally NOT a crime to share information that is posted on the WHO and other websites.

In each country, it is important to find a legal expert who can clarify local laws on:

- Whether it is mandatory to denounce a woman who has induced or received an abortion.
- The status of freedom of information laws (in most countries these laws are found in the Constitution, giving them a higher legal status and priority over other laws). It is important to know whether there have been court cases concerning the freedom of information law and what the decisions in these cases have been.
- The legal definition of intent to commit a crime. Usually this is not an issue, as these laws tend to refer to crimes with very severe punishment. However, it is important to confirm that the legal definition does not include abortion.
- Whether there are any statutes that specifically outlaw giving information about abortion and whether anyone has ever been prosecuted for giving information about abortion.
- In almost every country there are exceptions that allow abortion to save the life and/or health of the woman. Therefore activists can argue that giving information saves lives in specific cases.



OVERVIEW OF THE MENSTRUAL CYCLE AND PREGNANCY

Menstruation

When a young woman reaches puberty, she begins to ovulate - a process in which an egg cell is released from one of the ovaries. When ovulation has started, a woman can get pregnant. Pregnancy can happen if the woman has sex and the sperm fertilizes the egg. Menstruation happens each time the egg cell is not fertilized by the sperm.

The first menstruation (menarche) usually starts between 12-13 years, but every girl/woman is different. Menstruation usually happens 14-16 days¹⁷ after ovulation when the woman has not become pregnant. During menstruation the lining of the uterus is shed with blood through the vagina. The amount and duration of bleeding varies from woman to woman and can be different each month.

A woman's cycle starts on the first day of blood flow, and ends with the first day of

the next menstrual period. The average duration of a cycle is 28 days but women may have cycles as short as 21 days, or as long as 35 days¹⁸. The average duration of blood flow is 4 days but anything from 2 to 8 days is considered normal¹⁸.

Most women ovulate 10 to 16 days after the first day of their menstruation¹⁸. However, the time from the first day of the period to ovulation can vary widely among people and some women have irregular cycles. Stress, various types of intensive exercise, and diet can affect the onset of menstruation and the regularity of the menstrual cycle. Also, disorders of ovulation are very common and they can include infrequent or irregular ovulation (usually defined as cycles of ≥ 36 days or < 8 cycles a year) or absence of a menstrual period (amenorrhea) in a woman of reproductive age, which can even last a few months.

A woman is generally most fertile (able to become pregnant) a few days before, during, and 24h^{17,19} after ovulation, **but a woman can get pregnant at any point in her menstrual cycle!!** Sperm survival in women's bodies is usually 1-2 days but research shows that the probability of sperm surviving 4 days is less than 5% and less than 1% survive up to 7 days inside a woman's body¹⁷.

Pregnancy

If a woman becomes pregnant, she notices that she has not gotten her menstrual period (although some women do have light bleeding while pregnant so they may be confused by this bleeding). Typical symptoms of pregnancy include nausea and vomiting, excessive tiredness, fatigue, frequent urination (particularly during

the night) enlarged and tender breasts, and changes in appetite. However, not every woman experiences these symptoms.

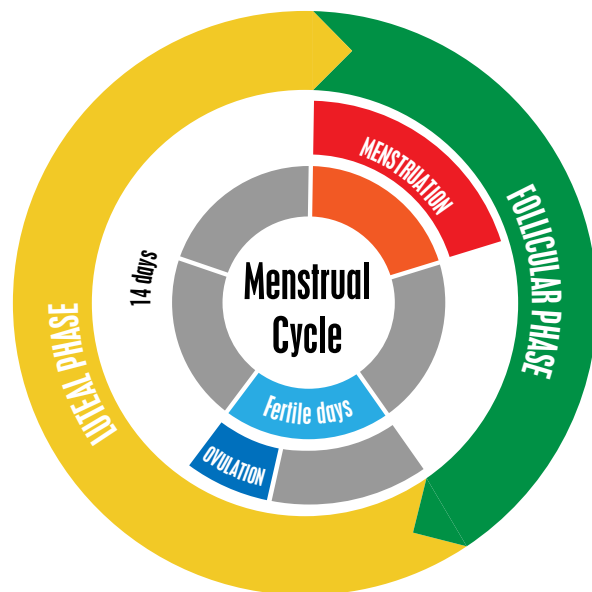
To confirm whether or not a woman is pregnant, she can take a pregnancy test that determines the presence of a hormone called human chorionic gonadotropin (hCG)⁹ in the blood or in the urine. For a urine test, she can buy a pregnancy test at the pharmacy. For a blood test she must see a doctor or clinician.

Most home pregnancy tests will give an accurate result if done as soon as the menstrual period is missed or 3 weeks after unprotected intercourse.

Women can also confirm a pregnancy by doing an ultrasound 5-6 weeks after their LMP (Last Menstrual Period). If an ultrasound is done before 6 weeks it is possible it won't show anything even if the woman is pregnant²⁴.

If a woman continues her pregnancy, she will give birth between 37-42 weeks after her last menstrual period²⁵.

Gestational age



To calculate the length of a pregnancy, a woman can count the number of days that have passed since the first day of her **Last Menstrual Period (LMP)**. The gestational age can also be established by ultrasound or through a physical exam done by a nurse, midwife or doctor. An experienced professional will be able to assess the duration of pregnancy through a pelvic examination, starting from approximately six weeks after the first day of her last menstruation.



Human chorionic gonadotropin (HCG) is a hormone initially produced around 5 days after fertilization and it continues to be produced by cells of the future placenta²⁵ after implantation, which generally happens $\pm 6-10$ days after fertilization²¹. HCG becomes detectable in the women's blood and urine between 6 and 14 days after fertilization²². During the first 8 weeks of a normal pregnancy with one embryo, the hCG level doubles about every 24 hours²³.

Ultrasounds are especially recommended if the woman isn't sure of the first day of her last menstrual period or if she has become pregnant without resuming her period after an abortion or childbirth.

Qualitative blood pregnancy tests that measure hCG levels can also be used to calculate the gestational age for pregnancies of up to 7 weeks²⁶. After 60 days of gestation, human chorionic gonadotropin concentrations vary widely and are of little value in predicting gestational age²⁷. After 7 weeks hCG levels may lead to an underestimation of gestational age. Usually the hCG levels reach a peak at around 10 weeks of gestation and then levels decrease until about the 16th week of gestation where they remain fairly constant until term²⁷.

Pregnancies are conventionally dated in weeks, starting from the first day of the last menstrual period and not dated from the fertilization as some people might think. If a woman has a regular cycle of 28 days, ovulation usually occurs about 2 weeks after a woman's menstrual period starts, and fertilization usually occurs shortly after ovulation²⁸. Consequently, the gestational age is about 2 weeks more than the weeks passed since fertilization (the date of conception). If women are sure of the date of conception they can also estimate the approximate gestational age by counting the days that have passed since the sexual intercourse and adding 2 weeks.



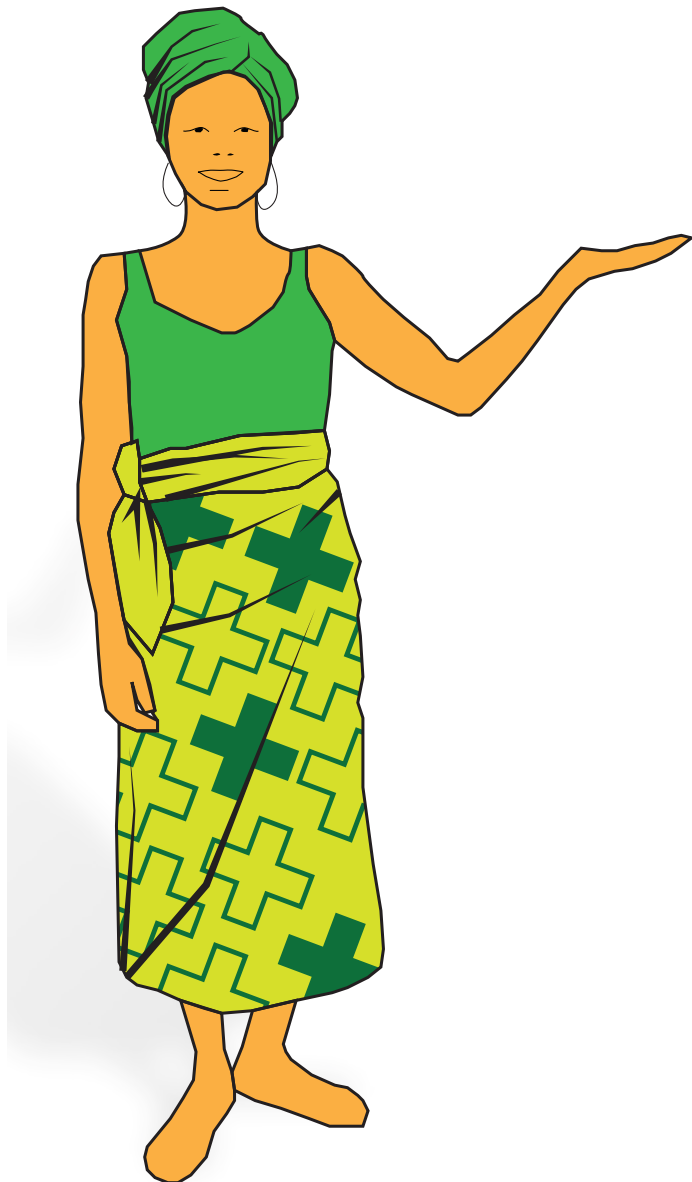
CONTRACEPTION AND EMERGENCY CONTRACEPTION

Contraception

About 85% of sexually active women who do not use contraceptives become pregnant within a year²⁹. A woman can ovulate as soon as 25 days after childbirth²⁹ and 8 days³⁰ after abortion or miscarriage. Women can also become pregnant during menstruation. Withdrawal of the penis prior to ejaculation during intercourse and periodic abstinence has a higher failure rate than other contraceptive methods. According to Planned Parenthood statistics, about 22 out of 100 (approximately 1 in 5) women who use withdrawal become pregnant every year³¹.




