

# Comprehensive Abortion Care: Medical Abortion

# Objectives

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By the end of this training program, participants will be able to:



Provide an overview of Abortion and its global challenges



Explain Early Pregnancy Loss ( Miscarriage)



Provide an overview of different abortion methods



Provide an overview of Medication Abortion



Explain After-Care / Post-abortion Care



Explain options for Medical Management of Early Pregnancy Loss



Describe a high-quality Medication Abortion (MA) service



Provide options for post-abortion contraception



Explain the role of telemedicine in abortion care

# GLOBAL CHALLENGES OF ABORTION

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## OVERVIEW

# Abortion Overview

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- An abortion is a way of ending a pregnancy, using medicines (drugs) or a surgical procedure, before the fetus is capable of surviving independently outside the uterus.
- Abortion is safe when carried out using a method recommended by WHO, appropriate to the pregnancy duration and by someone with the necessary skills.
- In Great Britain, the law allows a woman to obtain an abortion up to 24 weeks of pregnancy if two doctors agree that it would cause less damage to her physical or mental health than continuing the pregnancy. You must follow the rules and regulations in your country.
- Abortion is a safe procedure for which major complications are uncommon at any stage of pregnancy. However, the earlier in pregnancy an abortion is done, the safer it is.
- The patient is offered a choice of different methods, depending on length of pregnancy.

# Abortion – Key facts

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1

**73.3M**

Abortions occurred each year  
between 2015 & 2019<sup>1</sup>

2

**61%**

of unintended pregnancies  
ended in an induced abortion<sup>1</sup>

3

**80.000**

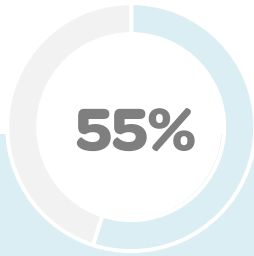
maternal deaths per year  
due to abortion<sup>2</sup>

<sup>1</sup>Bearak J, Popinchalk A, Ganatra B, Moller A-B, Tunçalp Ö, Beavin C, Kwok L, Alkema L. Unintended pregnancy and abortion by income, region, and the legal status of abortion: estimates from a comprehensive model for 1990–2019. Lancet Glob Health. 2020 Sep; 8(9):e1152–e1161. doi: 10.1016/S2214-109X(20)30315-6.

<sup>2</sup>Say L, Chou D, Gemmill A, Tunçalp Ö, Moller AB, Daniels J, Gülmezoglu AM, Temmerman M, Alkema L. Global causes of maternal death: a WHO systematic analysis. Lancet Glob Health. 2014 Jun; 2(6):e323-33.

# Abortion - Classification

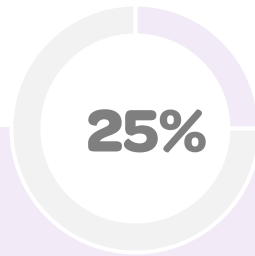
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## Safe Abortions

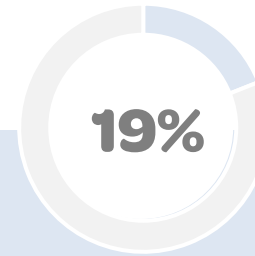
Safe abortion is an abortion provide by

- 1) a trained person,
- 2) with a WHO qualified method (Medical abortion, Vaccum aspiration, Dilatation and evacuation)



## Less Safe Abortions

An abortion is less safe when only one of the two criteria is met (1 or 2)

