# MISOPROSTOL: A REVIEW OF THE INTERNATIONAL EVIDENCE FOR POSTABORTION CARE

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# How does Misoprostol Work?

- Two properties make it good for ob/gyn procedures
- Drug causes contractions of smooth muscles lining the uterus -> empties the uterus
- Drug can ripen the cervix -> increases dilation for inter-uterine procedures, facilitates expulsions



# Misoprostol in RH

#### **Labor and Delivery**

- Labor induction
- Cervical softening
- Prevention and treatment of postpartum hemorrhage

#### **Abortion**

- First trimester abortions (alone or with other drugs)
- Second trimester abortion (D&E or labor induction)
- Cervical priming prior to surgical abortion

#### **Uterine Evacuation**

- Incomplete abortion
- Missed abortion
- Intra-uterine fetal death



# Misoprostol Availability approved not approved also approved for an ob/gyn indication © 2005 Gynuity Health Projects 04/04/07

# RATIONALE

- Incomplete abortion is the most common reason for postabortion care
- Misoprostol is widely available, inexpensive, simple to use and has been proven to be efficacious for the treatment of incomplete abortion.
- Misoprostol was recently added to the WHO Essential Medicines List (EML) for the treatment of incomplete abortion
- Medical methods provide women with options and have the potential to increase access to care

# DEFINITION: INCOMPLETE ABORTION

- Open cervical os, with
  - Past or present history of vaginal bleeding during pregnancy or
  - If ultrasound used: evidence of substantial debris in the uterus or evidence of fetal demise



# INDICATIONS FOR USE

Misoprostol is indicated for treatment of incomplete abortion and miscarriage for women with uterine size less than or equal to 12 weeks LMP at presentation

- Regimen:
  - 400 mcg sublingually or
  - 600 mcg orally



# SERVICE DELIVERY

- care.
- If eligible and consenting, given misoprostol treatment and counseling about what side effects to expect and postabortion contraception. Method given if desired.
- Day 8 14: In-clinic follow up to confirm status of incomplete abortion. Follow up opportunity to counsel the woman about contraception and to provide a method.



# CONTRAINDICATIONS

- History of allergy to misoprostol or other prostaglandin
- Suspicion of ectopic pregnancy
- Signs of pelvic infection and/or sepsis
- Symptoms of hemodynamic instability or shock
- Hemorrhage or infection that requires rapid action
- IUD (remove before treatment)



# **EFFICACY**

Country	Groups	N	Efficacy(%)
Burkina Faso	600 μg oral miso vs. MVA	460	94.5 vs. 99.1
Ghana	600 μg oral miso vs. MVA	220	99 vs. 99.1
India	600 μg oral miso vs. D&C	122	97 vs. 100
Mozambique	600 μg oral miso vs. MVA	100	91 vs. 100
Tanzania	600 μg oral miso vs. MVA	300	99 vs. 100
Moldova	600 μg oral miso vs. 400 μg sublingual miso	150	95.7 vs. 97.9
Madagascar	600 μg oral miso vs. 400 μg sublingual miso	200	93 vs. 94.9
Mauritania/Niger	400 μg sublingual miso vs. D&C	400	96 vs. 100
Egypt	400 μg sublingual miso vs. MVA	697	98.3 vs. 99.1
Ecuador/Venezuel a	400 μg sublingual miso vs. MVA	242	94 vs. 100
Senegal	400 μg de miso sublingual	100	96.6

# SIDE EFFECTS

- Side effects as expected:
  - Bleeding
  - Pain/cramps
  - Nausea/vomiting
  - Fever/chills
- Transient and easily tolerated by women
- Similar to those experienced after surgical treatments
- Easily managed by women and lower level providers (good counseling, mild analgesics, antipyretics)



# SAFETY AND

### **ACCEPTABILITY**

- Safety: recent meta-analysis and studies have demonstrated that complications with misoprostol are similar to those with surgical methods
  - Infection: the risk of infection is low and not greater than with surgical methods or expectant management
  - Hemorrhage and anemia: Change in Hb after MVA and misoprostol comparable; change clinically negligible
- Satisfaction: levels are high among women and providers. Women cite overwhelmingly that they would use the method again



# **MISSED ABORTION**

Misoprostol is also effective in treating missed abortions (non viable pregnancy or empty gestational sac) generally diagnosed by ultrasound

- Recommended protocol
  - 800 µg vaginal misoprostol or
  - 600 µg sublingual misoprostol



# CONCLUSIONS

- Misoprostol presents an important first line treatment alternative to surgery for PAC that can be offered at many levels of health system.
- 400 μg sublingual or 600 μg oral misoprostol are safe and effective treatments for incomplete abortion
- Misoprostol is an internationally recognized treatment for incomplete abortion (ACOG, FIGO, WHO, etc.)



## **THANK YOU!**