An unwanted pregnancy can be prevented by:


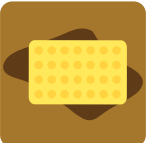


- Practicing total abstinence
- Use of contraceptives. No method of contraception gives 100% protection; but some methods are more effective than others.







Your birth control choices:

The information below comes from Birth Control Choices³² written by Reproductive Health Access Project in the USA. Some of these choices may not be available in your country.

The Implant 	How well does it work?	Pros
	> 99%	<ul style="list-style-type: none"> • Long lasting (up to 5 years) • No pill to take daily • Often decreases cramps • Can be used while breastfeeding • You can become pregnant right after it is removed
	How to Use	Cons
Progestin IUD 	How well does it work?	Pros
	> 99%	<ul style="list-style-type: none"> • May be left in place 3 to 7 years, depending on which IUD you choose • No pill to take daily • May improve period cramps and bleeding • Can be used while breastfeeding • You can become pregnant right after it is removed
	How to Use	Cons
Copper IUD 	How well does it work?	Pros
	> 99%	<ul style="list-style-type: none"> • May be left in place for up to 12 years • No pill to take daily • Can be used while breastfeeding • You can become pregnant right after it is removed
	How to Use	Cons
	Must be placed in uterus by a health care provider Usually removed by a health care provider	<ul style="list-style-type: none"> • May cause more cramps and heavier periods • May cause spotting between periods • Rarely, uterus is injured during placement • Does not protect against HIV or other STIs

The Shot 	How well does it work?	Pros
	96%	<ul style="list-style-type: none"> Each shot works for 12 weeks Private Usually decreases periods Helps prevent cancer of the uterus No pill to take daily Can be used while breastfeeding
	How to Use	Cons
	Get a shot every 3 months	<ul style="list-style-type: none"> May cause spotting, no period, weight gain, depression, hair or skin changes, change in sex drive May cause delay in getting pregnant after you stop the shots Side effects may last up to 6 months after you stop the shots Does not protect against HIV or other STIs
The Pill 	How well does it work?	Pros
	93%	<ul style="list-style-type: none"> Can make periods more regular and less painful Can improve PMS symptoms Can improve acne Helps prevent cancer of the ovaries You can become pregnant right after stopping the pills
	How to Use	Cons
	Must take the pill daily	<ul style="list-style-type: none"> May cause nausea, weight gain, headaches, change in sex drive – some of these can be relieved by changing to a new brand May cause spotting the first 1-2 months Does not protect against HIV or other STIs
Progestin-Only Pills 	How well does it work?	Pros
	93%	<ul style="list-style-type: none"> Can be used while breastfeeding You can become pregnant right after stopping the pills
	How to Use	Cons
	Must take the pill daily	<ul style="list-style-type: none"> Often causes spotting, which may last for many months May cause depression, hair or skin changes, change in sex drive Does not protect against HIV or other STIs
The Patch 	How well does it work?	Pros
	93%	<ul style="list-style-type: none"> Can make periods more regular and less painful No pill to take daily You can become pregnant right after stopping patch
	How to Use	Cons
	Apply a new patch once a week for three weeks No patch in week 4	<ul style="list-style-type: none"> Can irritate skin under the patch May cause spotting the first 1-2 months Does not protect against HIV or other STIs

The Ring 	How well does it work?	Pros
	93%	<ul style="list-style-type: none"> • One size fits all • Private • Does not require spermicide • Can make periods more regular and less painful • No pill to take daily • You can become pregnant right after stopping the ring
	How to Use	Cons
	Insert a small ring into the vagina Change ring each month	<ul style="list-style-type: none"> • Can increase vaginal discharge • May cause spotting the first 1-2 months of use • Does not protect against HIV or other STIs
External Condom 	How well does it work?	Pros
	87%	<ul style="list-style-type: none"> • Can buy at many stores • Can put on as part of sex play/foreplay • Can help prevent early ejaculation • Can be used for oral, vaginal, and anal sex • Protects against HIV and other STIs • Can be used while breastfeeding
	How to Use	Cons
	Use a new condom each time you have sex Use a polyurethane condom if allergic to latex	<ul style="list-style-type: none"> • Can decrease sensation • Can cause loss of erection • Can break or slip off
Internal Condom 	How well does it work?	Pros
	79%	<ul style="list-style-type: none"> • Can put in as part of sex play/foreplay • Can be used for anal and vaginal sex • May increase pleasure when used for anal and vaginal sex • Good for people with latex allergy • Protects against HIV and other STIs • Can be used while breastfeeding
	How to Use	Cons
	Use a new condom each time you have sex Use extra lubrication as needed	<ul style="list-style-type: none"> • Can decrease sensation • May be noisy • May be hard to insert • May slip out of place during sex • Requires a prescription from your health care provider
Withdrawal 	How well does it work?	Pros
	80%	<ul style="list-style-type: none"> • Costs nothing • Can be used while breastfeeding
	How to Use	Cons
	Pull penis out of vagina before ejaculation (that is, before coming)	<ul style="list-style-type: none"> • Less pleasure for some • Ineffective if penis is not pulled out before ejaculation • Does not protect against HIV or other STIs • Must interrupt sex

Diaphragm 	How well does it work?	Pros
	83%	<ul style="list-style-type: none"> • Can last several years • Costs very little to use • May protect against some infections, but not HIV • Can be used while breastfeeding
	How to Use	Cons
	<p>Must be used each time you have sex</p> <p>Must be used with spermicide</p>	<ul style="list-style-type: none"> • Using spermicide may raise the risk of getting HIV • Should not be used with vaginal bleeding or infection • Raises risk of bladder infection
Fertility Awareness 	How well does it work?	Pros
	85%	<ul style="list-style-type: none"> • Costs little • Can be used while breastfeeding • Can help with avoiding or trying to become pregnant
	How to Use	Cons
	<p>Predict fertile days by: taking temperature daily, checking vaginal mucus for changes, and/or keeping a record of your periods</p> <p>It works best if you combine with other contraceptive methods</p> <p>Avoid sex or use condoms/spermicide during fertile days</p>	<ul style="list-style-type: none"> • Must use another method during fertile days • Does not work well if your periods are irregular • Many things to remember with this method • Does not protect against HIV or other STIs
Spermicide 	How well does it work?	Pros
	79%	<ul style="list-style-type: none"> • Can buy at many stores • Can be put in as part of sex play/foreplay • Comes in many forms: cream, gel, sponge, foam, inserts, film • Can be used while breastfeeding
	How to Use	Cons
	<p>Insert spermicide each time you have sex</p>	<ul style="list-style-type: none"> • May raise the risk of getting HIV • May irritate vagina, penis • Cream, gel, and foam can be messy
Emergency Contraception Pills 	How well does it work?	Pros
	<p>58 - 94%</p> <p>Ulipristal acetate EC works better than progestin EC if you are overweight</p> <p>Ulipristal acetate EC works better than progestin EC in the 2-5 days after sex</p>	<ul style="list-style-type: none"> • Can be used while breastfeeding • Available at pharmacies, health centers, or health care providers: call ahead to see if they have it • People of any age can get progestin EC without a prescription
	How to Use	Cons
	<p>Works best the sooner you take it after unprotected sex</p> <p>You can take EC up to 5 days after unprotected sex</p> <p>If pack contains 2 pills, take both together</p>	<ul style="list-style-type: none"> • May cause stomach upset or nausea • Your next period may come early or late • May cause spotting • Does not protect against HIV or other STIs • Ulipristal acetate EC requires a prescription • May cost a lot

Emergency contraception (EC)

Emergency contraception is birth control that can prevent pregnancy after unprotected sex. Emergency contraception is also called “the morning after pill” or EC. A woman can use emergency contraception right away, or up to five days after sex, if a woman thinks that her birth control failed or if she had unprotected sex without contraception. The sooner she uses EC the more effective it will be.

When used correctly, the emergency contraceptive pill reduces the chances that women will get pregnant after unprotected sex, **BUT**:

- It is not 100% effective at preventing pregnancy after unprotected intercourse. It is less effective than birth control that is used before or during sex, such as condoms, birth control pills, or an IUD.
- It does not prevent pregnancy if the woman has unprotected intercourse again after taking it.
- Women who don't want to get pregnant can start using effective contraception immediately or as soon as possible after using EC.

Emergency contraception options around the world include:

- Copper-T Intrauterine Device (IUD).
- Ulipristal acetate (30 mg).
- Mifepristone (25mg).
- Progestin only EC (Levonorgestrel 1,5 mg) Should ideally be taken within 24h after unprotected sex.
- “Combined” emergency contraceptive pills (2 doses of 0,5 mg of levonorgestrel and 0,1 mg of ethinyl estradiol taken 12 hours apart).
- Yuzpe method - certain birth control pills can be used as EC.

On this website, <http://ec.princeton.edu/>, there are lists by country of which birth control (contraceptive) pills are available which can also be used as EC and how to use them as emergency contraception. This website can also answer most of the questions you might have about EC.

The most effective EC is the copper-T intrauterine device (IUD) with less than 0.01% of women getting pregnant³³.

Both ulipristal acetate and mifepristone are effective within 5 days after unprotected intercourse. With these types of emergency contraception, only

1.2% of users³⁴ will become pregnant. It is the preferred method when compared to progestin only contraception or “combined” emergency contraceptive.