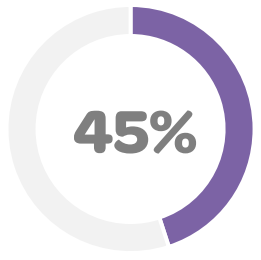


## Unsafe Abortions

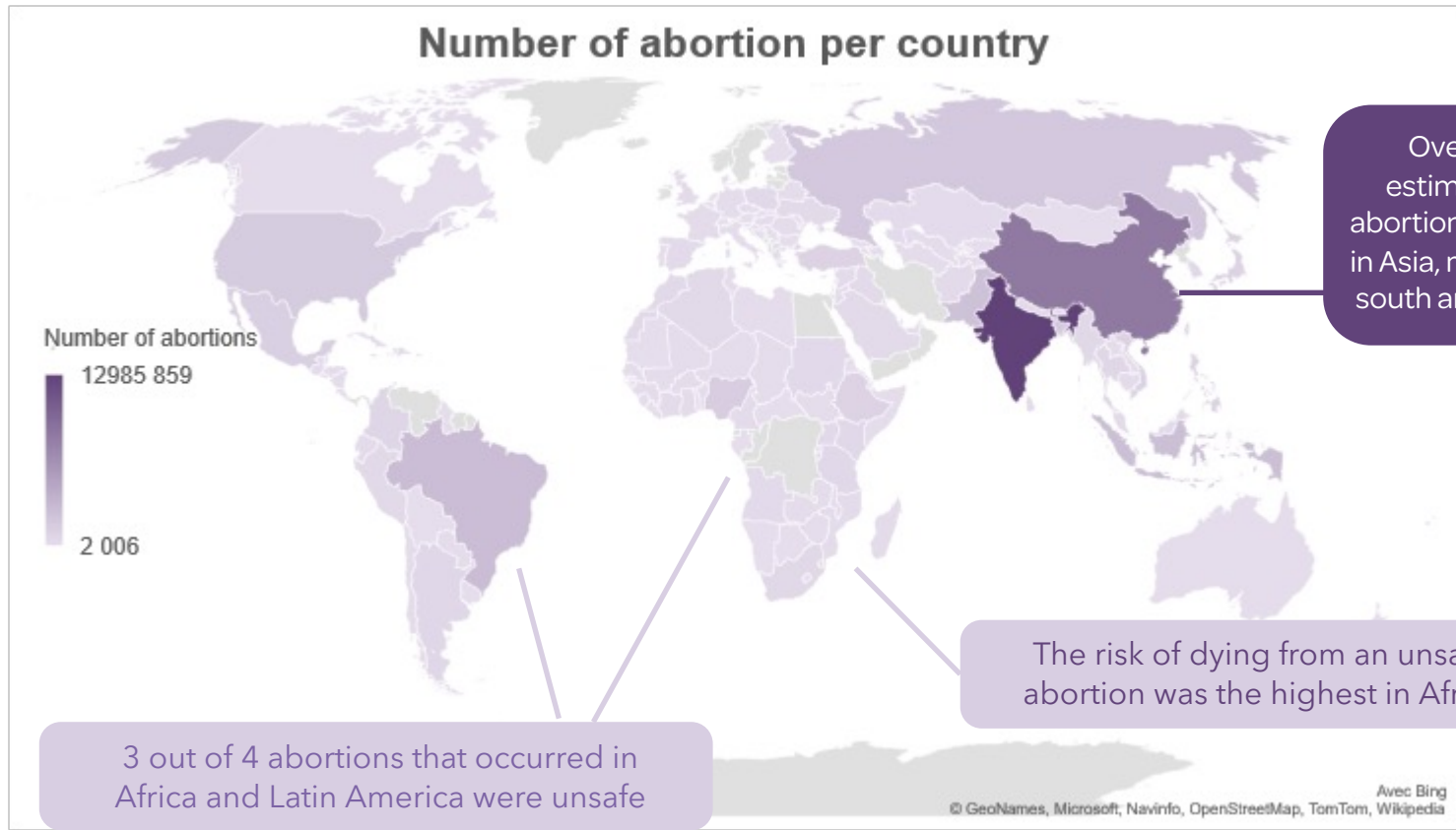
An abortion is classified least safe if it provided by untrained individual using a WHO unqualified method

<https://www.who.int/news-room/fact-sheets/detail/preventing-unsafe-abortion>  
Internal Source

# Global Challenge of Unsafe Abortion



Approximately 45% of all abortions worldwide were unsafe or less safe.



<https://www.who.int/news-room/fact-sheets/detail/preventing-unsafe-abortion>  
Internal Source

# Complications of Unsafe Abortion

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Unsafe abortions when performed under least safe conditions can lead to complications such as:



incomplete abortion (failure to remove or expel all the pregnancy tissue from the uterus)



hemorrhage (heavy bleeding)



infection



uterine perforation (caused when the uterus is pierced by a sharp object)



damage to the genital tract and internal organs by inserting dangerous objects such as sticks, knitting needles, or broken glass into the vagina or anus.

