Abortion and Public Health

Dr. T. Doughten (Seattle University)

GFMER - WHO - UNFPA - LAO PDR
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Objectives

- Provide an overview of unintended pregnancy and abortion in the United States and Washington.
- Provide a international perspective on abortion.
- Review the incidence of pregnancy and abortion.
- Identify who has abortions, why and when in pregnancy.
- Review the safety of abortion.
- Discuss provision of and access to abortion services.

Abortion vs Pregnancy Termination

- Abortion = spontaneous abortion (miscarriage) and induced abortion (pregnancy termination)

- Pregnancy termination = induced abortion (legal and illegal)

Mortality Rates

- Abortion in US 0.6/100,000
  - 10 deaths per year
- Abortion worldwide 127/100,000
  - 70,000-80,000 deaths per year
- Abortion in Bangladesh 5,000/100,000
  - 1/200 women die from an abortion

Abortions Worldwide

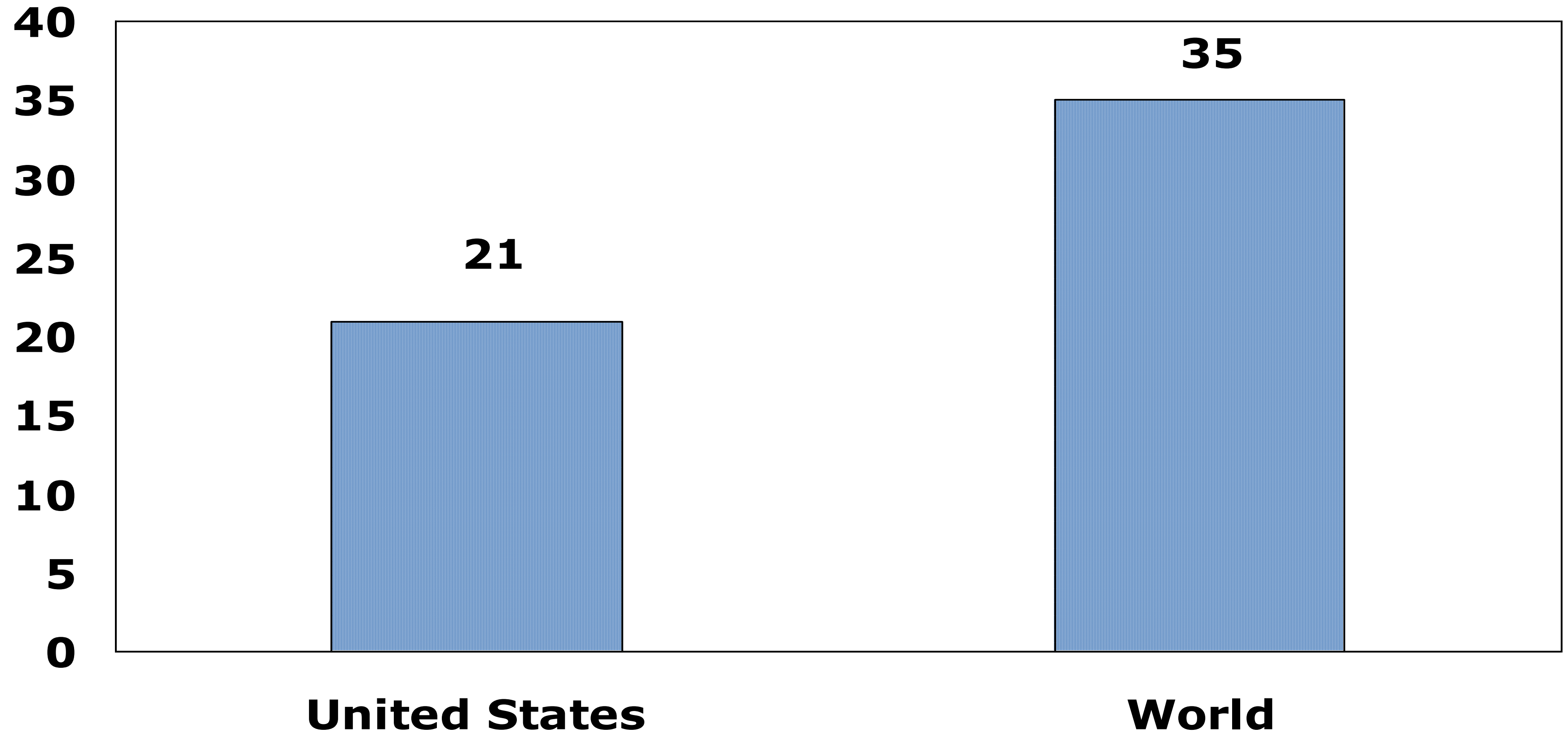
- 20 million illegal abortions
- + 30 million legal abortions
- = 50 million abortions

- (25% of clinical pregnancies end in abortion)

Facts about Abortions

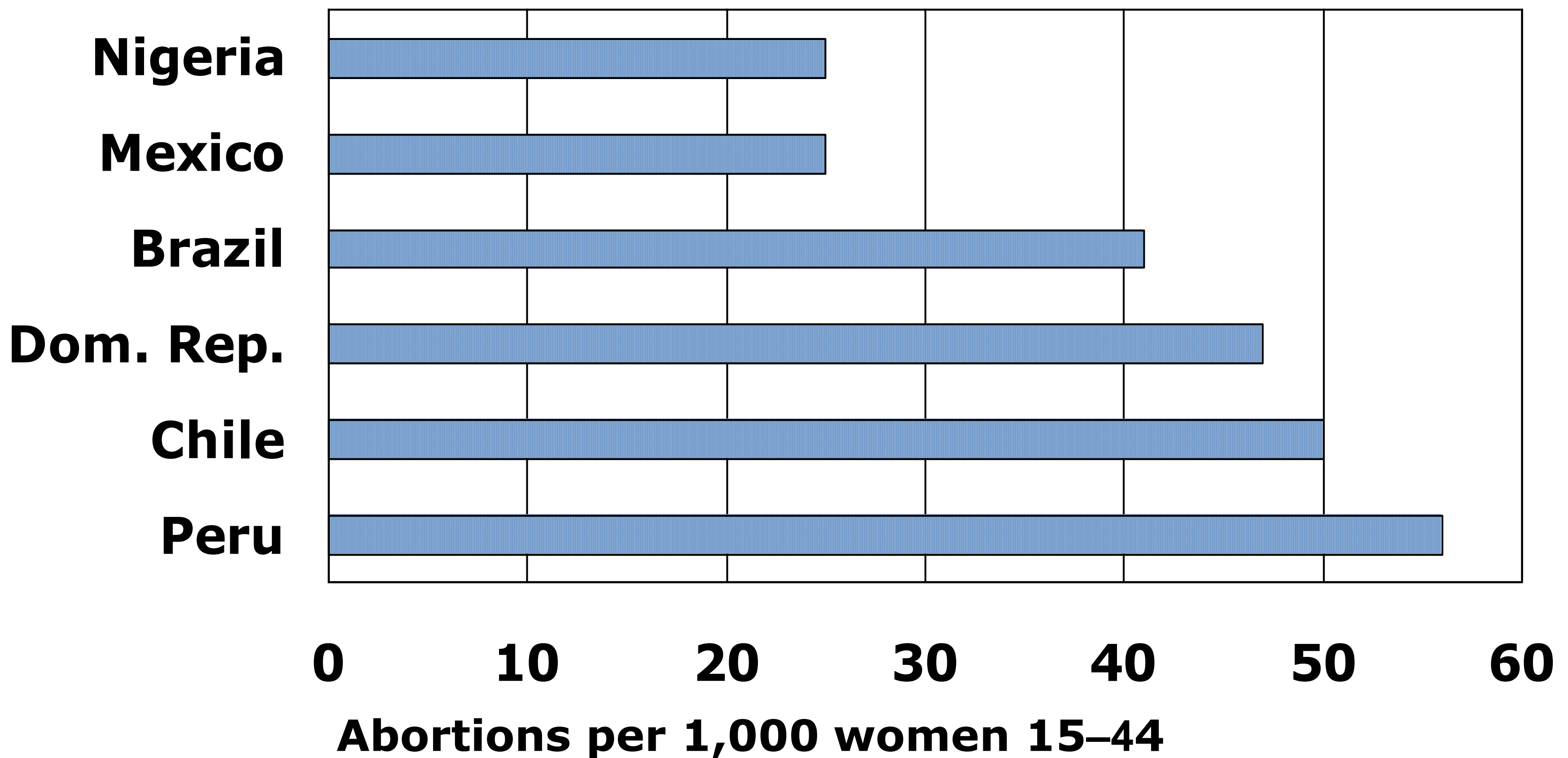
- Most common surgical procedure in U.S.
  - 1.2-1.4 million per year
- By age 45, 38% of women in the U.S. will have had an abortion