When progestin only EC (levonorgestrel 1.5 mg) is taken within 72h after unprotected intercourse only 0.6–2.6%³³ will become pregnant. Studies show this method could be used up to 96 hours/ 4 days after unprotected sex³⁵.

‘Combined’ emergency contraceptive pills and the Yuzpe method have been shown to be less effective than other EC methods and should only be chosen if all other methods are unavailable.

The **effectiveness** of EC is difficult to study. In general pharmaceutical companies advertise the effectiveness of their products based on studies that include all women that have taken EC and not only the ones that were at risk of becoming pregnant. A significant number of the women enrolled in these studies would not have become pregnant in any case³³. A trial suggested that the percentage of pregnancies prevented by LNG-EC taken within 72 hours would be estimated 69%³⁶ and 85%³⁶ for UPA.

Pregnancy testing is advised if, after EC, the next menstrual period is delayed by more than 7 days, is lighter than usual or is associated with abdominal pain that is not typical of the woman’s usual dysmenorrhoea and/or if the woman has any other symptom of pregnancy. In summary, EC does not always prevent a pregnancy and contraception used before intercourse is more effective. After using EC, a woman should still monitor her body for signs of an unplanned pregnancy.

Women who start hormonal contraception soon after the use of EC are advised to do a pregnancy test even if they have bleeding; bleeding associated with the contraceptive method may not represent menstruation. Pregnancy (or lack of pregnancy) can be determined by a urine pregnancy test taken 21 days after unprotected sexual intercourse³³.



MEDICAL ABORTION

MEDICAL ABORTION

Medical abortion^Q is the termination of a pregnancy through the use of pills. Medical abortion has been thoroughly researched and is recommended as a safe abortion method by the World Health Organization (WHO) and other research organizations^{2,7,37,38}. As a reminder, the information in this manual only applies to pregnancies of up to 12 weeks.

The recommended types of medical abortion that are safe and most effective^Q are:

Mifepristone and misoprostol
(95-98% effective)¹³



Misoprostol alone
(75-90% effective)¹³



Mifepristone plus misoprostol, or misoprostol alone, will cause a process similar to a miscarriage. The uterus will contract and push out the products of conception; this process involves bleeding, passing tissue and/or clots and cramping.



Medical abortion In the manual these two medical abortion methods will be presented simultaneously, giving an opportunity to better understand the differences and similarities of both methods. At pp 43-44 you will find a check-list that can be used for counseling women seeking a medical abortion.

Effective medical abortion in this manual signifies that no additional medical treatment was needed. Failure of medical abortion refers to all cases where medical or surgical intervention was needed for a complication or due to a continuing pregnancy³⁹.

Misoprostol alone availability^Q

Misoprostol is available in most countries including where access to abortion is restricted. It is sold under the brand names of Cytotec, Arthotec, Misotac and many others. Misoprostol is inexpensive, heat resistant and can be stored for years.

Mifepristone availability^Q

Mifepristone is currently available in 68 countries⁴⁰; in most of these countries abortion is authorized under certain conditions.

How misoprostol alone works

Misoprostol softens and opens the cervix and causes the uterus to contract and push out the products of conception.

How mifepristone and misoprostol combination work

Mifepristone blocks receptors for progesterone, a hormone necessary to maintain a pregnancy⁴¹. It also makes the uterus more receptive to misoprostol. Misoprostol causes contractions of the uterus, which result in the expulsion of the pregnancy.

What is supposed to happen?

If the medical abortion is effective, the woman will experience cramping and menstrual-like bleeding (usually longer and more intense) with visible clots and products of conception depending on pregnancy length. The risk of a complication during medical abortion is very low and is the same as when a woman has a miscarriage. Up to 20 percent of all recognized pregnancies end in miscarriage⁴².



In the IPPF website **<https://www.medab.org/>** it is possible to get information of the brands available in each country.

Before using the medications

What are the few medical conditions that can be a problem?

Almost all women can do a self-managed medical abortion but in very few cases some medical conditions can be a problem.



Using misoprostol alone

Women who shouldn't attempt to self-manage abortion with misoprostol alone¹³ are those with:

- Previous strong allergic reaction to misoprostol.
- Known or suspected ectopic^Q pregnancy.



Using mifepristone and misoprostol

Women who shouldn't attempt to self-manage abortion with mifepristone and misoprostol¹³ are those with:

- Previous strong allergic reaction to mifepristone and or misoprostol.
- Known or suspected ectopic^Q pregnancy.
- *Inherited porphyria.*
- *Chronic adrenal failure or hepatic failure.*

Usually a woman knows if she has one of these last two medical conditions.



Ectopic (outside of the uterus) pregnancy is an uncommon, but potentially life-threatening event, occurring in 1.5–2% of pregnancies¹³. If the medications are used they will not be harmful or cause rupture, but they will not be effective in terminating the pregnancy.



Recommended precautions

(Condition ► What to do)

If a woman presents severe/unstable health problems,^{13,37} which include hemorrhagic (bleeding) disorders, heart disease, severe anemia and/or other severe/unstable health problems. Some serious illnesses, such as severe anemia or hemophilia can create problems because of the heavy blood loss involved. ► If the woman has no other safe abortion options she can consider medical abortion but should have someone with her and be near medical care in case of a complication.

If the woman has been diagnosed with an STI like Chlamydia or Gonorrhea ► she is advised to see a doctor so that the infection can be treated.

If she has an intrauterine device (IUD), in this case ► she should have the IUD removed first³⁷.



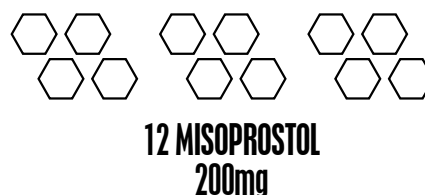
IUD In case the woman cannot remove the IUD (if no doctor or health professional agrees to remove it) she can still do the medical abortion. There are no studies to verify whether having an IUD in place poses actual risks during medical abortion³⁷. Miscarriage with an IUD in situ is probably quite common and is not necessarily life-threatening⁴³.

Prior to using medication:

- A woman should make sure she is pregnant. Pregnancy can be confirmed by pregnancy test (urine or blood) or ultrasound.
- A woman should be less than 12 weeks pregnant, 84 days since the first day of the last menstrual period. Medical abortion after 12 weeks requires a different protocol and different information about the process and what to expect. The chance of a complication is higher and the experience can be physically, and for some women emotionally, more difficult. Like with a miscarriage, the risks and severity of complications increases with the length of the pregnancy.

Using misoprostol alone

Get 12 misoprostol 200 mcg and make sure she knows how to use the pills, the normal symptoms and the signs of a complication.



Using mifepristone and misoprostol

Get 1 mifepristone 200mg and 4 misoprostol 200 mcg and make sure she knows how to use the pills, the normal symptoms and the signs of complication.



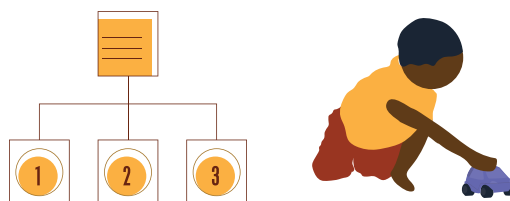
Medications aren't dangerous but the side effects of the medicine can be unpleasant and there is no reason to take any medicine that is not needed.

Making a plan



While having the abortion, even if it isn't necessary, it can be helpful to have **someone close by**; this can be a partner, friend or relative who knows about the abortion and who can help in the rare cases of complications. It is also good to have someone available for emotional support. If a woman has any issues such as depression, post-traumatic stress, or another condition that may make the experience particularly difficult or less safe, it is critical not to be alone. It is important to acknowledge that for some women informing the partner, a friend or family member can result in violence, isolation or being blocked from doing a self-managed abortion.

Women may want to arrange for **childcare or other tasks** ahead of time, and make a plan so that the experience is as convenient and stress-free as possible.



Women can buy **painkillers, anti-nausea medicine** (so that she does not vomit up the pills) ahead of time.



Women shouldn't be more than a **couple of hours away from a hospital** or medical facility so that, if complications occur, medical aid will be near. Nevertheless if women live in very isolated areas and cannot be near a medical facility it will be much safer to have an early medical abortion than to continue the pregnancy, go into labor and deliver⁴⁴. Women can think about where to go in case of a complication and what to say when she sees the medical staff.



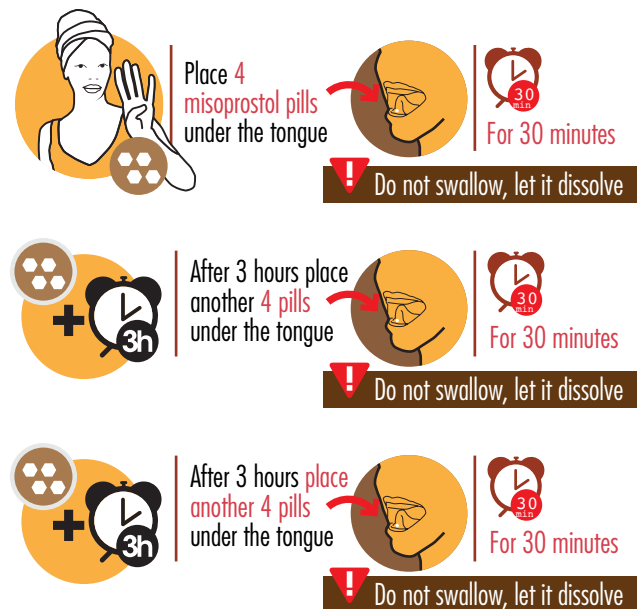
Doing a self-managed abortion with misoprostol alone

1st dose: A woman should put 4 pills of 200 micrograms (in total 800 mcg) of misoprostol **under the tongue**. She should not swallow the pills for at least 30 minutes until the tablets are dissolved! (She can swallow her saliva). After 30 minutes it is OK to swallow the remnants of the pills).