<https://www.who.int/news-room/fact-sheets/detail/preventing-unsafe-abortion>



# EARLY PREGNANCY LOSS (EPL)

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# MISCARRIAGE

# Types of EPL/Miscarriage

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## ○ Missed abortion

When the pregnancy stops developing, but it (the embryo/ fetus/ embryonic tissue or empty gestation sac) remains in the uterus and the cervical os is closed\*  
The patient may have pain, bleeding or no complaints. An ultrasound may show an embryo or fetus without cardiac activity, or a fluid-filled sac within the uterus.

## ○ Incomplete abortion

When the pregnancy has started to pass out of the uterus and the cervical os is open. The patient complains of bleeding and cramping pain.  
An ultrasound may show 'Irregular heterogeneous echoes within the endometrial cavity on TVS \*\*.  
However, routine ultrasound should not be used to screen for incomplete abortion; ultrasound appearances correlate poorly with retained products of conception ( WHO 2023 )

## ○ Threatened abortion

When vaginal bleeding or spotting occurs, but the pregnancy remains alive / viable in the uterus and the cervical os is closed. There may or may not be pain.

\*Abortion care guideline. Geneva: World Health Organization; 2022. [Abortion care guideline \(who.int\)](https://www.who.int/publications/m/item/abortion-care-guideline)

\*\* Doubilet PM, Benson CB, Bourne T, Blaivas M. Diagnostic criteria for nonviable pregnancy early in the first trimester. N Engl J Med 2013; 369: 1443–51.

# ABORTION METHODS

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# OVERVIEW

# Abortion Methods Overview



Recommended methods of abortion by pregnancy duration:



Medical abortion (MA)



Surgical abortion



Vacuum aspiration – up to 14 weeks



Manual vacuum aspiration (MVA)

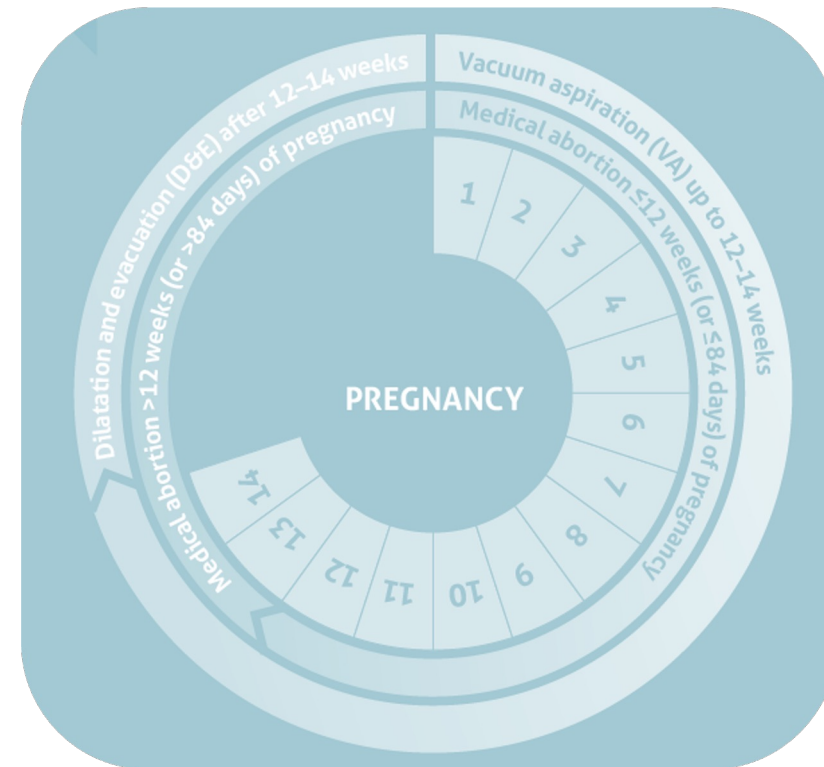


Electric vacuum aspiration (EVA)



Dilation and evacuation (D&E) - after 14 weeks.