Abortion Rate, United States and World



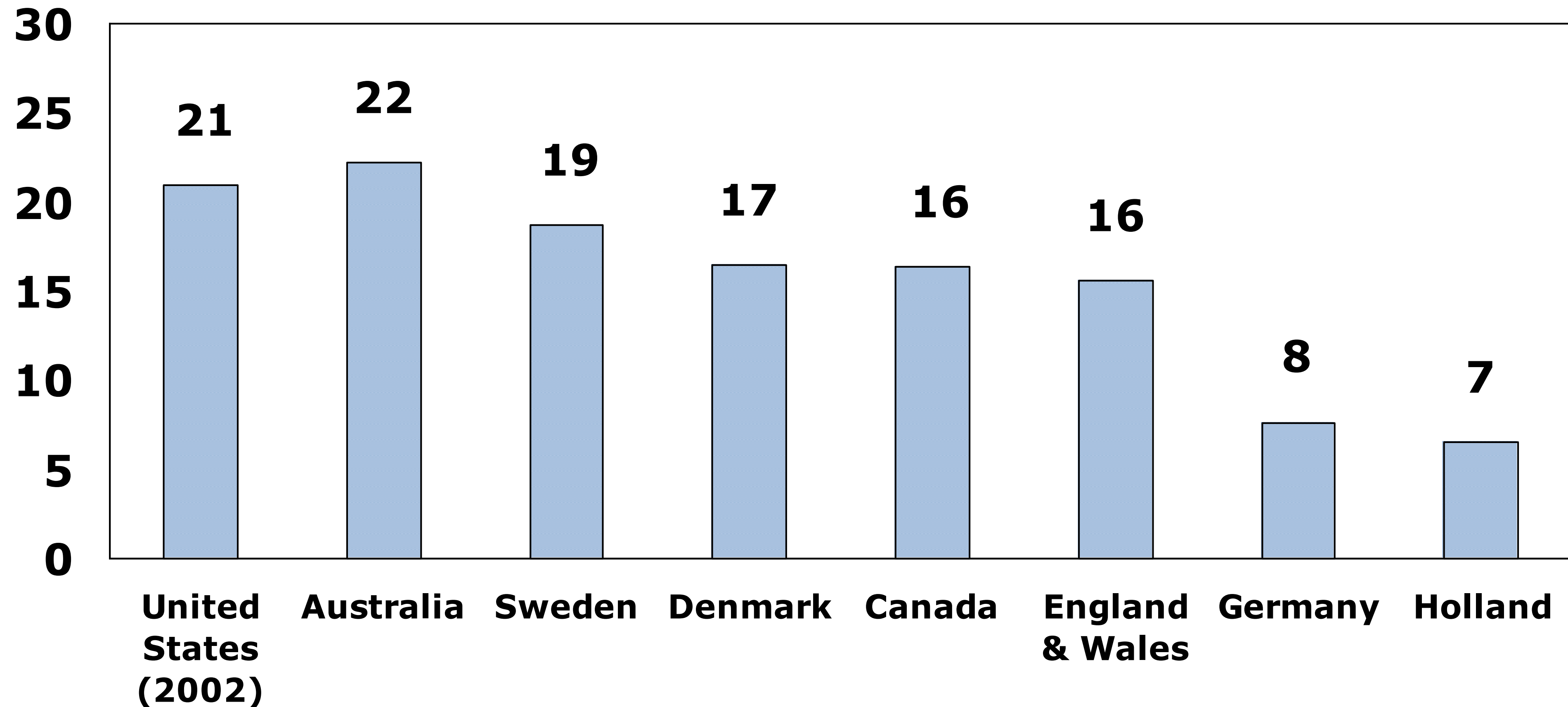
Sources: Finer and Henshaw, 2005; Henshaw et al., 1999 (1995 data)

High Rates of Abortion Occur in Countries that Severely Restrict Abortion



Source: Boonstra, 2006

U.S. Abortion Rate Higher Than in Many Other Industrialized Countries



Source: Finer and Henshaw, 2005; Henshaw et al., 1999 (1996 data)

Status of Abortion

- 2/3s of world can access legal abortion, due to:
  - realization of high costs of illegal abortion
  - rising status of women
  - some countries wanting to limit populations

- But, legal does not mean easy access

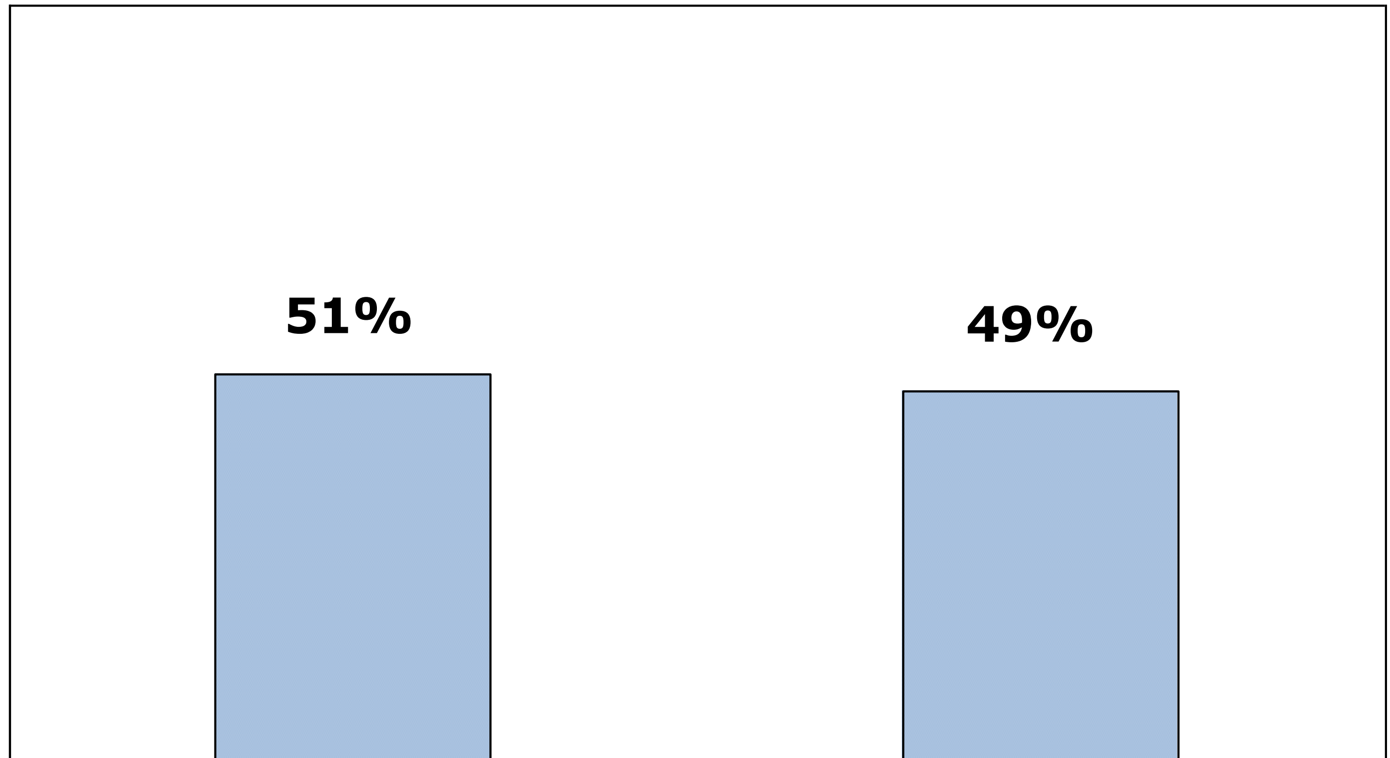
Menstrual Regulation

- Removal of menses by suction around the time of menses
- Equipment available: manual vacuum aspiration
- Circumvent anti-abortion laws
- Pregnancy verification does not occur; less stigma
- Lower skill level