2nd dose: After 3 hours she should put another 4 pills of misoprostol under the tongue and let dissolve.

3rd dose : After 3 hours she should put another 4 pills of misoprostol under the tongue and let dissolve.

Women shouldn't eat or drink anything while the pills are dissolving to avoid swallowing them before the 30 minutes. Anything left in the mouth after 30 minutes can be swallowed. Before and after using the misoprostol she can eat and drink normally, but should not use drugs or alcohol that could affect her consciousness; she needs to be able to pay attention to her body.



The success rate in the first 12 weeks of pregnancy is 75% - 90%¹³. This means that 8 to 9 of every 10 women who use misoprostol correctly will have a safe abortion after this procedure, without needing additional medical care. The research shows that after a medical abortion with misoprostol alone in the first 12 weeks, 4-8 %⁴⁵⁻⁴⁸ of women will have a continuing pregnancy.



Doing a self-managed abortion with mifepristone and misoprostol

In the first 12 weeks of pregnancy, a woman will need 1 mifepristone 200mg and 4 misoprostol tablets (200 mcg each)

1st: Mifepristone should be swallowed with a glass of water.

2nd : 24 hours later, the woman should take 4 pills of 200 micrograms (in total 800 mcg) of misoprostol - **place the tablets between the gum and cheek, two on the left side and two on the right side.** She should not swallow the pills for at least 30 minutes until the tablets are dissolved! (She can swallow her saliva). After 30 minutes it is OK to swallow the remnants of the pills).



The mifepristone should be swallowed with a glass of water.

24 hours later the woman can use 4 pills of misoprostol buccally



between the gum and the cheek, two on the left side and two on the right side.

All four pills should be left in the mouth for approximately 30 minutes to dissolve.



The success rate in the first 12 weeks of pregnancy is 95-98%¹³. This means that only 1 of every 20 women who use mifepristone and misoprostol correctly will still need additional medical care. The research shows that after a medical abortion with mifepristone and misoprostol in the first 12 weeks around 1,3% of women will have a continuing pregnancy⁴⁹.





Additional information



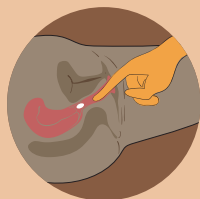
Anti-nausea medications - The most recommended medications to treat nausea and vomiting (antiemetics) while doing a medical abortion are domperidone and metoclopramide. There are other types of antiemetics that might interfere with the abortion process. The woman might also preventively get antidiarrheals (medications that stop or slow diarrhea).



Route of administration - Misoprostol can be administered sublingually (under the tongue), buccally (between the gum and cheek) or vaginally (inside the vagina). When used for abortion misoprostol is NOT very effective when swallowed⁵⁰, because it is digested in the stomach. When misoprostol is used sublingually, buccally or vaginally the medicine is directly absorbed into the blood.



Vaginal route - Because pills used in the vagina may be found by a doctor up to 4 days after using them it is recommended to use misoprostol under the tongue (sublingual). If a woman decides to use the pills vaginally, it is important to know that in most countries it is illegal to self-induce an abortion. In case of a complication or if she wants to see a doctor or go to the hospital she should make sure to take out all the remains of the medications before she sees the doctor or she could face legal problems. If she does not have a doctor she trusts, she can say she was having a miscarriage; the symptoms of a miscarriage and a medical abortion are exactly the same.





Misoprostol alone

Buccal route is less recommended since it is associated with more continuing pregnancies⁵¹ when using misoprostol alone.

Interval dosing - If administration is sublingual, the intervals between misoprostol doses need to be short, 3h is the recommended interval. When the pills are used vaginally interval dosing can be increased from 3h to 12h⁵².

Number of doses - An important study showed that repeating 3 doses of 800mcg of misoprostol for a first trimester abortion is more or less 84% effective⁴⁸. Recent WHO guidelines⁴ refer that repeating doses of misoprostol can be considered as needed to achieve success of the abortion process. They do not establish a maximum number of doses of misoprostol, so it is possible to use more than 3 doses to successfully complete the abortion. Precaution should be taken in cases of individuals with prior uterine incision and with advanced gestational age⁴, but normally this doesn't concern first trimester abortions.



Mifepristone and misoprostol

Vomiting - If a woman vomits the mifepristone less than 1,5 hours after she took it, the effect of the medicine may be impaired⁴¹.

Interval between mifepristone and misoprostol - misoprostol should be used approximately 24-48 hours after swallowing the mifepristone for best results. However, research has shown that misoprostol can be used with success in the first trimester if taken from 8 hours up to 72 hours⁴⁸ after mifepristone.

Repeating misoprostol - If there is no bleeding 4h after the first dose of misoprostol it is possible to take an additional dose of 400mcg of misoprostol. Success rates are higher when misoprostol dosing is repeated, some research show it lowers the number of continuing pregnancies⁵³⁻⁵⁵.

What to expect after medical abortion



Bleeding



Bleeding and cramping will be experienced by women undergoing medical abortion and are necessary for the process to occur. Bleeding is the first sign that the abortion is starting. If the abortion continues successfully, bleeding and cramps will become more intense and the expulsion of the products of conception will occur. But this can take more or less time. The expulsion can be noticed with a peak of heavier blood and tissue loss and more pain and cramps. Heaviest bleeding may last for 1 to 4 hours as the pregnancy is being expelled. Bleeding is often heavier than a normal menstruation with clots. The longer the pregnancy, the more heavy the cramps and the bleeding might be. Generally, cramping will subside after the pregnancy and tissue passes. The bleeding will gradually decrease over the next few days, and light spotting often continues for one to three weeks, but sometimes more or less. Every woman's experience is different. The normal menstrual period usually returns after four to six weeks but this can also vary.⁹



Bleeding after using misoprostol alone

Bleeding usually starts within 2-4 hours⁵⁶ after using the pills, but sometimes begins sooner or later. The expulsion of the products of conception will normally occur 6h-11h⁵² after the first dose of misoprostol.



Bleeding after using mifepristone and misoprostol

Bleeding usually starts within 1-2 hours⁵⁷ after using misoprostol, but sometimes begins sooner or later. Women should be informed that before using the misoprostol 11%⁵⁷ of them may bleed anyway and 3%⁴¹ of them will have a miscarriage without the second medication. Around 67% will have a complete abortion 4 hours after using misoprostol and 90% after 24h⁵⁸.



Ovulation after MA

Ovulation can occur as soon as 8 days³⁰ after the abortion was induced, so menstruation can resume 3-7 weeks after the abortion or even later.

Side Effects

Side effects of misoprostol

Misoprostol DOES have side effects. If a woman has no side effects at all, it is possible that she does not have genuine misoprostol. Side effects of the misoprostol can include **cramps, chills, slight fever, nausea, vomiting, diarrhea and skin rash**⁵⁹. Numbness in the tongue or palate is also a possible side effect when using misoprostol sublingually or buccally. These side effects usually do not last for more than a few hours after using the misoprostol and not all women experience all of them. The intensity of the side effects can also vary. Women using misoprostol alone normally report more intense side effects⁶⁰ than women using mifepristone and misoprostol. This can be explained by the fact that in the combined method the amount of misoprostol used is 3 times lower and because mifepristone increases uterine contractility and sensitizes the uterus to misoprostol⁶¹.



Side effects of mifepristone

Generally, mifepristone has no side effects.

Pain



Most women will experience some pain. Cramps are part for the process. The cramping causes the bleeding and expulsion of the pregnancy. Not all women feel pain but most describe the pain as more intense than during normal menstruation or similar to the pain during miscarriage for those who have experienced it.



Cramps after using misoprostol alone

Cramps generally start within 1,5h- 3h⁵⁶ hours after the first dose of misoprostol.



Cramps after using mifepristone and misoprostol

Cramps generally start within 0-2h⁵⁷ hours after misoprostol, and around 7% of women⁵⁷ will have cramps before using the misoprostol.



Handling pain

It is possible to take painkillers preventively and/or when the pain arises. According to current research the most appropriate painkiller for the cramps during medical abortion is **ibuprofen**⁶². Women can also use other nonsteroidal anti-inflammatory medications or paracetamol. Other examples of known NSAID's are Diclofenac, naproxen; aspirin is not recommended. If the woman needs it, she can alternate an NSAID with paracetamol every 3h. She is advised to check the maximum daily dosage.

Hot water bottles or a heating pad also help. Other methods for reducing pain are relaxing with music, a movie, or whatever a woman generally uses when dealing with menstrual cramps.

What will be seen

Depending on the length of pregnancy, a small gestational sac, which is white and looks like a small piece of sponge may be seen. If the woman is five to six weeks pregnant, there will be no visible embryo and the gestational sac will measure 1-3 cm⁴¹; it is unlikely that the woman will see the products of conception. From 7 weeks onwards, a small embryo might be visible inside the sac. At 9 weeks the embryo measures around 2,5 cm⁴¹; by 12 weeks the fetus will be approximately 9 cm⁶³ crown to heel.

If the woman prefers she can flush the products of conception down the toilet to avoid seeing anything. Nevertheless, for some women, viewing the tissue can be very reassuring to confirm that the abortion was successful.

Needing additional medical care



While combined medical abortion (mifepristone and misoprostol) and misoprostol alone are safe and effective methods of ending an unwanted pregnancy when used in the first 12 weeks of pregnancy, there is a small risk of needing additional care. The risk of complications is very low, but it slightly increases with the pregnancy length. The risk is the same as when a woman has a miscarriage (miscarriage happens in 15-20% of all pregnancies).