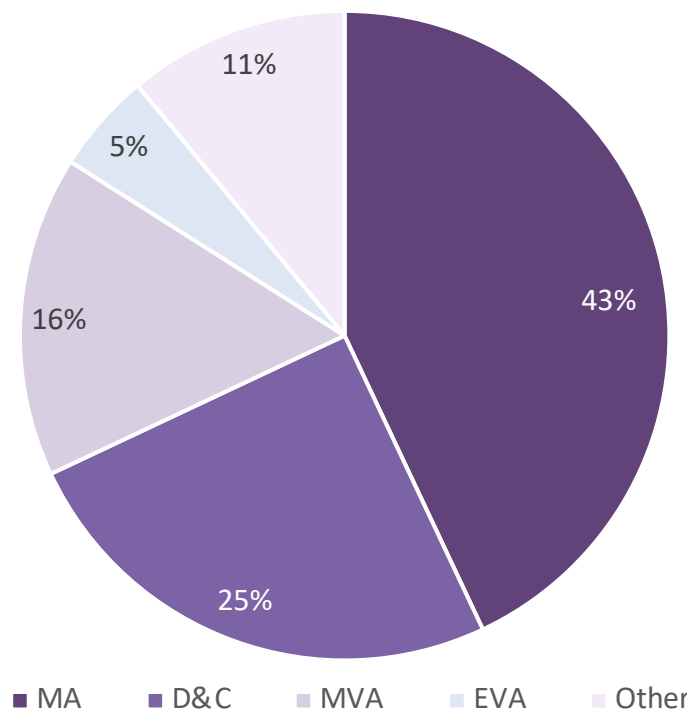
*VA should replace D&C because D&C is likely to be associated with more complications*



Clinical practice handbook for Quality Abortion Care, World Health Organization, 2023

# Abortion Methods Overview

Segmentation of abortions by method\*, 2019



## MA

MA is the **preferred method worldwide**, specially in Northern Europe (97%\*\*), followed by Southern Asia (72%), Northern America (59%) and Western Europe (56%).

## D&C

D&C is declining as abortion method in many countries. **It is not a recommended method for abortion.** However, many providers in less developed countries and rural areas still use this abortion method. This practice is prevalent in Central America, Western and Central Asia, Middle Africa.

## MVA

MVA is the third most popular abortion method worldwide. It is widely used in South America, Southern and Eastern Africa and Southern Europe. In North America and Europe (esp. Northern and Western Europe), it is being gradually replaced by medical abortion.

Internal Source: Global MVA Abortion Market MarketSize, Trends and Competitive Landscape, 2021

# Abortion Methods Overview

Region	Subregion	Surgical abortion method			Medical	Other	Based on country data:
		% MVA	%EVA	%D&C	%MA	Other methods	
Africa	Eastern Africa	34	4	14	36	12	Kenya, Tanzania, Rwanda, Ethiopia
	Middle Africa	8	1	43	48	0	Uganda
	Northern Africa	na	na	na	na	na	Egypt
	Southern Africa	63	7	limited	30	0	South Africa
	Western Africa	17	20	0	6	57	Nigeria, Ivory Coast
Asia	Central Asia	20	14	45	21	0	Pakistan
	Eastern Asia	7	3	41	26	23	Japan, China
	Southeastern Asia	na	na	na	na	na	Thailand
	Southern Asia	6	2	20	72	0	India, Bangladesh
	Western Asia	35	10	45	10	0	Turkey
America	Caribbean	na	na	na	na	na	
	Central America	14	0	45	20	21	Guatemala, Costa Rica
	South America	33	13	10	32	12	Brazil
	Northern America	23	17	1	59	0	USA, Mexico
Europe	Eastern Europe	na	na	na	na	0	Ukraine, Romania
	Northern Europe	1	2	0	97	0	Sweden, Finland
	Southern Europe	35	38	0	27	0	Italy, Spain
	Western Europe	22	12	10	56	0	Germany, France, UK
	Oceania	67 (all surgical)			11	20 (vacuum and MA)	Australia

Internal Source: Global MVA Abortion Market MarketSize, Trends and Competitive Landscape, 2021