Pregnancies in the United States (Approximately 6.4 Million Annually)

% of pregnancies

100%
80%
60%
40%
20%
0%



Intended **Unintended**

Source: Finer et al., 2006
(2002 data)

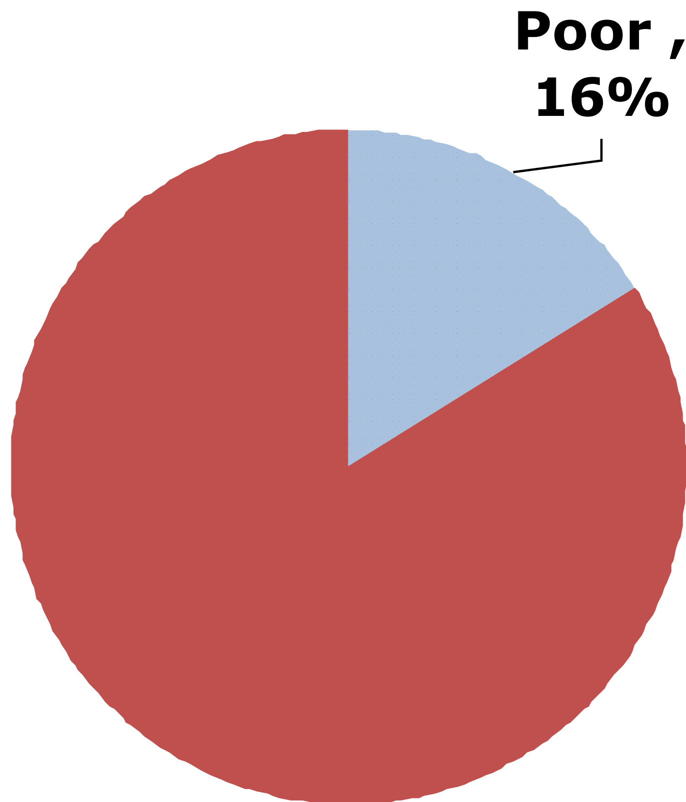
Unequal Progress on Unintended Pregnancy

- Overall unintended pregnancy rates have stagnated, yet…

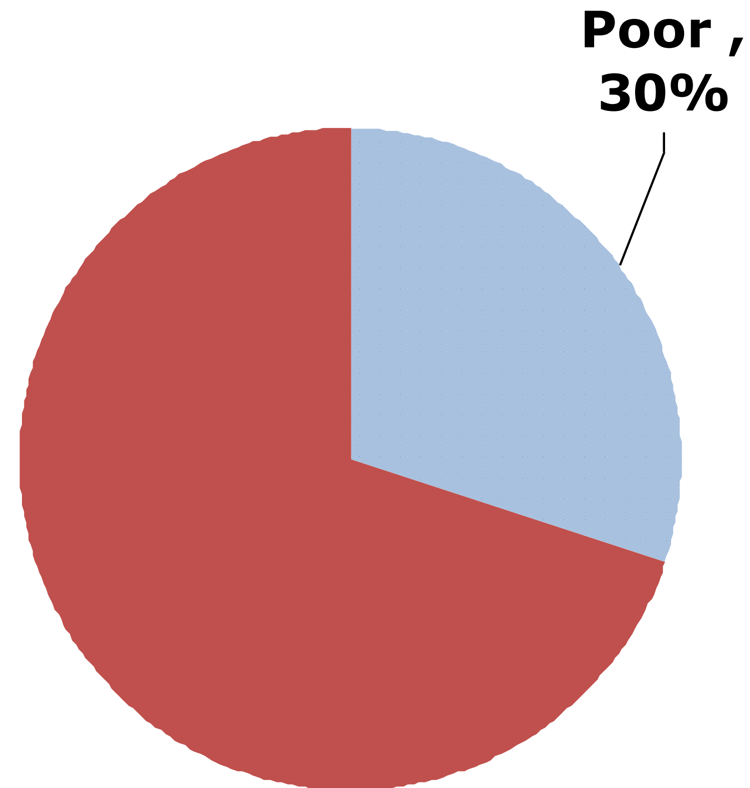
- Unintended pregnancy has *increased* by 29% among poor women while *decreasing* 20% among higher-income women.

Poor Women Account for a Disproportionate Share of Unintended Pregnancies

The 16% of women at risk of unintended pregnancy who are poor …



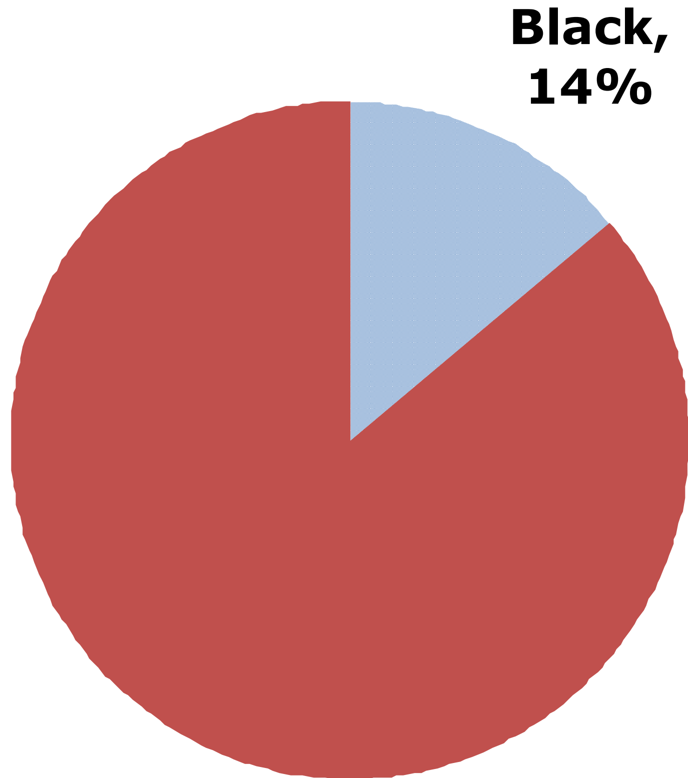
… account for 30% of unintended pregnancies