Signs of a complication:



There are 4 signs of complication women need to know. When a woman presents one or more of the following signs of complication she should seek medical care:



Heavy bleeding that soaks more than 2 sanitary maxi pads per hour **for more than 2 or 3 hours** (if the stream of blood is like a stream of water from an open faucet). Feeling dizzy or light-headed can be a sign of too much blood loss, and dangerous to the woman's health (very rare).



Strong pain that does not go away with painkillers within a few days after taking the medications.



Vaginal discharge that smells bad.



Fever of over 38° C for more than 24 hours, or if she has a fever of more than 39° C degrees at any time.

The treatment of any complication of abortion is exactly the same as the treatment for complications of a miscarriage. The treatment of miscarriage is routine and available in all hospitals and basic medical centers. Treatments can involve antibiotics and/or vacuum aspiration to empty the uterus in case of infection, or an extra dose of misoprostol to help with incomplete abortion.

If there is a complication, a woman can always go to the hospital or to any doctor and say she had a miscarriage. The doctor will treat her as if she had a miscarriage. There will be no way that the doctor can know she has taken medications unless the woman discloses.

Detecting misoprostol



It is recommended that women use the pills under the tongue because they will dissolve completely and the medicine will be absorbed into the body directly through the skin inside that part of the mouth. There is no routine blood or urine test that can be done to prove that a woman used misoprostol. Even if it is technically possible, the few facilities with the capacity to detect misoprostol in blood are in Europe and Asia, and the assays are very expensive and rarely used⁶⁴.

Additional medical care while using misoprostol alone

Around 10-25%¹³ of women using misoprostol alone during the first 12 weeks of pregnancy will need additional medical care.

Overall % of women that require surgical intervention after using misoprostol alone	
Gestational age	
Up to 7 weeks	14,10% ⁴⁷
Between 7-9 weeks	16,80% ⁴⁷
Between 9-13 weeks	21,40% ⁴⁶



Additional medical care while using mifepristone and misoprostol

Around 2-5%¹³ of women using mifepristone and misoprostol during the first 12 weeks of pregnancy will need additional medical care.



Overall % of women that require surgical intervention after using mifepristone and misoprostol	
Gestational age	
Up to 7 weeks	2% ⁵⁵
Between 7-9 weeks	2,5% ⁵⁵
Between 9-13 weeks	3,2% ⁴⁹

Possible Complications

As described above, the risk of complications is low and serious complications are extremely rare. Specific complications include:

After using misoprostol alone

- **Continuing pregnancy** this means that the pregnancy continues to develop despite the use of the medications. It happens in around 4-8 %⁴⁵⁻⁴⁸ of cases.
- **Incomplete abortion**^Q means that although the pregnancy has ended the woman presents signs of complication and a vacuum aspiration is performed. It happens in around 10%⁵² of cases.
- **Infection** - the overall frequency of diagnosed or treated infections reported after medical abortion was 0.92%⁶⁸.
- **Serious complications** requiring hospitalization or transfusion was estimated at most 0.2%⁴⁸. Reports of death are extremely rare and are comparable to that for early surgical abortion (0.1 deaths per 100,000⁶⁹ surgical abortions up to 9 weeks) and for miscarriage (UK recent records show 0.22 deaths per 100,000 miscarriages⁶⁹).

After using mifepristone and misoprostol

- **Continuing pregnancy** this means that the pregnancy continues to develop despite the use of the medications. It happens in around 0,7%⁴⁹ of cases.
- **Incomplete abortion**^Q it means that although the pregnancy has ended the woman presents signs of complication and a vacuum aspiration is performed. It happens in around 2-5%¹³ of cases.
- **Bleeding excessive** enough to warrant either a blood transfusion or back-up curettage (aspiration) is extremely rare (0%-0.2% and 0.3%-2.6% of cases, respectively)⁴¹.
- **Infection** - the overall frequency of diagnosed or treated infections reported after medical abortion was 0.016%⁷¹.
- **Serious complications** requiring hospital admission or emergency care occur in around 0,16 %⁷¹ of cases. Reports of death are extremely rare and are comparable to that for early surgical abortion and for miscarriage⁶⁵ (0.1 deaths per 100,000⁶⁶ surgical abortions up to 9 weeks) and for miscarriage (UK recent records show 0.22 deaths per 100,000 miscarriages⁶⁷).

Incomplete Abortion



Abortion is a process that can last for several weeks before the uterus is empty so the concept of incomplete abortion can be confusing. Remaining material in the uterus without other symptoms is not considered an incomplete abortion. If there are no signs of complication there is no need for medical attention. Misoprostol or expectant management (wait for the tissue to pass out of the womb naturally) are good and safe alternatives⁶⁵.

After doing a self-managed medical abortion

Making sure it was successful



If a woman had a successful abortion, the pregnancy symptoms (like nausea, fatigue) should disappear within a few days and she should not feel pregnant anymore⁴¹. Breast tenderness can continue for up to 3 weeks. Some women know the abortion is successful because they see the products of conception. Even if the woman feels she is not pregnant anymore, it is important to confirm the abortion was successful.

Women should either do an ultrasound or do a pregnancy test, because the hormones of pregnancy stay in the body for several weeks even if the abortion was successful. A pregnancy test will usually not be accurate until at least 3-4 weeks after an abortion. If the test is done too early a woman might have a false positive test result.



Ordinary urinary pregnancy tests can be positive for up to 6 weeks after a successful abortion,⁴¹ 30 days after the medical abortion, 25% of women will still have detectable hCG in the urine⁷².

Another alternative is for women to get a blood pregnancy test when they have the abortion (it can also be done just before or after the abortion) and then repeat the test 4-5 days after the abortion. If the level of hormone called hCG reduces significantly, this is a sign the abortion was successful.



When the abortion is successful the hCG levels reduce 50 % every 2 days⁷³.

If a woman has no pain, fever or heavy bleeding, nor a strong suspicion of an ongoing pregnancy, she should not have the ultrasound before 10 days. Even several weeks after a successful abortion it is normal for some blood and tissue to remain in the uterus, and if a woman has her ultrasound too soon a doctor might perform a D&C or vacuum aspiration that is unnecessary.

If there is a continuing pregnancy



In some cases, Medical Abortion will not end the pregnancy (this is different than an incomplete abortion; [see pp 40](#)).

After using misoprostol alone

A continuing pregnancy will happen in about 4-8%⁴⁵ of cases after use of misoprostol alone for medical abortion in the first trimester.

Overall % of women that have a continuing pregnancy after using misoprostol Alone	
Pregnancy Length	
Up to 7 weeks	4,7% ⁴⁷
Between 7-9 weeks	7,1% ⁴⁷
Between 9-13 weeks	7,2% ⁴⁶



After using mifepristone and misoprostol

A continuing pregnancy will happen in about 0,7%⁴⁹ of cases after use of misoprostol alone for medical abortion in the first trimester.



Overall % of women that have a continuing pregnancy after using mifepristone and misoprostol	
Pregnancy Length	
Up to 7 weeks	0,1% ⁶³
Between 7-9 weeks	0,5% ⁶³
Between 9-13 weeks	1,5% ⁷⁴

Signs that the abortion wasn't successful

If **no bleeding or little bleeding** occurs, the abortion did not take place. There are 4 possible reasons that the abortion did not happen:

1. The medications were fake. Unfortunately there are many scams that take advantage of a woman who has an unwanted pregnancy. If the pills caused NO chills, nausea, diarrhea or cramps, it was likely not genuine medicine.
2. The pregnancy is ectopic (outside of the uterus). Medical abortion medications will not increase the risk of complication but it won't treat an ectopic pregnancy either. If the woman can get an ultrasound, an ectopic can be diagnosed. This is a potentially life-threatening situation and will be treated in all situations if identified.
3. The woman did not have the proper instructions and did not use the right quantity or dosage of pills, or did not use them as directed.
4. Medical abortion isn't 100 % effective.



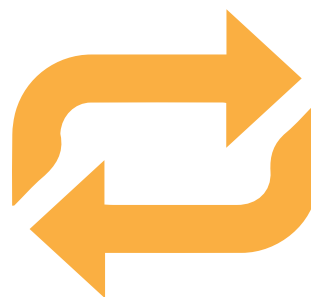
Even after using misoprostol alone correctly 4-8%⁴⁵⁻⁴⁸ of women will have a continuing pregnancy.



Even after using mifepristone and misoprostol correctly up to 0,7 %^{55,74} of women will have a continuing pregnancy.



Repeating medical abortion



If the pregnancy continues the woman can try to use the medications again (pp. 28-29). Women should know that even if they repeat the procedure, it could fail again. If the woman is unsure about whether she bled enough to end the pregnancy, the only way to confirm that she is no longer pregnant is to have an ultrasound as soon as possible.

If the woman believes that the medication did not work, she is sure she is pregnant and cannot confirm if the pregnancy continues she can try the medications again. Medical abortion with mifepristone and misoprostol or a surgical abortion are more effective methods.

If the pregnancy continues, the use of misoprostol is associated with a slightly increased risk of birth defects such as deformities of the hands or feet and problems with the nerves of the fetus.



Malformation

It is important to know that there is a small risk of malformation due to the use of misoprostol. Around 1% of exposed fetuses develop fetal abnormalities associated with the use of misoprostol⁵⁰. These abnormalities include Moebius syndrome, limb defects, club foot, central nervous system anomalies and anomalies of the palate.



Bleeding and contraception after medical abortion



After the abortion, a woman can expect light bleeding for 1-3 weeks, but this can vary, every woman is different. In some rare cases, a woman can bleed up to 7 weeks⁷⁵ after the abortion and sometimes bleeding will only resume after the first menstruation after abortion. Prolonged spotting up to 5 weeks⁷⁵ can also occur.