# Comparison of Abortion Methods < 14weeks:

Medical Abortion	MVA
Avoids surgery.	Minor surgical procedure done in OPD.
Mimics the natural process of miscarriage.	Done with the help of instruments by trained provider.
In some settings and gestations it can take place at home.	Takes place in a health facility.
Abortion takes hours or days to complete, which is unpredictable. women experience bleeding and cramping during this time. IUD can be inserted only after confirming completion which may take more than a week.	Quick procedure, takes less than 15 minutes to complete. Complete evacuation confirmed by examining aspirated products. Intrauterine contraception can be provided at the end of the procedure.
Tablets may cause other side effects such as vomiting, shivering and nausea.	Instrumentation may cause some discomfort.
May require more than one visit to the clinic if bleeding and pain require treatment and to confirm that the pregnancy has passed completely.	Single visit unless there is uterine or cervical injury – risk of injury is small in hands of trained provider.
There is a chance that women may see the products of conception.	Women do not see products of conception.
Timing of process can be women controlled.	Timing of procedure is controlled by the provider and the clinic.

# MEDICATION ABORTION (MA)

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## OVERVIEW



# Medication Abortion (MA)

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- Medical methods of abortion (medical/medication abortion) is the use of pharmacological agents / drugs to terminate pregnancy.
- MA is safe, **effective** and suitable for almost all women.
- May take place at home with safety, privacy, convenience and acceptability.
- Commonly **mifepristone and misoprostol** or **misoprostol alone** is used.
- Drugs can be used for management of induced abortion and early pregnancy loss/ miscarriage.
- Mifepristone and misoprostol is more effective than misoprostol used alone for induced abortion.
- Women must be counselled and have access to medical care for complications or if they have questions.

Goodman S, Flaxman G, and the TEACH Trainers Collaborative Working Group.\* TEACH Early Abortion Training Workbook, Fifth Edition. UCSF Bixby Center for Global Reproductive Health: San Francisco, CA (2016).

# Medication Abortion (MA)

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## Mechanism of action



### Mifepristone

- Stops the pregnancy from growing by blocking the hormone progesterone
- This normally sustains the pregnancy
- Used combined with misoprostol in a *set dosing sequence*



### Misoprostol

- Stimulates the uterus to contract and empty by softening the cervix
- Can be used without mifepristone where this is not available
- Initially used for protecting the stomach lining



Note: Letrozole is a less common drug but acts in a similar way to Mifepristone.

# Medication Abortion (MA)

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## Contraindications



### Mifepristone

- Adrenal suppression (may require corticosteroid);
- Anticoagulant therapy;
- Asthma (avoid if severe and uncontrolled);
- Existing cardiovascular disease;
- Haemorrhagic disorders;
- History of endocarditis;
- Prosthetic heart valve;
- Risk factors for cardiovascular disease



### Misoprostol

- Cardiovascular disease;
- Risk factors for cardiovascular disease



## Allergies to the medication

# Medication Abortion (MA)

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## Management of induced abortion with pills



Pre abortion ultrasound is not mandatory. Local regulation may demand it, but this may reduce access



Pain management should be offered routinely (e.g. non-steroidal anti-inflammatory drugs/NSAIDs) to use if and when wanted.



Use of anti D to prevent rhesus isoimmunisation is not indicated <12w.



Prophylactic antibiotics are not indicated for medical abortion.

# Medication Abortion (MA)

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## Estimation of gestational age



Accurate estimation of gestation ensures woman receives correct doses of medication.



Gestational age can be reasonably estimated in most cases as the number of weeks and days from the first day of the last normal menstrual period (LMP).



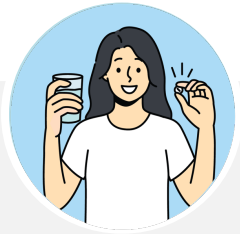
Medical abortion at later gestations should be performed in a healthcare facility because of increased risk of bleeding.



Perform ultrasound or physical exam if there are doubts about gestation, or suspicion of ectopic pregnancy.