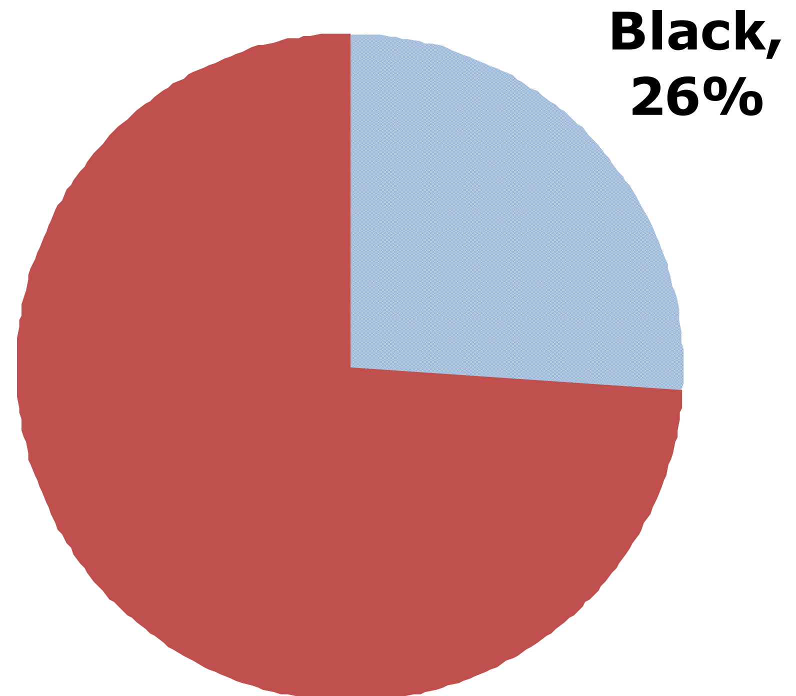
Source: Boonstra et al., 2006

Black Women Account for a Disproportionate Share of Unintended Pregnancies

The 14% of women at risk of unintended pregnancy who are black …



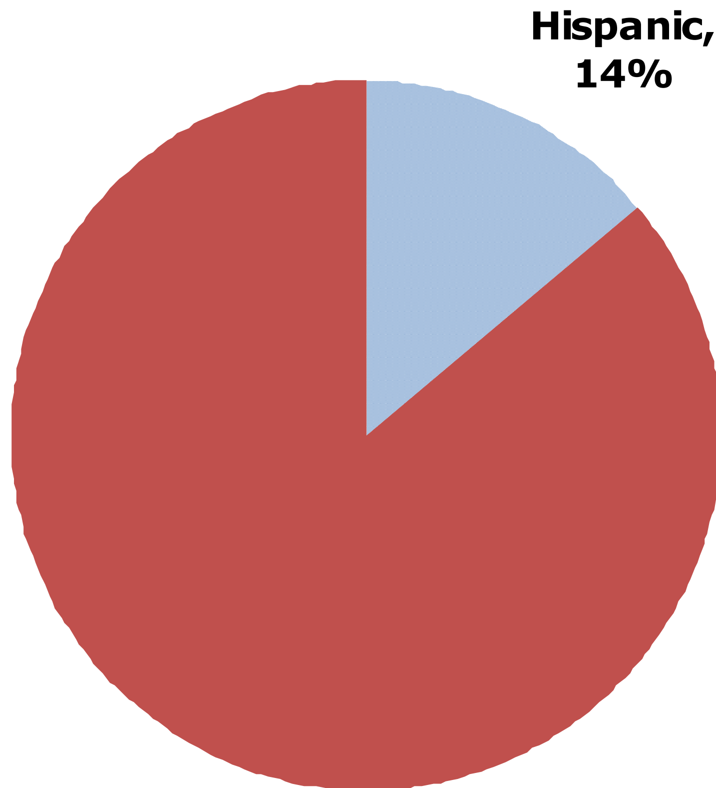
… account for 26% of unintended pregnancies