Women are advised not to insert anything into the vagina (tampons, fingers), avoid taking a bath (showers are okay) or engaging in sexual intercourse until heavy bleeding stops, approximately for 2 days, after a medication abortion.

It is important women know they can get pregnant immediately after an abortion!

If they don't want to get pregnant immediately they should be advised to start contraception to prevent a new unwanted pregnancy.

Women may start **hormonal contraception (pill, skin patch, shot, implant)** up to 5 days after taking misoprostol^{37,41,72}. That way they will be immediately protected.

Women who choose the **vaginal ring** for birth control should insert it 2 or 3 days after using misoprostol.

If a woman starts any **hormonal method** more than 5 days after the abortion she should use a barrier method (like condoms) in the first 7 days (9 days if she uses pills called Qlaira), until the hormonal method reaches its maximum efficacy in her body^{37,41,72}.

An **Intrauterine Device (IUD)** can be inserted as soon as a complete abortion has been confirmed or during the first menstruation after the abortion. **Condoms, caps, sponges, diaphragms, spermicidal foams, jellies or vaginal tablets** can be used as soon as sexual intercourse is resumed. Methods based on **fertility awareness** can be used once regular menstrual cycles have resumed^{37,41,72}.

Check-list to support women doing a self-managed abortion

Pregnancy

- ☐ 1. Did the woman confirm the pregnancy?
a) If she did not confirm, she should do a pregnancy test or ultrasound.
- ☐ 2. How many weeks pregnant? When was the first day of her last menstruation?
- ☐ 3. Is she less than 12 weeks pregnant (84 days since her last menstruation)?
a) If she is more than 12 weeks and has decided to do an abortion herself, refer her to someone who can provide her with more information about second trimester abortion.

Decision

- ☐ 4. Is the pregnancy unwanted? Is it her decision? It is her choice or is she being pressured to do an abortion against her will?
- ☐ 5. Is she sure about her decision? Does she need more time or to talk to make a decision? Does she have concerns?

Health

- ☐ 6. Does she have any medical condition that can be a problem (ectopic pregnancy or allergic reaction to misoprostol and or mifepristone; Inherited porphyryria; Chronic adrenal failure or hepatic failure)?
- ☐ 7. Does she have any other serious medical condition?
- ☐ 8. Does she have an IUD in place?
- ☐ 9. If she is clear in her decision to end her pregnancy, she is under 12 weeks and she has no health problems, she is eligible for a safe abortion with pills.

Giving information

- ☐ 10. She is advised to have someone with her during the abortion, prepare everything that could be helpful for the procedure and make a plan in case she has a complication and needs to seek medical care. The plan should include having anti-nausea medications if needed and ibuprofen for pain.
- ☐ 11. Explain how much misoprostol or mifepristone and misoprostol she needs and the most effective way to use it.
- ☐ 12. Detail the possible side-effects of the pills (bleeding, cramps, chills, diarrhea, vomiting).
- ☐ 13. Explain what is expected to happen (onset of bleeding, cramping which may be painful, and expulsion of the pregnancy).
- ☐ 14. Describe the signs of complications (excessive bleeding, fever, abnormal vaginal discharge, severe pain that isn't relieved with painkillers).
- ☐ 15. Talk about what to do if no bleeding occurs (confirm quality of medications, rule out ectopic pregnancy, confirm the length of the pregnancy and repeat the procedure if appropriate; she can consider to use mifepristone and misoprostol if she has access).
- ☐ 16. Inform her about what will happen to pregnancy symptoms if abortion is successful and what to expect in terms of bleeding and pain.
- ☐ 17. Underline the need to confirm that the abortion was successful (ultrasound or pregnancy test 3-4 weeks later).

Ask the woman to repeat this information to you and if needed correct her. Make sure she understands and ask if she has any questions.



COMPARING DIFFERENT TYPES OF MEDICAL ABORTION METHODS FOR A FIRST TRIMESTER ABORTION

Misoprostol alone

Medications

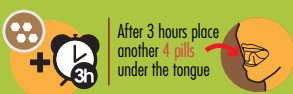


12 misoprostol 200mcg

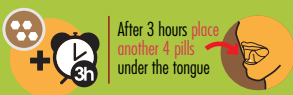
How to use



First step: put 4 misoprostol 200mcg under the tongue and let dissolve for at least 30 minutes then swallow with water.



Second step: 3 hours later put another 4 misoprostol 200mcg under the tongue and let dissolve for at least 30 minutes then swallow with water.



Third step: 3 hours later put another 4 misoprostol 200mcg under the tongue and let dissolve for at least 30 minutes then swallow with water.

Efficiency



10-25% of women will need additional medical care¹³.

The continuing pregnancy rate is between 4-8%⁴⁵⁻⁴⁸.

Side effects



The side effects like nausea, pain, vomiting, diarrhea, shivering are more intense.

Process



Abortion normally occurs **7,5 hours after the first dose of misoprostol**⁵².

12 hours after using first dose misoprostol alone 70% of the women have expelled the pregnancy, 80% after 24h⁴⁵.

Access

Misoprostol is cheaper and available in many countries for several uses (ulcers, arthritis, prevention of heavy bleeding after birth), so it can be easier to get.

Mifepristone and misoprostol

Medications



1 mifepristone 200mg
4 misoprostol 200mcg

How to use



First step: Swallow the mifepristone with a glass of water.



Second step: 24 hours later put another 4 misoprostol 200mcg under the tongue and let dissolve for at least 30 minutes then swallow with water.

Efficiency



2-5% of women will need additional medical care¹³.

The continuing pregnancy rate is extremely low, around 1,3%⁴⁹.

Side effects



The side effects like nausea, vomiting, pain, diarrhea, shivering are less intense.

Process



Abortion normally occurs 3,5 hours after using misoprostol⁴⁹.

6 hours after using misoprostol 80% of the women have expelled the pregnancy⁴¹.

Access

Mifepristone is more expensive and is generally not available in countries where abortion is legally restricted.

Frequently asked questions

Ectopic pregnancy

An ectopic pregnancy occurs when an embryo implants somewhere other than the uterus (womb), like in one of the fallopian tubes. Ectopic pregnancy is an uncommon, but potentially life-threatening condition, occurring in 1.5–2% of pregnancies and can only be confirmed by an ultrasound after 6 weeks of pregnancy¹³.

If a woman cannot get an ultrasound, it is fine to use pills for abortion, as they will not worsen her condition. Medical abortion pills will not work if a woman has an ectopic pregnancy. She may have some bleeding, but will not see clots or pregnancy tissue, because the pregnancy continues outside of the uterus.

Ectopic pregnancy can be asymptomatic in the initial stages. Symptoms of an ectopic pregnancy can often be vague, and include vaginal bleeding, abdominal or pelvic pain (usually stronger on one side), shoulder pain, weakness or dizziness. These symptoms can also occur in other conditions such as ovarian cysts, miscarriages, or even in a normal pregnancy, so these symptoms alone do not mean a woman has an ectopic pregnancy. If an ectopic pregnancy is suspected, blood tests for beta-hCG, the hormone which is in the blood during the pregnancy, and ultrasound after 6 weeks can be used to help confirm the diagnosis. A ruptured ectopic pregnancy can be life threatening and needs emergency care⁷⁶.



If the woman is Rhesus negative

There are different blood groups in humans. Most women have blood groups that are Rh-positive.

Rh incompatibility occurs when a pregnant woman has Rh-negative blood and the fetus has Rh-positive blood. If the fetus's Rh-positive blood enters the bloodstream of a woman with Rh-negative blood, the woman's immune system may recognize the fetus's red blood cells as foreign and produce antibodies. This may cause a problem in a future pregnancy⁷⁷.

For pregnancies of up to 84 days (12 weeks), there is no evidence that any problem related to blood groups can occur this early in pregnancy⁷⁸. So there is no need for a woman to get any injection or treatment related to the blood types¹³.

For women that are more than 12 weeks pregnant and know that they are Rh-negative, the woman should get an Rh-immunoglobulin injection the same day they take the mifepristone or misoprostol or maximum up to 72h after the abortion to avoid Rh incompatibility¹³.

Multiple pregnancy

Even if there is a multiple pregnancy, the medications and protocol recommended to end the pregnancy are the same as for a single pregnancy⁴¹.

Breastfeeding

Because of the extremely low levels of misoprostol in breast milk, amounts ingested by the infant are trivial and are unlikely to cause any adverse effects in breastfed infants⁴¹. No special precautions are required⁷⁹.

Previous caesarean section

The safety and efficacy of early medical abortion when conducted in the first trimester are unaffected by previous caesarean section(s)⁴¹. Uterine rupture is a rare complication and is associated with later gestational ages and uterine scar^{13,80}.

Weight

The medications and protocol recommended to end a pregnancy is the same for all women, regardless of their weight. The medications work exactly the same in women of all weights, heights and sizes⁴¹.

Age

Neither adolescence nor older age should be regarded as conditions that can be a problem for medical abortion. The medications work exactly the same in women of all ages⁴¹. Nevertheless additional considerations might be needed for adolescents concerning confidentiality, financial constraints and access to post-abortion care⁴.

HIV

HIV positive women can use medical abortion. Antiretroviral therapy doesn't interfere with medical abortion safety or efficacy⁸¹.