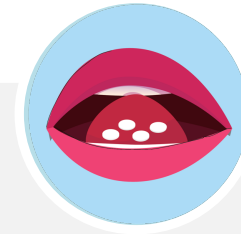
# Routes of Administration of MA

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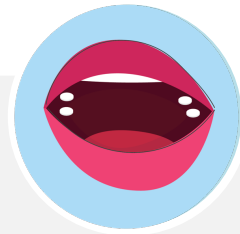
## Oral

pills are swallowed immediately



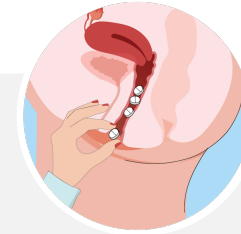
## Sublingual

pills are placed under the tongue and  
swallowed after 30 minutes



## Buccal

pills are placed between the cheek and gums  
and swallowed after 20 to 30 minutes



## Vaginal

pills are placed in the vagina

# MA Protocol for Gestation <12w\*

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## Mifepristone and misoprostol



200 mg mifepristone administered orally, followed 1–2 days later by 800 µg misoprostol



Administered vaginally, sublingually or buccally



The minimum recommended interval between use of mifepristone and misoprostol is 24 hours.\*



## Misoprostol only



800 µg misoprostol administered buccally, sublingually, vaginally



Repeat doses of misoprostol can be considered when needed



## Letrozole plus Misoprostol



Letrozole 10 mg orally each day for 3 days followed by misoprostol 800 µg sublingually on the fourth day

*Repeat doses of misoprostol can be used to achieve success of the abortion process*

\*Abortion care guideline. Geneva: World Health Organization; 2022.

# Medication Abortion (MA)

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## Side Effects



### **Cramping/pain**

- occurs in >90% of patients, varies in intensity, peaks after misoprostol dose. Normally no more than 6 hrs and responds to ibuprofen.



### **Nausea, vomiting, diarrhea, low-grade fever, chills and myalgias**

- are common side effects of misoprostol, and usually resolve within 6 hours of use.



### **Vaginal bleeding**

- is usually heaviest within 4-6 hours after misoprostol, often heavier than normal menses and accompanied by the passage of clots.



# Follow Up Care After MA

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Women must be informed about 'danger signs' to seek medical advice:

- Symptoms of ongoing pregnancy (may indicate failure of abortion),
- Prolonged heavy bleeding or absence bleeding during medical abortion,
- Severe pain not relieved by medication can indicate an ectopic pregnancy.



There is no medical need for mandatory medical follow-up unless the woman wishes to be assessed



***However, it is Important to say "Come back any time"  
and have an open-door policy***

# Medication Abortion (MA)

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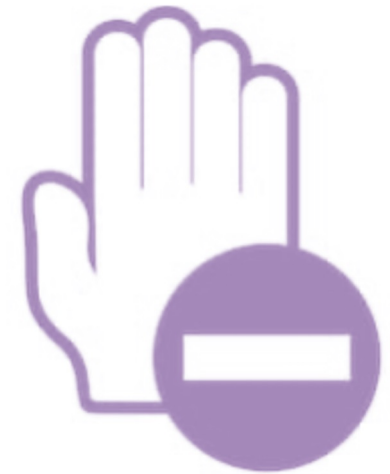


## Danger Signs



The patient should reach emergency services if:

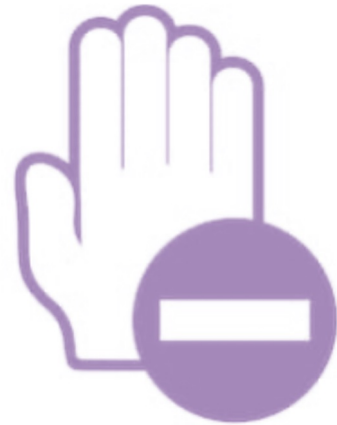
- There is no bleeding within 24 hours of misoprostol
- Soak 2 or more maxi-pads for 2 or more consecutive hours
- Unmanageable pain despite taking analgesics prescribed
- Sustained fever  $>38^{\circ}\text{C}$  or  $100.4^{\circ}\text{F}$  or onset of fever  $>24$  hours after misoprostol
- Abdominal pain, weakness, nausea, vomiting or diarrhea more than 24 hours after misoprostol



Goodman S, Flaxman G, and the TEACH Trainers Collaborative Working Group.\* TEACH Early Abortion Training Workbook, Fifth Edition. UCSF Bixby Center for Global Reproductive Health: San Francisco, CA (2016).