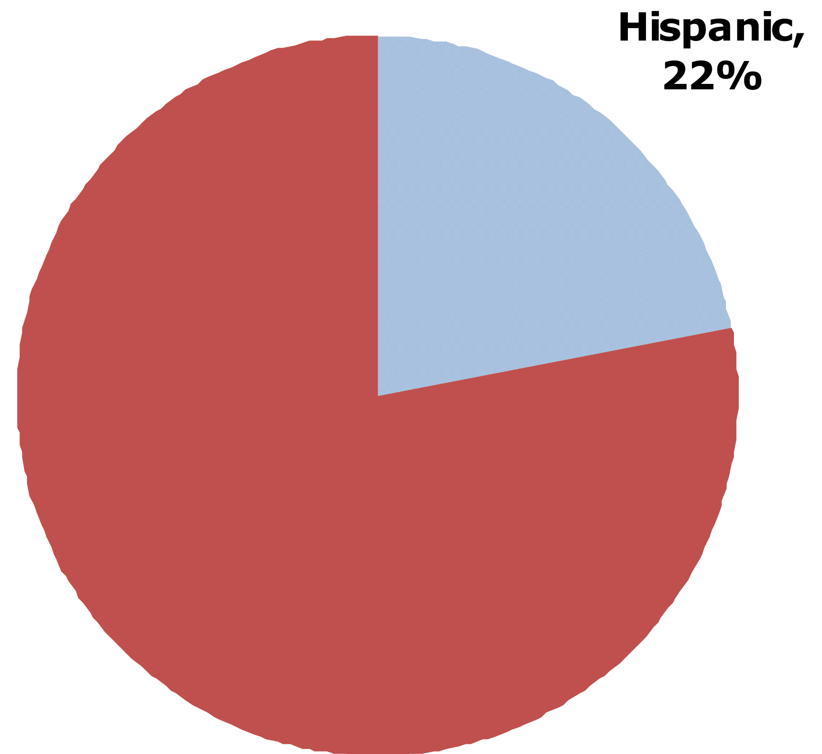
Source: Boonstra et al., 2006

Hispanic Women Account for a Disproportionate Share of Unintended Pregnancies

The 14% of women at risk of unintended pregnancy who are Hispanic …

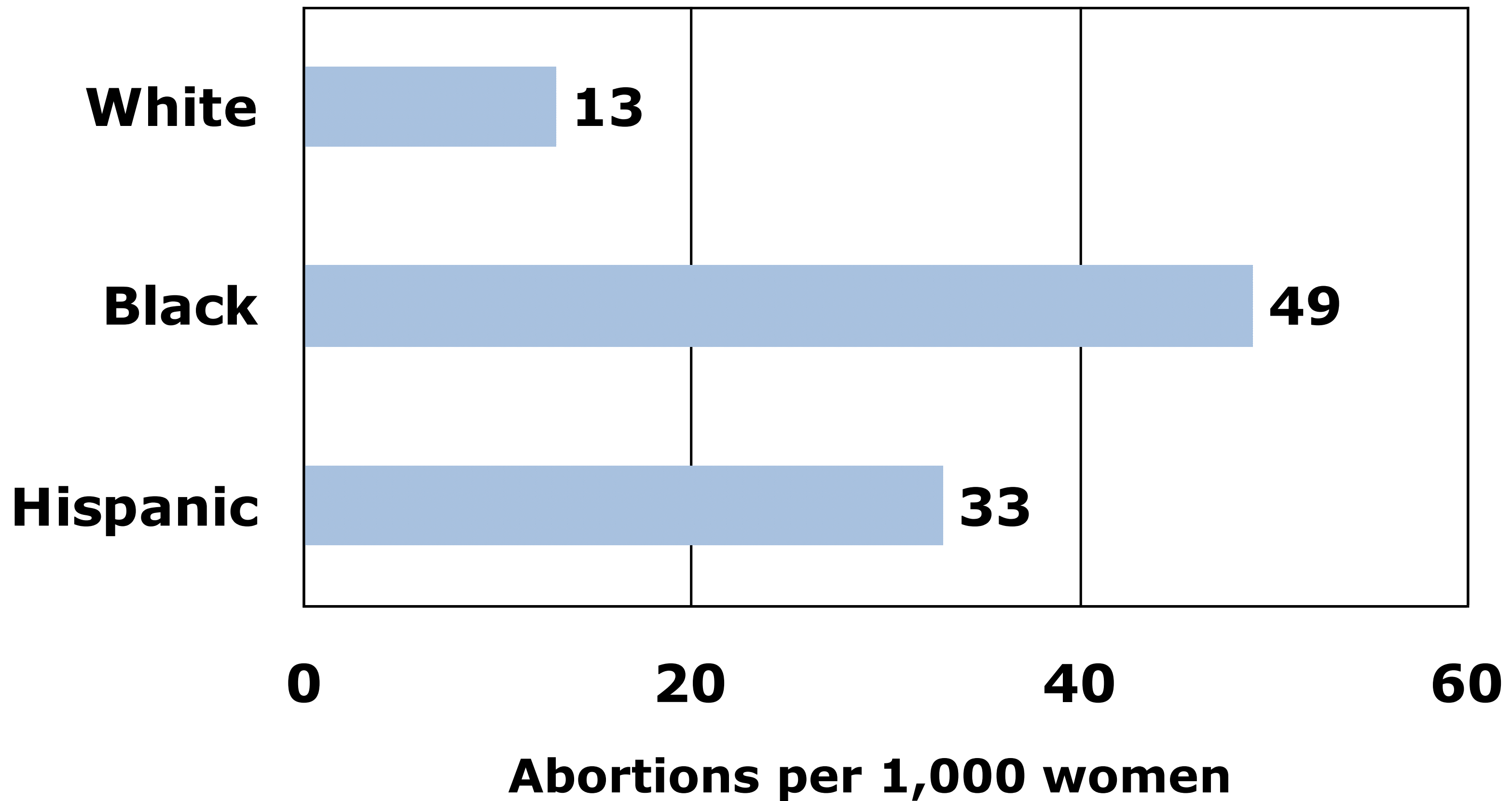


… account for 22% of unintended pregnancies



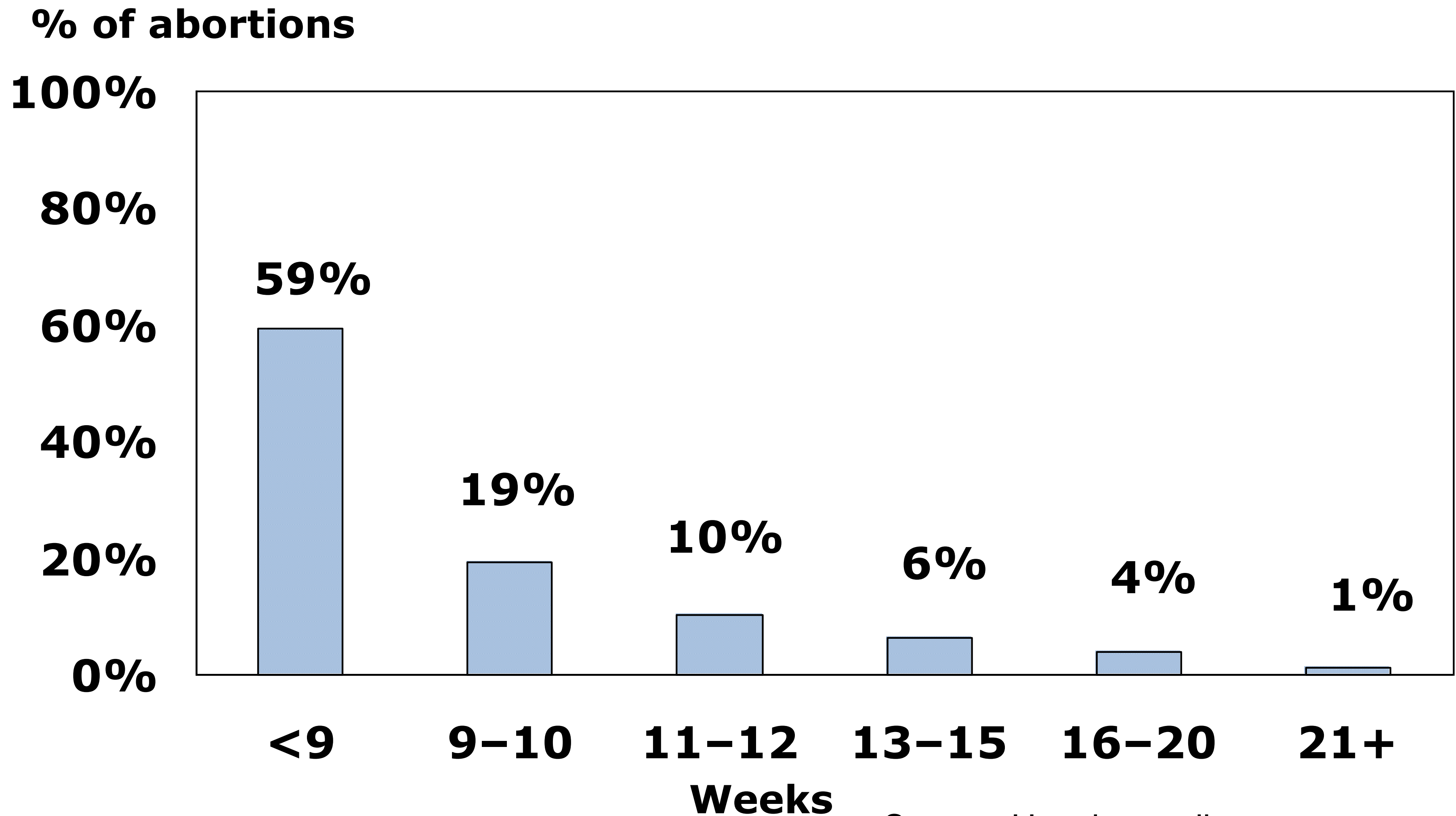
Source: Boonstra et al., 2006

Rate of Abortion by Race/Ethnicity



Source: Jones et al., 2002

Abortions by Gestational Age
(Weeks Since Last Menstrual Period)



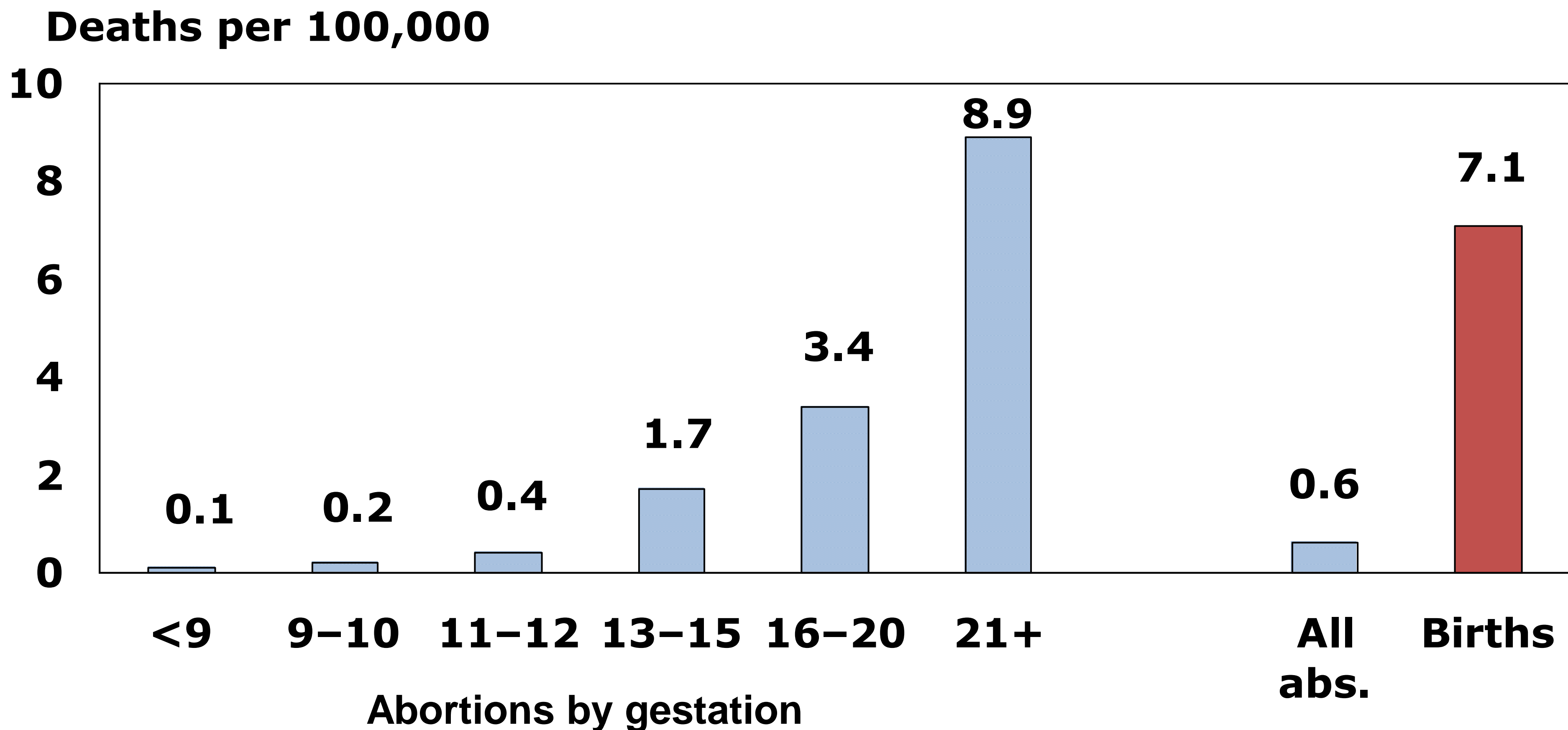
Source: Henshaw adjustments to Strauss et al., 2004 (2001 data)

