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

Abortions per 1,000 women

United States: 21
World: 35

Sources: Finer and Henshaw, 2005; Henshaw et al., 1999 (1995 data)
High Rates of Abortion Occur in Countries that Severely Restrict Abortion

<table>
<thead>
<tr>
<th>Country</th>
<th>Abortions per 1,000 women 15–44</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nigeria</td>
<td>25</td>
</tr>
<tr>
<td>Mexico</td>
<td>25</td>
</tr>
<tr>
<td>Brazil</td>
<td>40</td>
</tr>
<tr>
<td>Dom. Rep.</td>
<td>47</td>
</tr>
<tr>
<td>Chile</td>
<td>51</td>
</tr>
<tr>
<td>Peru</td>
<td>55</td>
</tr>
</tbody>
</table>

Source: Boonstra, 2006
U.S. Abortion Rate Higher Than in Many Other Industrialized Countries

Abortions per 1,000 women

<table>
<thead>
<tr>
<th>Country</th>
<th>Abortions per 1,000 women</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States (2002)</td>
<td>21</td>
</tr>
<tr>
<td>Australia (2002)</td>
<td>22</td>
</tr>
<tr>
<td>Sweden</td>
<td>19</td>
</tr>
<tr>
<td>Denmark</td>
<td>17</td>
</tr>
<tr>
<td>Canada</td>
<td>16</td>
</tr>
<tr>
<td>England &amp; Wales</td>
<td>16</td>
</tr>
<tr>
<td>Germany</td>
<td>8</td>
</tr>
<tr>
<td>Holland</td>
<td>7</td>
</tr>
</tbody>
</table>

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)

51% Intended

49% 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 …

Black, 14%

... account for 26% of unintended pregnancies

Black, 26%

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

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>Abortions per 1,000 women</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>13</td>
</tr>
<tr>
<td>Black</td>
<td>49</td>
</tr>
<tr>
<td>Hispanic</td>
<td>33</td>
</tr>
</tbody>
</table>

Source: Jones et al., 2002
Abortions by Gestational Age
(Weeks Since Last Menstrual Period)

% of abortions

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

<9  9–10  11–12  13–15  16–20  21+

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

Deaths per 100,000

<table>
<thead>
<tr>
<th>Gestation</th>
<th>Deaths per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;9</td>
<td>0.1</td>
</tr>
<tr>
<td>9–10</td>
<td>0.2</td>
</tr>
<tr>
<td>11–12</td>
<td>0.4</td>
</tr>
<tr>
<td>13–15</td>
<td>1.7</td>
</tr>
<tr>
<td>16–20</td>
<td>3.4</td>
</tr>
<tr>
<td>21+</td>
<td>8.9</td>
</tr>
<tr>
<td>All abs.</td>
<td>0.6</td>
</tr>
<tr>
<td>Births</td>
<td>7.1</td>
</tr>
</tbody>
</table>

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

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
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

- Prostaglandin 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

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)

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

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

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 (?)