# Complications of Medication Abortion (MA)

- If there is no bleeding after taking pills consider
  - A continuing pregnancy (1-2 per 100 women): if confirmed, provider should discuss repeat MA or MVA
  - Ectopic pregnancy: may be asymptomatic or present with minimal bleeding or pain
- If there is heavy or prolonged bleeding after taking MA pills, urgent uterine aspiration may be required to control bleeding
  - Severe bleeding requiring transfusion is seen in less than 1 per 1000
- The need for additional procedure to complete the abortion occurs in 70 per 1000 cases
- Infection is rare (less than 1 per 100)
- Once misoprostol taken, abortion must be completed due to its potential for teratogenicity (risk of congenital deformities).



# Unsuccessful Medication Abortion (MA)

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The following signs may indicate that abortion has **not** been successful:



No bleeding or only slight spotting within 24 hours of taking misoprostol tablets.



Less than 4 days of bleeding after taking MA pills.



Continued pregnancy symptoms such as sore breasts, nausea, or a growing abdomen.



A positive, invalid, or unclear result on the urine pregnancy test taken 3 weeks after treatment (using the first morning urine).



No onset of the next period by 4 weeks after MA, even if the pregnancy test was negative.

\* British Pregnancy Advisory Service (BPAS). Abortion aftercare. <https://www.bpas.org/abortion-care/abortion-aftercare/>.

# Self-Management of MA <12 Weeks

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For Medication Abortion < 12 weeks (using combination of mifepristone plus misoprostol or using misoprostol only) , self-management is possible as follows:

- self-assessment of eligibility (determining pregnancy duration, ruling out contraindications)
- self-administration of abortion medicines outside a health-care facility without the direct supervision of a trained provider
- self-management of the abortion process
- self-assessment of the success of medical abortion



**High Quality counselling and information are pre-requisites of self-management**

# Management of Early Pregnancy Loss



Medical, surgical (vacuum aspiration) and expectant management are all options for **management of missed abortion**. The decision depends on the individual's clinical condition and preference for treatment

## MEDICAL TREATMENT OF MISSED ABORTION < 14 WEEKS

REGIMEN TYPE	DOSING INFORMATION			REMARKS
<b>MIFEPRISTONE PLUS MISOPROSTOL</b> (Recommended regimen)	Mifepristone 200 mg PO once	▶ 1-2 DAYS BEFORE ▶	Misoprostol 800 µg by any route (B, PV or SL) once	The minimum recommended interval between use of mifepristone and misoprostol is 24 hours.
<b>MISOPROSTOL ALONE</b> (Alternative regimen)	NA		Misoprostol 800 µg by any route (B, PV or SL)	If using this regimen, it should be noted that at gestational ages ≥ 9 weeks, evidence shows that repeat dosing of misoprostol is more effective to achieve success of the abortion process. WHO guidance does not indicate a maximum number of doses of misoprostol.

B: buccal; NA: not applicable; PO: oral; PV: vaginal; SL: sublingual

# Management of Early Pregnancy Loss



For clinically stable patients, the three options for **management of incomplete abortion < 14 weeks** are : expectant management, vacuum aspiration, or medical management with misoprostol based on her clinical condition and her preference for treatment.



Misoprostol can be repeated as needed to achieve completion of the abortion process but WHO guidance does not indicate a maximum number of doses of misoprostol to be used.

Recommended regimen for management of incomplete abortion with misoprostol

UTERINE SIZE	MISOPROSTOL REGIMEN (DOSE AND ROUTE)
< 14 weeks uterine size	600 µg oral or 400 µg sublingual
≥ 14 weeks uterine size	400 µg sublingual, vaginal or buccal every 3 hours



*Caution must be exercised with maximum number of doses of misoprostol in pregnant women with prior uterine incision and advanced pregnancy (> 14 weeks) to avoid uterine rupture*

# Session Summary

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- Mifepristone + misoprostol, or misoprostol alone are safe and effective treatments for uterine evacuation for early pregnancy loss.
- Medication Abortion does not require a surgical procedure or availability of a provider.
- Medication Abortion can be self-administered successfully supported by good quality counselling and correct information.
- MVA should be accessible for all women who choose Medication Abortion if the woman changes her mind or uterine evacuation is incomplete or if there is heavy bleeding.