REFERENCES

1. Erdman JN, Jelinska K, Yanow S. Understandings of self-managed abortion as health inequity, harm reduction and social change. *Reprod Health Matters*. 2018 Nov;26(54):13–19. PMID: 30231807
2. World Health Organization, editor. *Clinical practice handbook for safe abortion*. Geneva: World Health Organization; 2014.
3. American College of Obstetricians and Gynecologists. Medical management of first-trimester abortion. *Obstet Gynecol*. 2014 Mar;123(3):676–692. PMID: 24553166
4. Medical management of abortion [Internet]. Geneva: World Health Organization; 2018 [cited 2019 May 10]. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK536779/> PMID: 30702834
5. Gynuity Health Projects. Misoprostol for Treatment of Postpartum Hemorrhage [Internet]. Gynuity; 2017 [cited 2019 May 15]. Available from: https://gynuity.org/assets/resources/clinguide_ifu_pphtreatment_en.pdf
6. Gynuity Health Projects. Misoprostol for prevention of postpartum hemorrhage [Internet]. Gynuity; 2015 [cited 2019 May 15]. Available from: <https://gynuity.org/resources/misoprostol-for-prevention-of-postpartum-hemorrhage>
7. Gynuity Health Projects. *Providing Medical Abortion in Low-Resource Settings: An Introductory Guidebook*. Second edition. 2009.
8. Organization WH. World Health Organization model list of essential medicines: 21st list 2019. World Health Organization; 2019 [cited 2020 Mar 12]; Available from: <https://apps.who.int/iris/handle/10665/325771>
9. World Health Organization. Preventing unsafe abortion [Internet]. 2019 [cited 2020 Mar 12]. Available from: <https://www.who.int/news-room/fact-sheets/detail/preventing-unsafe-abortion>
10. Ganatra B, Gerdtz C, Rossier C, Johnson BR, Tunçalp Ö, Assifi A, Sedgh G, Singh S, Bankole A, Popinchalk A, Bearak J, Kang Z, Alkema L. Global, regional, and subregional classification of abortions by safety, 2010–14: estimates from a Bayesian hierarchical model. *The Lancet*. 2017 Nov 25;390(10110):2372–2381. PMID: 28964589
11. Guttmacher Institut. Induced Abortion Worldwide [Internet]. Guttmacher Institut; 2018 [cited 2019 Oct 5]. Available from: https://www.guttmacher.org/sites/default/files/factsheet/fb_jaw.pdf
12. WHO. Maternal mortality [Internet]. 2018 [cited 2019 May 10]. Available from: <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality>
13. WHO. *Safe Abortion: Technical and Policy Guidance for Health Systems* [Internet]. 2nd ed. Geneva: World Health Organization; 2012 [cited 2019 May 10]. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK138196/>
14. Berard V, Fiala C, Cameron S, Bombas T, Parachini M, Gemzell-Danielsson K. Instability of Misoprostol Tablets Stored Outside the Blister: A Potential Serious Concern for Clinical Outcome in Medical Abortion. Hawkins SM, editor. *PLoS ONE*. 2014 Dec 15;9(12):e112401.
15. Gikonyo D, Gikonyo A, Luvayo D, Ponoth P. Drug expiry debate: the myth and the reality. *Afr Health Sci*. 2019 Sep;19(3):2737–2739. PMCID: PMC7040264

16. Winikoff B, Sheldon W. Use of Medicines Changing the Face of Abortion. *Int Perspect Sex Reprod Health*. 2012 Sep;38(03):164–166.
17. Faculty of Sexual & Reproductive Healthcare (FSRH). Fertility Awareness Methods [Internet]. 2015. Available from: <https://www.fsrh.org/standards-and-guidance/documents/ceuguidancefertilityawarenessmethods/>
18. Reed BG, Carr BR. The Normal Menstrual Cycle and the Control of Ovulation. In: Feingold KR, Anawalt B, Boyce A, Chrousos G, Dungan K, Grossman A, Hershman JM, Kaltsas G, Koch C, Kopp P, Korbonits M, McLachlan R, Morley JE, New M, Perreault L, Purnell J, Rebar R, Singer F, Trencle DL, Vinik A, Wilson DP, editors. *Endotext* [Internet]. South Dartmouth (MA): MDText.com, Inc.; 2000 [cited 2019 May 10]. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK279054/> PMID: 25905282
19. American College of Obstetricians and Gynecologists. FAQ Contraception: Fertility Awareness-Based Methods of Family Planning [Internet]. 2019. Available from: <https://www.acog.org/-/media/For-Patients/faq024.pdf?dmc=1&ts=20190510T1235512624>
20. Makrigiannakis A, Vrekoussis T, Zoumakis E, Kalantaridou SN, Jeschke U. The Role of HCG in Implantation: A Mini-Review of Molecular and Clinical Evidence. *Int J Mol Sci*. 2017 Jun 19;18(6). PMID: PMC5486126
21. Su R-W, Fazleabas AT. Implantation and Establishment of Pregnancy in Human and Nonhuman Primates. *Adv Anat Embryol Cell Biol*. 2015;216:189–213. PMID: PMC5098399
22. Nepomnaschy PA, Weinberg CR, Wilcox AJ, Baird DD. Urinary hCG patterns during the week following implantation. *Hum Reprod Oxf Engl*. 2008 Feb;23(2):271–277. PMID: PMC5330618
23. Betz D, Fane K. Human Chorionic Gonadotropin (HCG). *StatPearls* [Internet]. Treasure Island (FL): StatPearls Publishing; 2019 [cited 2019 May 27]. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK532950/> PMID: 30422545
24. Early Options: Ultrasound Imaging in Early Pregnancy [Internet]. [cited 2019 May 27]. Available from: https://prochoice.org/online_cme/m4ultrasound.asp
25. Quinn J-A, Munoz FM, Gonik B, Frau L, Cutland C, Mallett-Moore T, Kissou A, Wittke F, Das M, Nunes T, Pye S, Watson W, Ramos A-MA, Cordero JF, Huang W-T, Kochhar S, Buttery J. Preterm birth: Case definition & guidelines for data collection, analysis, and presentation of immunisation safety data. *Vaccine*. 2016 Dec 1;34(49):6047–6056. PMID: PMC5139808
26. Lagrew DC, Wilson EA, Fried AM. Accuracy of serum human chorionic gonadotropin concentrations and ultrasonic fetal measurements in determining gestational age. *Am J Obstet Gynecol*. 1984 May 15;149(2):165–168. PMID: 6720792
27. Lagrew DC, Wilson EA, Jawad MJ. Determination of gestational age by serum concentrations of human chorionic gonadotropin. *Obstet Gynecol*. 1983 Jul;62(1):37–40. PMID: 6856220
28. Brown HL. Detecting and Dating a Pregnancy - Women's Health Issues - Merck Manuals Consumer Version [Internet]. 2016 [cited 2019 Jun 6]. Available from: <https://www.merckmanuals.com/home/women-s-health-issues/normal-pregnancy/detecting-and-dating-a-pregnancy>
29. Institute G. Contraceptive Use in the United States [Internet]. 2018 [cited 2019 Oct 5]. Available from: https://www.guttmacher.org/sites/default/files/factsheet/fb_contr_use_0.pdf
30. Schreiber CA, Sober S, Ratcliffe S, Creinin MD. Ovulation resumption after medical abortion with mifepristone and misoprostol. *Contraception*. 2011 Sep;84(3):230–233.
31. Planned Parenthood. What is the Effectiveness of the Pull Out Method? [Internet]. [cited 2019 May 10]. Available from: <https://www.plannedparenthood.org/learn/birth-control/withdrawal-pull-out-method/how-effective-is-withdrawal-method-pulling-out>

32. Reproductive Health Access Project (RHAP). Your birth control choices [Internet]. Reproductive Health Access Project. [cited 2019 May 10]. Available from: <https://www.reproductiveaccess.org/resource/bc-fact-sheet/>
33. FSRH Clinical Effectiveness Unit. Emergency Contraception [Internet]. Faculty of Sexual & Reproductive Healthcare; 2017 [cited 2019 Oct 5]. Available from: <https://www.fsrh.org/documents/ceu-clinical-guidance-emergency-contraception-march-2017/>
34. World Health Organization. Emergency contraception [Internet]. [cited 2019 May 10]. Available from: <https://www.who.int/news-room/fact-sheets/detail/emergency-contraception>
35. Cleland K, Raymond EG, Westley E, Trussell J. Emergency contraception review: evidence-based recommendations for clinicians. *Clin Obstet Gynecol*. 2014 Dec;57(4):741–750. PMID: PMC4216625
36. Creinin MD, Schlaff W, Archer DF, Wan L, Frezieres R, Thomas M, Rosenberg M, Higgins J. Progesterone receptor modulator for emergency contraception: a randomized controlled trial. *Obstet Gynecol*. 2006 Nov;108(5):1089–1097. PMID: PMC2853373
37. IPAS. Clinical Updates in Reproductive Health [Internet]. L. Castleman&N. Kapp (Eds.). NC; 2018. Available from: <https://www.ipas.org/clinical-updates/static/CURHE18.pdf>
38. Royal College of Obstetricians and Gynaecologists. Best practice in comprehensive abortion care. *Best Pract Pap*. 2015 Jun;
39. Winikoff B, Ellertson C, Clark S. Analysis of failure in medical abortion. *Contraception*. 1996 Dec;54(6):323–327. PMID: 8968659
40. Gynuity Health Projects. Mifepristone approvals [Internet]. 2017. Available from: https://gynuity.org/assets/resources/biblio_ref_lst_mife.pdf
41. Fiala C, Agostini A, Bombas T, Gemzell-Danielsson K, Lertxundi R, Lubusky M, Parachini M. *Early Medical Abortion: A Practical guide for Healthcare Professionals*. 2nd Edition. Editions de Santé; 2018.
42. Griebel CP, Halvorsen J, Golemon TB, Day AA. Management of spontaneous abortion. *Am Fam Physician*. 2005 Oct 1;72(7):1243–1250. PMID: 16225027
43. Davey A. Mifepristone and prostaglandin for termination of pregnancy: contraindications for use, reasons and rationale. *Contraception*. 2006 Jul;74(1):16–20.
44. Raymond EG, Grimes DA. The comparative safety of legal induced abortion and childbirth in the United States. *Obstet Gynecol*. 2012 Feb;119(2 Pt 1):215–219. PMID: 22270271
45. Faúndes A, Fiala C, Tang OS, Velasco A. Misoprostol for the termination of pregnancy up to 12 completed weeks of pregnancy. *Int J Gynecol Obstet*. 2007 Dec;99:S172–S177.
46. Tang OS, Miao BY, Lee SWH, Ho PC. Pilot study on the use of repeated doses of sublingual misoprostol in termination of pregnancy up to 12 weeks gestation: efficacy and acceptability. *Hum Reprod Oxf Engl*. 2002 Mar;17(3):654–658. PMID: 11870118
47. von Hertzen H. *Misoprostol Only Regimens for Medical abortion*. Moscow: FIAPAC; 2005.
48. Raymond EG, Harrison MS, Weaver MA. Efficacy of Misoprostol Alone for First-Trimester Medical Abortion: A Systematic Review. *Obstet Gynecol*. 2019 Jan;133(1):137–147.
49. Hamoda H, Ashok PW, Flett GMM, Templeton A. A randomised controlled trial of mifepristone in combination with misoprostol administered sublingually or vaginally for medical abortion up to 13 weeks of gestation. *BJOG Int J Obstet Gynaecol*. 2005 Aug;112(8):1102–1108.
50. Tang OS, Gemzell-Danielsson K, Ho PC. Misoprostol: Pharmacokinetic profiles, effects on the uterus and side-effects. *Int J Gynecol Obstet*. 2007 Dec;99:S160–S167.