Most Important Reason Given for Terminating an Unwanted Pregnancy

Concern for/responsibility to other individuals	**74%**
Cannot afford a baby now	**73%**
A baby would interfere with school/ employment/ability to care for dependents	**69%**
Would be a single parent/ having relationship problems	**48%**
Has completed childbearing	**38%**

Source: Finer et al., 2005 (2004 data)

An Abortion Is Safer the Earlier in Pregnancy It Is Performed



Sources: All births and abortions: Grimes DA, 2006;
Abortion by gestation: Bartlett et al., 2004 (1988–1997 data)

Long-Term Safety of Abortion

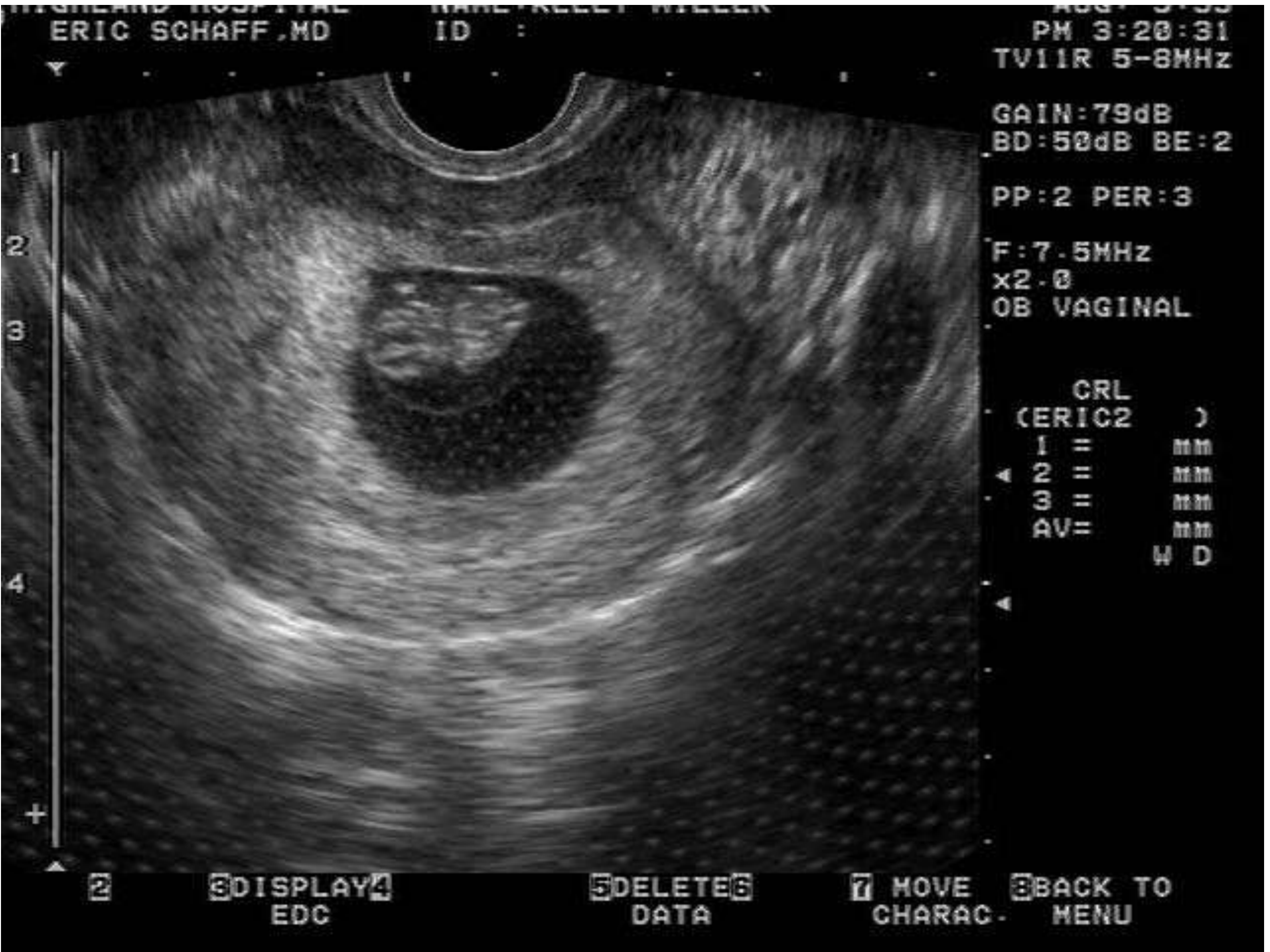
- First trimester abortions pose virtually no risk of:
  - Infertility
  - Ectopic pregnancy
  - Miscarriage
  - Birth defect
  - Preterm or low-birth-weight delivery
- There is no association between abortion and breast cancer.
- Abortion does not pose a hazard to women’s mental health.

Source: Boonstra, 2006

Abortion Risks in Perspective

	Chance of death per year:
Risk from terminating pregnancy:	
Before 9 weeks	1 in 1,000,000
Between 9 and 10 weeks	1 in 500,000
Between 13 and 15 weeks	1 in 60,000
After 20 weeks	1 in 11,000
Risk to persons who participate in:	
Motorcycling	1 in 1,000
Automobile driving	1 in 5,900
Power-boating	1 in 5,900
Playing football	1 in 25,000
Risk to women aged 15–44 from:	
Having sexual intercourse (PID)	1 in 50,000
Using tampons	1 in 350,000

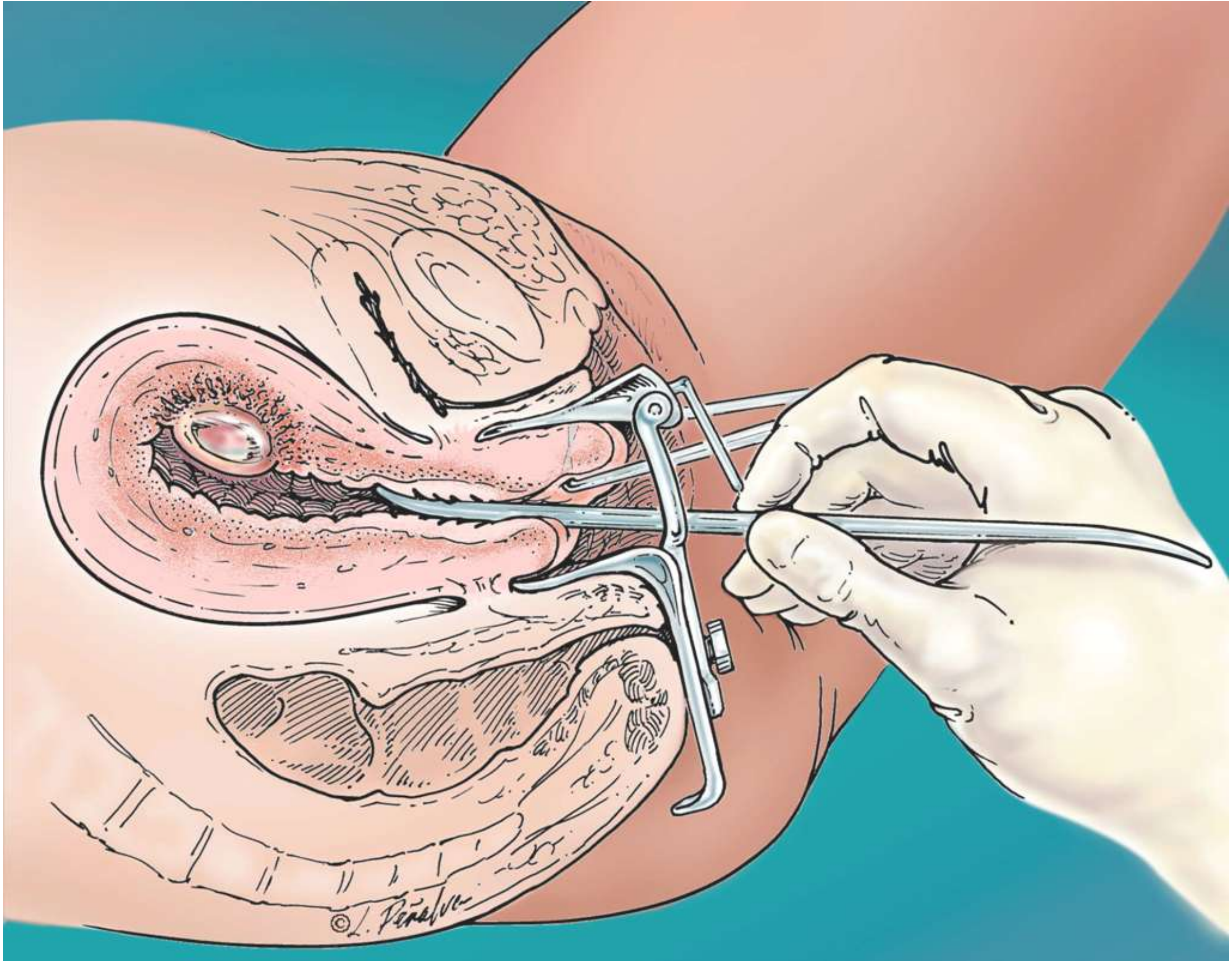
Source: Bartlett et al., 2004 (1988–1997 data);
Contraceptive Technology, 2005