# HIGH-QUALITY MEDICAL ABORTION

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# OVERVIEW

# Overview

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*Effective monitoring and evaluation (M&E) are essential for measuring abortion quality and trends*



Quality abortion care health system inputs to monitor over time include:



**Governance:** adherence to legal status of abortion in country and protocols in national guidelines



**Financing:** financing for abortion-related care in health benefits packages



**Health workforce:** competency-based training in national curricula for relevant categories of health workers



**Health commodities:** national essential medicines lists (NEMs) include mifepristone and misoprostol, monitoring of stock-outs of abortion service commodities at service-delivery points



**Health management information systems (HMIS):** indicators for quality abortion care integrated into the national HMIS.

# Monitoring Service Delivery Quality

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Service-delivery quality monitoring should track the following:



Availability of providers trained in and providing abortion related care



Availability of necessary medicines and products at service-delivery points



Readiness to provide abortion care to a defined minimum quality standard



Quality of service delivery, including person-centred care, assessed by users and community



Abortion related service-delivery monitoring included in facility-level quality assessments, HMIS and population-based surveys

# Monitoring Quality at Outcome and Impact Levels

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## ○ Population outcome monitoring

for quality abortion care assesses coverage including

- Access to quality, affordable abortion care, and
- Population knowledge of access to quality, affordable abortion care, disaggregated by dimensions of inequality, such as ability, age, caste, education, ethnicity, gender, geography and wealth.

## ○ Impact measurement

for quality abortion care includes abortion-related mortality and morbidity, disaggregated by dimensions of inequality as much as possible.

# POST ABORTION CONTRACEPTION

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# OVERVIEW

# Contraception

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- Following an induced or spontaneous abortion / miscarriage / EPL , ovulation can return as early as 8–10 days later and usually within one month.
- Starting contraception as soon as possible within the first month is important for women who desire to delay or prevent a future pregnancy.
- All contraceptive options may be considered after an abortion, but informed choice and the client’s wishes are most important.
- Generally, almost all methods can be initiated immediately following a surgical or medical evacuation.

# Contraception

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- Immediate start of contraception after surgical abortion means it can be started on the same day as the procedure, after the success of the abortion has been confirmed.
- Immediate start of contraception after medical abortion means it can be started after taking the first pill (mifepristone or misoprostol) of the medical abortion regimen, **except for IUDs.**
- **IUDs** may be inserted immediately after any abortion (surgical / medical ) has been confirmed as successful, but not after a septic (infected) abortion.
- As with starting any method of contraception, the woman's medical eligibility for her chosen method should be verified.

# MA USING TELEMEDICINE

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# OVERVIEW



# Overview

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**Telemedicine** is a mode of health service delivery where providers and clients, or providers and consultants, are separated by distance.

The interaction may take place in real time (synchronously), using telephone or video link, or asynchronously using a store-and-forward method, when a query is submitted and an answer is provided later (e.g. by email, text or voice/audio message)

# MA Using Telemedicine

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- An alternative to in-person interactions with the health worker to deliver medical abortion services in whole or in part.
- Telemedicine can be used for assessment of eligibility for medical abortion, counselling and/or instruction relating to the abortion process, providing instruction for and active facilitation of the administration of medicines, and follow-up post-abortion care
- Telemedicine services should include referrals
  - (based on the woman's location) for medicines (abortion and pain control medicines)
  - for any abortion related care or follow-up care required (including for emergency care if needed)
  - for post-abortion contraceptive services

# REFERENCES

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# Source Material

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- Abortion care guideline. Geneva: World Health Organization; 2022. Abortion care guideline (who.int) Clinical practice handbook for quality abortion care. Geneva: World Health Organization; 2023. Licence: CC BY-NC-SA 3.0 IGO
- Best Practice in Abortion Care, March 2022, Royal College of Obstetricians and Gynaecologists
- World Health Organization Department of Sexual and Reproductive Health and Research (WHO/SRH) and Johns Hopkins Bloomberg School of Public Health/ Center for Communication Programs (CCP), Knowledge SUCCESS. Family Planning: A Global Handbook for Providers (2022 update). Baltimore and Geneva: CCP and WHO; 2022.
- Lancet Series, 'Miscarriage Matters', April 26<sup>th</sup>, 2021

# Questions, Comments, Or Concerns?



We want to hear about it ...



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[www.dktwomancare.org](http://www.dktwomancare.org)