

Misoprostol for Treatment of Failed Pregnancy

Beverly Winikoff, MD, MPH

March 11, 2009



What is pregnancy failure?

A range of conditions in which pregnancy does not develop to viability, also “pregnancy loss”

- **Spontaneous abortion**
 - **complete** (all products of conception expelled)
 - **incomplete** (some products remaining)
- **Anembryonic gestation** (no embryo has developed)
- **Missed abortion** (fetal death, diagnosis relies on ultrasound)
- **Unwanted pregnancy** $\xrightarrow{\text{leads to}}$ **termination**



Why does it happen?

- **Spontaneous abortion occurs in 15-20% of all pregnancies**
- **Incomplete abortion often results from attempts at induced abortion, particularly in the absence of safe services**
- **Policy developed as a result of this situation is termed Post-Abortion Care (PAC)**

Treating Failed Pregnancy



- **Expectant Management**
- **Surgical Methods**
 - Manual Vacuum Aspiration (MVA)
 - Electric Aspiration
 - Dilatation and Curettage (D&C)
- **Medical Method**
 - Misoprostol



What is Post-Abortion Care?

- **A way to attend to the needs of women seeking medical services after pregnancy loss**
- **Not a field of medicine**
- **Not a specific service**

Who Comes for Post-Abortion Care?



Women with wanted pregnancies and spontaneous loss



Women with problems after induced abortion in a medical service



Women with problems after clandestine or self-induced abortion



MISOPROSTOL CAN ADDRESS THE NEEDS OF ALL THESE WOMEN

Medical Management of Failed Pregnancy



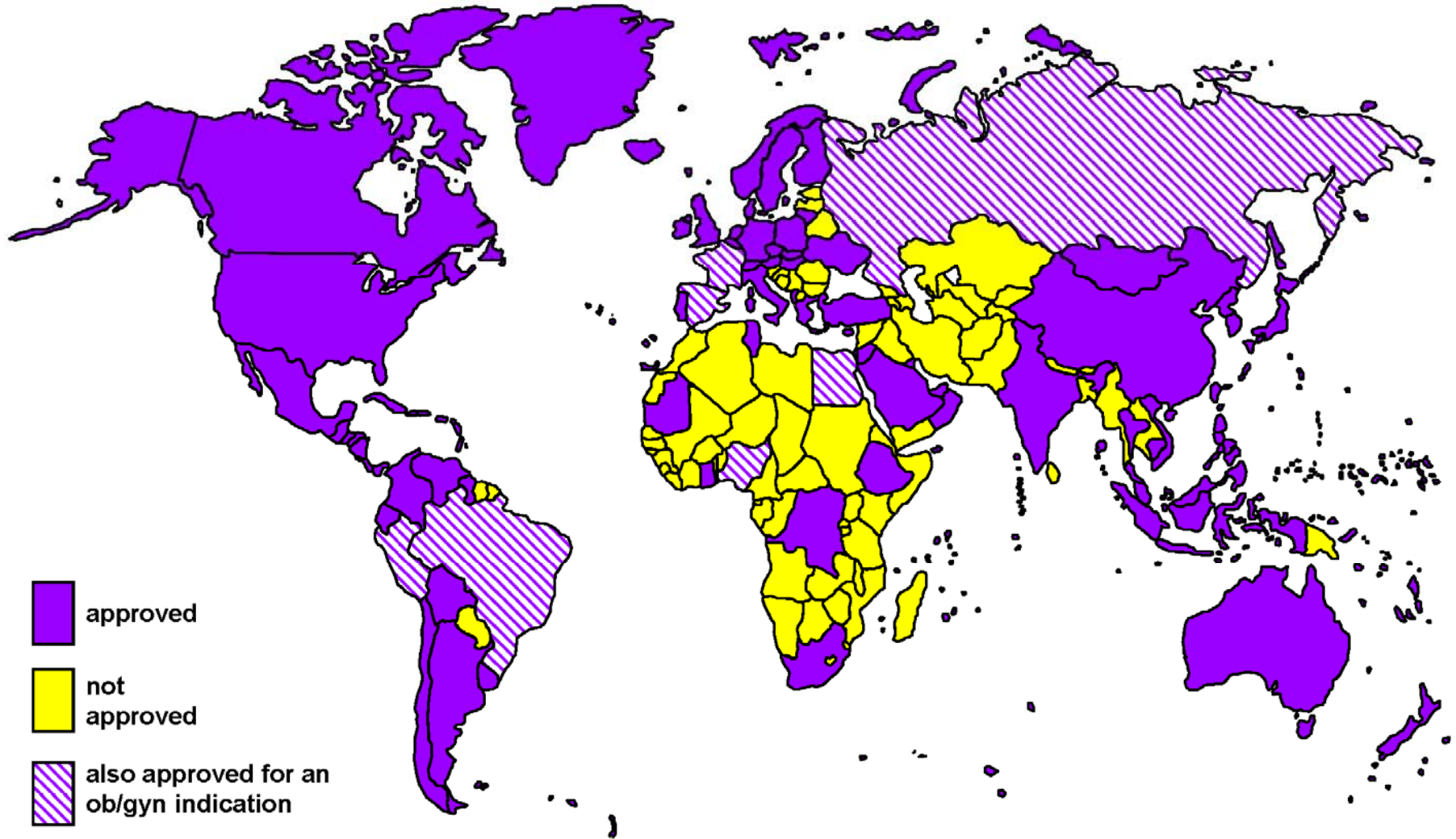
- **A way of emptying the uterus with medicines (pills)**
- **A “no touch” procedure**
- **A scientific adaptation of potions, teas, herbal remedies that women have sought for eons**
- **A new option for services and for women**