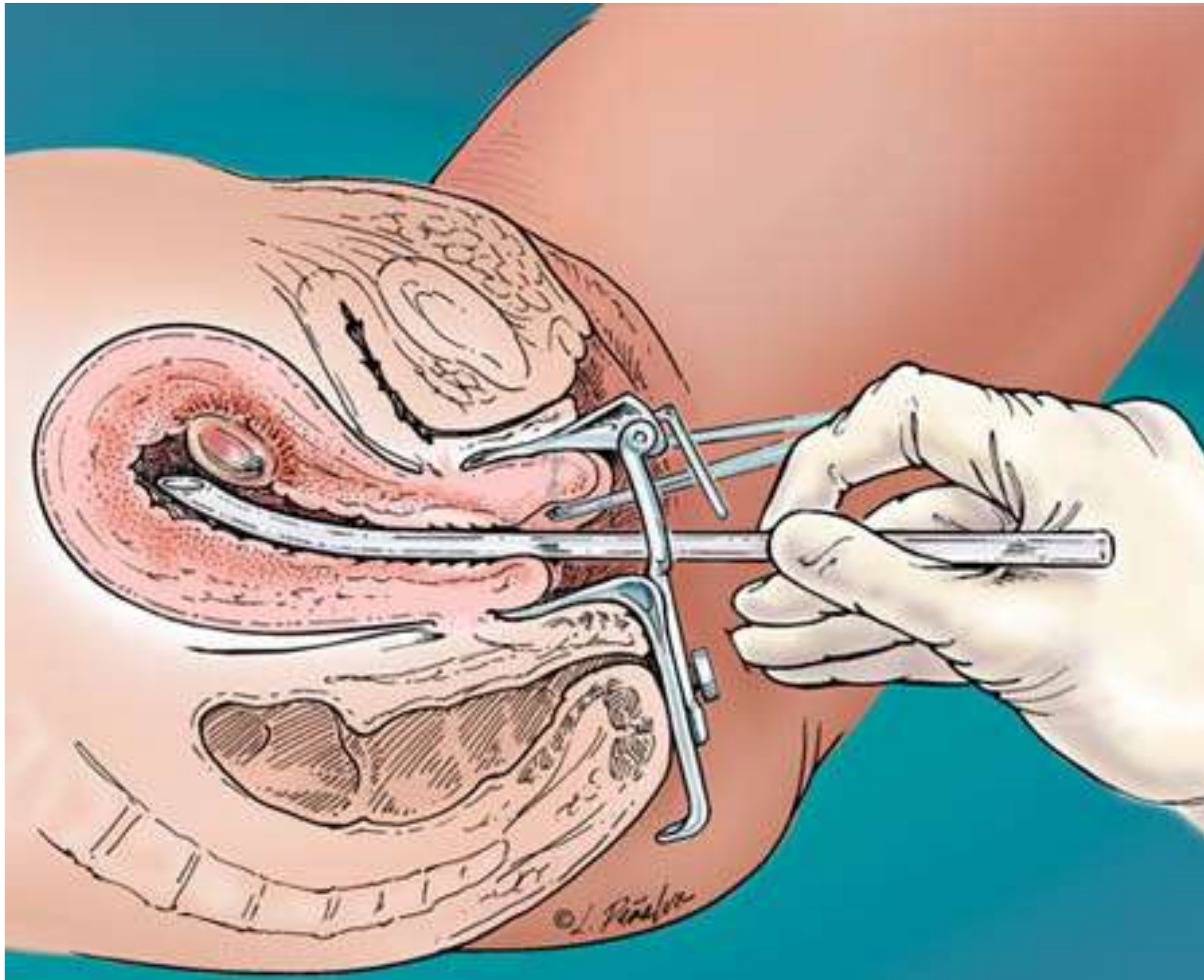
ERIC SCHAFF.MD
ID :
PM 3:20:31
TV11R 5-8MHz
GAIN:79dB
BD:50dB BE:2
PP:2 PER:3
F:7.5MHz
x2.0
OB VAGINAL
CRL
(ERIC2)
1 = mm
2 = mm
3 = mm
AV= mm
W D
2
3DISPLAY4
EDC
5DELETE6
DATA
7 MOVE
CHARAC.
8BACK TO
MENU

Vacuum Aspiration options in First Trimester (90%)

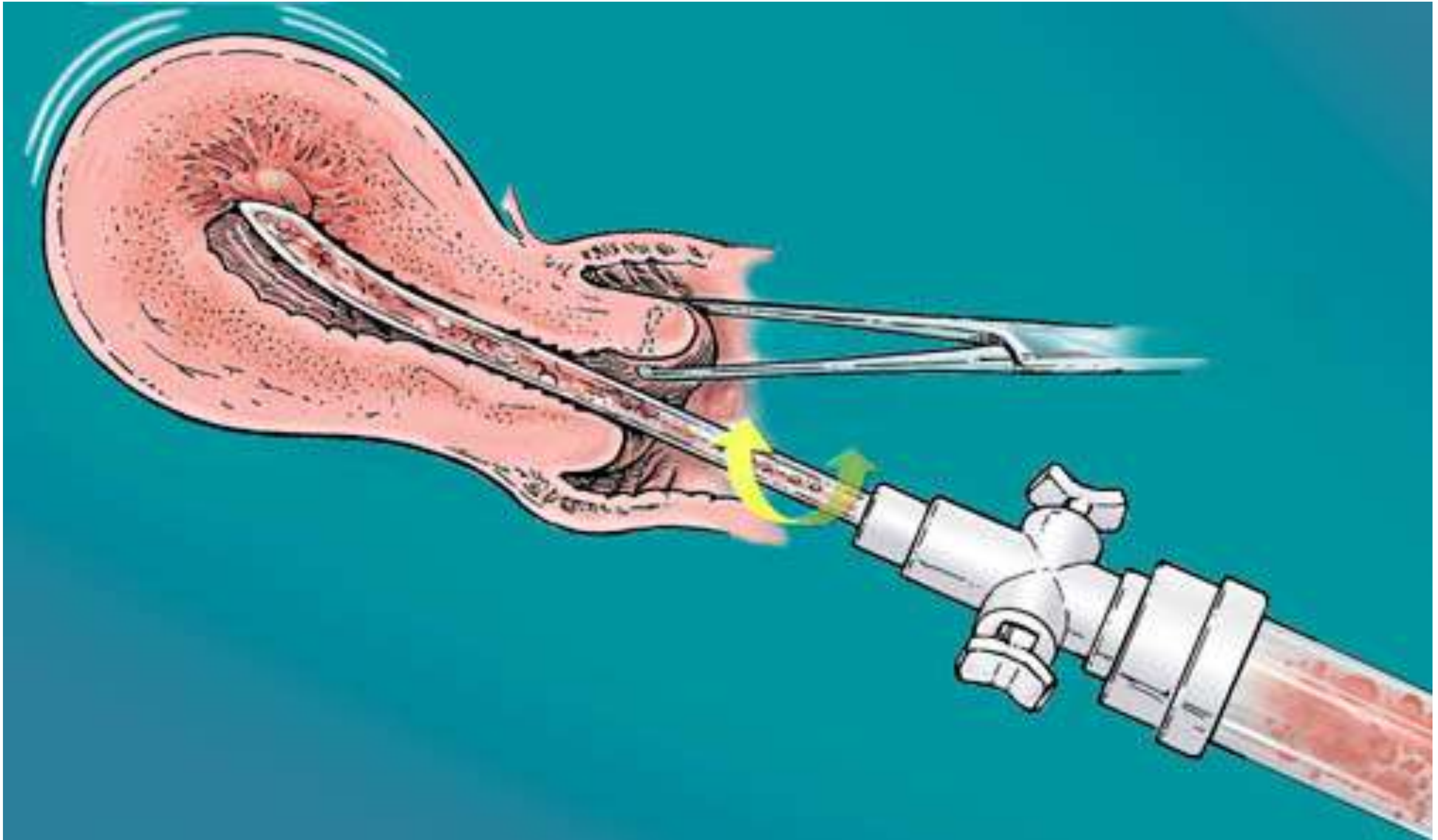
- Up to 9 weeks of pregnancy
  - Early suction curettage: manual or electrical
  - Medical abortions
    - Mifepristone and misoprostol
    - Methotrexate and misoprostol
- 7-10 weeks of pregnancy
  - Suction curettage: manual or electrical
- 11-14 weeks of pregnancy
  - Suction curettage: electrical