51. Sheldon WR, Durocher J, Dzuba IG, Sayette H, Martin R, Velasco MC, Winikoff B. Early abortion with buccal versus sublingual misoprostol alone: a multicenter, randomized trial. *Contraception*. 2019 May;99(5):272–277. PMID: 30831103
52. von Hertzen H, Piaggio G, Huong NTM, Arustamyan K, Cabezas E, Gomez M, Khomassuridze A, Shah R, Mittal S, Nair R, Erdenetungalag R, Huong TM, Vy ND, Phuong NTN, Tuyet HTD, Peregoudov A. Efficacy of two intervals and two routes of administration of misoprostol for termination of early pregnancy: a randomised controlled equivalence trial. *The Lancet*. 2007 Jun;369(9577):1938–1946.
53. Kapp N, Eckersberger E, Lavelanet A, Rodriguez MI. Medical abortion in the late first trimester: a systematic review. *Contraception*. 2019 Feb;99(2):77–86. PMID: PMC6367561
54. Coyaji K, Krishna U, Ambardekar S, Bracken H, Raote V, Mandelkar A, Winikoff B. Does a repeat dose of misoprostol following mifepristone for early abortion increase efficacy? *Contraception*. 2006 Aug;74(2):179.
55. Ashok PW, Templeton A, Wagaarachchi PT, Flett GMM. Factors affecting the outcome of early medical abortion: a review of 4132 consecutive cases. *BJOG Int J Obstet Gynaecol*. 2002 Nov;109(11):1281–1289.
56. Zikopoulos KA. Early pregnancy termination with vaginal misoprostol before and after 42 days gestation. *Hum Reprod*. 2002 Dec 1;17(12):3079–3083.
57. De Nonno LJ, Westhoff C, Fielding SL, Schaff E. Timing of pain and bleeding after mifepristone-induced abortion. *Contraception*. 2000 Dec;62(6):305–9.
58. Foster AM. Medication Abortion: A Guide for Health Professionals. Cambridge: Ibis Reproductive Health; 2005.
59. Work and Reference Group for Family Planning, Swedish Society of Obstetrics and Gynaecology. Inducered abort [Internet]. 2018. Available from: <https://www.sfog.se/natupplaga/ARGrappor9792c7d5-5648-475e-bee6-81478b0d9323.pdf>
60. Chawdhary R, Rana A, Pradhan N. Mifepristone plus vaginal misoprostol vs vaginal misoprostol alone for medical abortion in gestation 63 days or less in Nepalese women: a quasi-randomized controlled trial. *J Obstet Gynaecol Res*. 2009 Feb;35(1):78–85. PMID: 19215552
61. Livshits A, Machtinger R, David LB, Spira M, Moshe-Zahav A, Seidman DS. Ibuprofen and paracetamol for pain relief during medical abortion: a double-blind randomized controlled study. *Fertil Steril*. 2009 May;91(5):1877–1880.
62. Archie JG, Collins JS, Lebel RR. Quantitative Standards for Fetal and Neonatal Autopsy. *Am J Clin Pathol*. 2006 Aug;126(2):256–265.
63. Gynuity Health Projects » FAQ on Misoprostol Detection in Blood. :2.
64. Kim et al. - 2017 - Medical treatments for incomplete miscarriage.pdf [Internet]. [cited 2019 Jun 4]. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6464743/pdf/CD007223.pdf>
65. Lemmers M, Verschoor M a. C, Oude Rengerink K, Naaktgeboren C, Opmeer BC, Bossuyt PM, Huirne J a. F, Janssen C a. H, Radder C, Klinkert ER, Langenveld J, Catshoek R, Van der Voet L, Siemens F, Geomini P, Van Hooff MH, Van der Ploeg JM, Coppus SFPJ, Ankum WM, Mol BWJ, MisoREST study group. MisoREST: surgical versus expectant management in women with an incomplete evacuation of the uterus after misoprostol treatment for miscarriage: a randomized controlled trial. *Hum Reprod Oxf Engl*. 2016;31(11):2421–2427. PMID: 27591236
66. Kim C, Barnard S, Neilson JP, Hickey M, Vazquez JC, Dou L. Medical treatments for incomplete miscarriage. *Cochrane Database Syst Rev*. 2017 31;1:CD007223. PMID: PMC6464743

67. Shannon C, Brothers LP, Philip NM, Winikoff B. Infection after medical abortion: A review of the literature. *Contraception*. 2004 Sep;70(3):183–190.
68. Creinin M, Blumenthal P, Shulman L. Mifepristone-Misoprostol Medical Abortion Mortality. *Medscape Gen Med*. 2006 Apr 14;8(2):26. PMID: PMC1785176
69. Cantwell R, Clutton-Brock T, Cooper G, Dawson A, Drife J, Garrod D, Harper A, Hulbert D, Lucas S, McClure J, Millward-Sadler H, Neilson J, Nelson-Piercy C, Norman J, O’Herlihy C, Oates M, Shakespeare J, de Swiet M, Williamson C, Beale V, Knight M, Lennox C, Miller A, Parmar D, Rogers J, Springett A. Saving Mothers’ Lives: Reviewing maternal deaths to make motherhood safer: 2006-2008. The Eighth Report of the Confidential Enquiries into Maternal Deaths in the United Kingdom. *BJOG Int J Obstet Gynaecol*. 2011 Mar;118 Suppl 1:1–203. PMID: 21356004
70. Cleland K, Creinin MD, Nucatola D, Nshom M, Trussell J. Significant Adverse Events and Outcomes After Medical Abortion: *Obstet Gynecol*. 2013 Jan;121(1):166–171.
71. Perriera LK, Reeves MF, Chen BA, Hohmann HL, Hayes J, Creinin MD. Feasibility of telephone follow-up after medical abortion. *Contraception*. 2010 Feb;81(2):143–149. PMID: 20103453
72. Schaff EA, Eisinger SH, Franks P, Kim SS. Combined methotrexate and misoprostol for early induced abortion. *Arch Fam Med*. 1995 Sep;4(9):774–779. PMID: 7647943
73. Hamoda H, Ashok PW, Flett GMM, Templeton A. Medical abortion at 9–13 weeks’ gestation: a review of 1076 consecutive cases. *Contraception*. 2005 May;71(5):327–332.
74. Chen AY, Mottl-Santiago J, Vragovic O, Wasserman S, Borgatta L. Bleeding after medication-induced termination of pregnancy with two dosing schedules of mifepristone and misoprostol. *Contraception*. 2006 Apr;73(4):415–419. PMID: 16531178
75. Committee on Practice Bulletins—Gynecology. ACOG Practice Bulletin No. 191: Tubal Ectopic Pregnancy. *Obstet Gynecol*. 2018;131(2):e65–e77. PMID: 29232273
76. Dulay AT. Erythroblastosis Fetalis - Gynecology and Obstetrics [Internet]. Merck Manuals Professional Edition. [cited 2019 Jun 12]. Available from: <https://www.merckmanuals.com/professional/gynecology-and-obstetrics/abnormalities-of-pregnancy/erythroblastosis-fetalis>
77. Fiala C, Fux M, Danielsson KG. Rh-prophylaxis in early abortion. *Acta Obstet Gynecol Scand*. 2003;12.
78. Misoprostol. Drugs Lact Database Lact [Internet]. Bethesda (MD): National Library of Medicine (US); 2006 [cited 2019 Jun 12]. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK501436/> PMID: 30000496
79. Goyal V. Uterine rupture in second-trimester misoprostol-induced abortion after cesarean delivery: a systematic review. *Obstet Gynecol*. 2009 May;113(5):1117–1123. PMID: 19384128
80. Moseson H, Herold S, Filippa S, Barr-Walker J, Baum SE, Gerdt C. Self-managed abortion: A systematic scoping review. *Best Pract Res Clin Obstet Gynaecol*. 2020 Feb;63:87–110. PMID: 31859163