Advantages of Misoprostol



- **Misoprostol is less invasive than surgery and quicker than expectant management**
- **Research shows misoprostol effectively evacuates the uterus after pregnancy failure**
- **Can be provided at lower levels of the health care system**
- **Mid-level providers can use the method**

Misoprostol Approved (2008)



Who will benefit?



- **Women preferring a non-invasive procedure will benefit by having a no-touch alternative**
- **Women seeking privacy & out-patient care**
- **Skilled providers, by reduced workload for unnecessary surgical procedures**
- **Health care system: the burden of surgical care will be reduced**



Results of Selected Randomized Studies: Miso for PAC

| Author | Arms | N | Efficacy |
|------------|---|-----|----------|
| Zhang | 800 mcg vaginal miso (max 2 doses) vs. surgical evacuation | 30 | 93.0% |
| | | 148 | 97.0% |
| Dao | 600 mcg oral miso vs. MVA | 218 | 94.5% |
| | | 224 | 99.1% |
| Shwekerela | 600 mcg oral miso vs. MVA | 150 | 99% |
| | | 150 | 100% |
| Weeks | 600 mcg oral miso vs. MVA | 107 | 91.5% |
| | | 82 | 96.3% |
| Pang | 800 mcg oral miso (repeated in 4 hrs) vs. 800 mcg vaginal miso (repeated in 4 hrs) (first 24 hrs) | 103 | 64.4% |
| | | 95 | 61.1% |
| Ngoc | 600 mcg oral miso vs. 1200 mcg oral miso | 149 | 95.3% |
| | | 146 | 93.8% |
| Diop* | 400 mcg sublingual miso vs. 600 mcg oral miso | 146 | 94.5% |
| | | 148 | 94.6% |

*in press

Instructions for Use: Miso for postabortion care



Purpose:

- **Guidance for clinicians/medical personnel**
- **Dissemination via fact sheets, clinical training, websites, inclusion in scientific articles, etc.**

Content:

- **Shows a standard product label for use of misoprostol for incomplete uterine evacuation and miscarriage**

Instructions for Use: Indication and usage



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

- **For incomplete abortion (retention of debris):**
 - **600 mcg orally or 400 mcg sublingually**
 - **success rate 66-100% using this regimen**
- **For missed abortion (sac with no embryo):**
 - **800 mcg vaginally**
 - **success rate 60-93% using the recommended dose**

Where is miso being used for this indication?



- **Madagascar: 400 mcg sublingual miso regimen incorporated into the Reproductive Health Norms and Protocols of the MOH**
- **Ecuador: miso for PAC addendum to national norms under consideration**
- **Mexico city: miso soon to be implemented as first-line treatment for incomplete abortion**

Moving Forward: Misoprostol for PAC



- EDL application approved by WHO
- Chapter in IJGO Supplement recommending evidence-based regimens of miso for PAC (December 2007)
- Misoprostol added as technology to PAC Consortium Technology Task Force
- Instructions for Use available in 8 languages

When unwanted pregnancy results in the need for termination



- **Mifepristone + misoprostol**
- **Methotrexate + misoprostol**
- **Misoprostol alone**

Mifepristone+misoprostol is the “gold standard”



International Consensus for Accessibility to All



- **1998 Bellagio Meeting Consensus:**

Mifepristone followed by a suitable prostaglandin can feasibly be delivered in a manner that is safe, effective, and acceptable for women in developing countries¹

- **2000 Expert Meeting:**

Development of recommendations for use in low-resource settings (Orange book...)

- **2005: WHO Essential Drugs List**

¹ Population Council. Medical methods of early abortion in developing countries: Consensus Statement. Contraception 1998;58:257-259.

Misoprostol with mifepristone



- **Most effective when used up to 63 days' LMP**
- **Recently sublingual and buccal administration have become popular**
- **Many regimens work well**

Why misoprostol is sometimes used alone...



- **Mifepristone is expensive; not registered in many countries**
- **Misoprostol is cheap, available in many countries, easy to transport, store, and administer**
- **Efficacy of misoprostol alone up to 63 days' LMP is approx 85%**

Challenges



- **Pharmaceutical companies' reluctance:**
 - To reinvest in labeling for these indications
 - To make drug available at locally sustainable prices
 - To introduce misoprostol in places where need is greatest although financial rewards may be few
- **Policymakers fear women's self-use of drug**
- **Adoption of most appropriate service delivery models depends on purposes & clinical protocols, based on infrastructure, service demands, & legal/policy constraints in each country**

Misoprostol for treatment of pregnancy failure has the potential to...



- **improve women's health**
- **secure reproductive choice**
- **offer women autonomy**
- **help the disadvantaged especially**
- **enhance women's lives**



THANK YOU.....