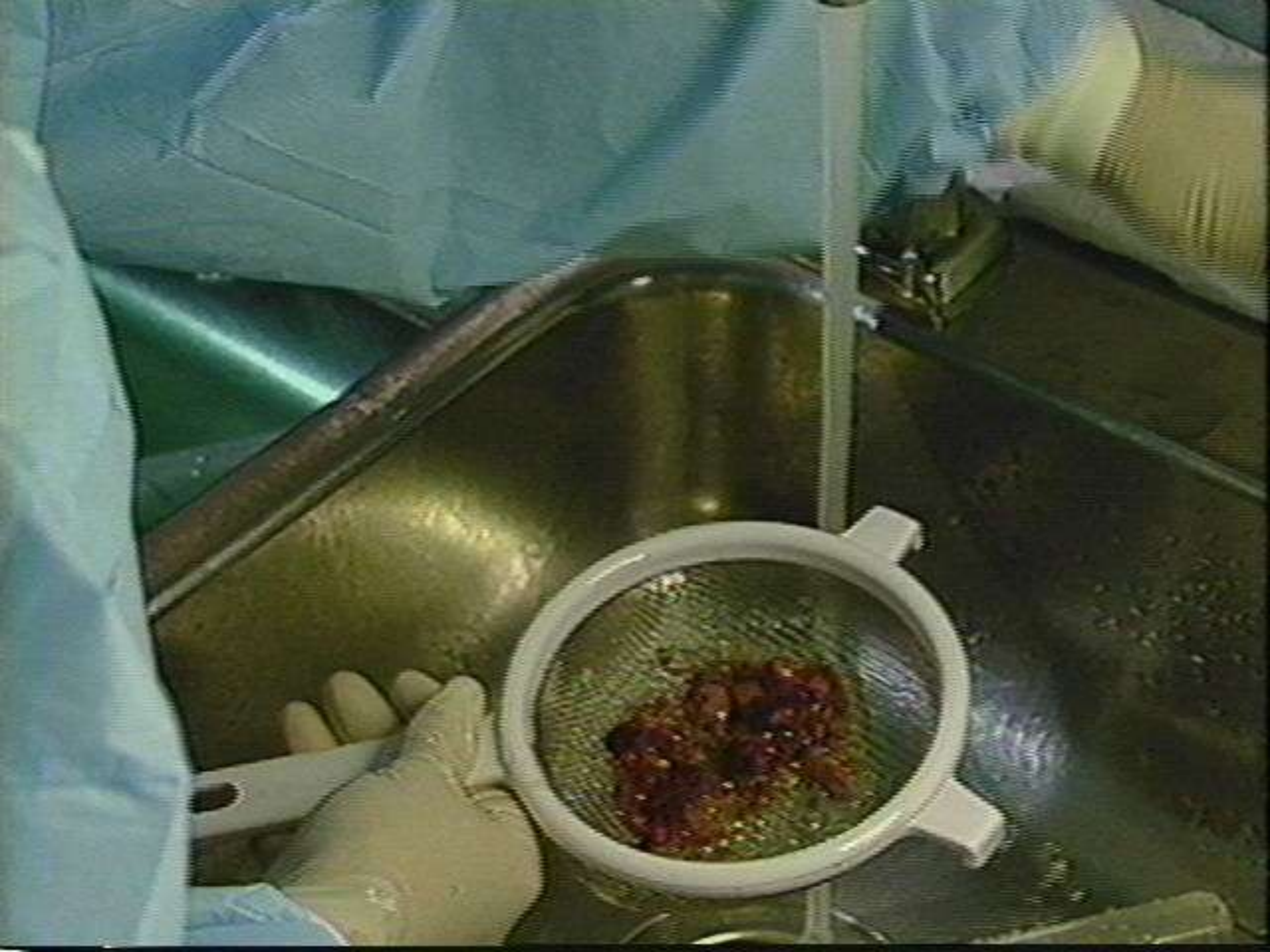


Inserting Cannula



Evacuating the Uterus





7-Week Pregnancy

Medical Management for Spontaneous Abortion

- Requirements for therapy:
  - Less than 13 weeks gestation
  - Stable vital signs
  - No evidence of infection
  - No allergies to medications used

Misoprostol

- Prostoglandin E1 analogue
- Many OB/Gyn indications
  - Labor induction
  - Cervical ripening
  - SAB treatment
  - Prevention/treatment of post-partum hemorrhage
- Can be administered by oral, buccal, sublingual, vaginal and rectal routes

Chen B, Clin Obstet Gynecol 2007

Why misoprostol?

- Do something while still avoiding surgery
- Cost effective
- Few side effects (especially with vaginal)
- Stable at room temperature
- Readily available

Dosing Regimens

- Creinin: 400 mcg po vs 800 pv 25% vs. 88%
- Ngoc: 800 mcg po vs 800 pv: 89% vs. 93% (NS)
- Tang: 600 mcg SL vs 600 pv q 3 hrs x 3 doses: 87.5%
  - SL had more side effects (diarrhea 70% vs 27.5%)
- Phupong: 600 mcg po x 1 vs. q 4 hrs x 2 doses: 82% vs 92% (NS)
  - Repeat dosing increased diarrhea (40% vs 18%)
- Gilles: 800 mcg pv saline-moistened vs. dry: 83% vs 87% (NS)

Creinin MD, Obstet Gynecol 1997; Ngoc NTN, Int.J Gynaecol Obstet 2004; Tang OS, Hum Reproduct 2003; Phupong V, Contraception 2005; Gilles JM, Am J Obstet Gynecol 2004

Outcomes

- Single dose 400 – 800 mcg misoprostol
  - 25 – 88% success rate
- Repeat dose x 1 if incomplete at 24 hours
  - 80 – 88% success rate
- Placebo success rates:
  - 16 – 60%
- Success rate depends on type of miscarriage:
  - 100% with incomplete abortion
  - 87% for all others

Wood SL, Obstet Gynecol 2002; Bagratee JS, Hum Reproduct 2004; Blohm F, BJOG: Int J Obstet Gynecol 2005

Side effects and complications

- Misoprostol vs. placebo:
  - Nausea, vomiting and diarrhea: no difference
  - Pain: more pain and analgesics in one study
  - Hemoglobin concentration: no difference
  - Infection: 0 for placebo vs. 2 - 4.7% for misoprostol
- No benefit with repeat dosing within 3-4 hrs.
- Improved outcome with one repeat dose at 24 hrs. if incomplete
- 90% found medical management acceptable and would elect same treatment again

Wood SL, Obstet Gynecol 2002; Bagratee JS, Hum Reproduct 2004; Blohm F, BJOG: Int J Obstet Gynecol 2005

Misoprostol summary

- 800 mcg. per vagina (or buccal)
- Repeat x 1 at 12-24 hours if incomplete
- Measure success as with expectant management
- Intervene with surgical management if:
  - Continued gestational sac
  - Clinical symptoms
  - Patient preference
  - Time (?)