Contraception and Abortion
Abortion: Statistics

- 1.3 million legal abortions are performed each year in the U.S.
- In other countries, policies on abortion vary widely.
Abortion: Methods

• Several methods of abortion are available.
  – The most common method of first trimester abortion, *vacuum aspiration method* (*vacuum suction* or *vacuum curettage*), sucks out the contents of the uterus, including the fetal tissue.
  – *Dilation and evacuation*, used especially for later abortions, is similar to the vacuum aspiration method but must be done in a hospital, because the fetus is relatively large by the second trimester.
Abortion: Methods

- **Saline-induced abortion**: saline is injected into the amniotic sac; causes labor to begin within several hours.
- **Hysterotomy**: essentially a cesarean section in which the fetus is removed.
- **Mifepristone (RU-486)**: a drug that has a powerful anti-progesterone effect and causes the endometrium of the uterus to be sloughed off.
Abortion: Controversy

- Abortion has been a controversial topic in North America for the past several decades.
  - Pro-choice groups talk of a woman’s right to control her own body.
  - Right-to-life groups speak of the fetus’s rights.
  - In 1973 the United States Supreme Court made two landmark decisions (Roe v. Wade and Doe v. Bolton) that decriminalized abortion.
  - Conservative Supreme Court rulings of the 1990s partly reverse these decisions.
Although this photo is from a spontaneous abortion (miscarriage), this is the most common time for an elective abortion. By this time, the fetus is about 3 inches long and does everything from urinate to hiccup.
Abortion via vacuum aspiration can be performed up to this time - 14 weeks gestation. It is done on an outpatient basis with local anesthetic.
Vacuum Aspiration Abortion
“Ensoulment”
Text, Chapter 19, *Ethics, Religion, & Sexuality*, p. 493

- Aristotle’s teaching, reaffirmed by St. Thomas Aquinas, that ensoulment, that is, the entry into the fetus of its distinctively human soul, takes place roughly 3 months after conception (end of first trimester).
- 1869 – Pope Pius IX eliminated the concept of ensoulment, holding that life begins at conception.
Men and Abortion

• In one study, few men wanted to be able to overrule the women’s decision; they only wanted to share in it.
  – Most felt isolated, angry at themselves and their partners, and fearful of emotional and physical damage to the woman.
  – Most tried to hide their stress and remain unemotional.
Abortion: Psychological Aspects

• According to the text, most women do not experience severe negative psychological responses to abortion. As a psychologist, this has not been my experience.
  – Women weigh the need to think of themselves and protect their own welfare against the need to think of the welfare of the fetus.
  – When interviewed a year or so after their abortion, most show good adjustment.
  – May I suggest that choices made tend to be the ones to appease the real people making the choices. Four case scenarios to follow.....
No Parade for Me

• Rather than argue about what to do with an unwanted pregnancy, I prefer to emphasize prevention through contraception.
Psychological Aspects: Steps in Effective Contraception

According to social psychologist Donn Byrne, there are five steps in effective contraception.

1. Must acquire and remember accurate information about contraception.
2. Must acknowledge a likelihood of engaging in sexual intercourse.
3. Must obtain contraceptive.
4. Must communicate with the partner about contraception.
5. Must actually use method of contraception.
Reasons Adolescents Don’t Use Contraception

• Beliefs about their own fertility
• Not minding if they did become pregnant
• Problems in obtaining contraception
• Intercourse is unplanned, and therefore contraception is not planned
• Negative attitudes and feelings about contraception
Psychological Aspects: Attitudes Toward Contraception

- Attitudes and emotions play an important role in making a person more or less likely to use contraceptives effectively.
  - **Erotophobes** don’t discuss sex, have sex lives that are influenced by guilt and fear of social disapproval, have intercourse infrequently with few partners, and are shocked by sexually explicit films.
  - **Erotophiles** are just the opposite and are more likely to be consistent, reliable contraceptive users.
Effectiveness Measures

• **Failure Rate**
  – If 5 women out of 100 become pregnant during a year of using contraceptive A, then A’s failure rate is 5%.
• Perfect user vs. typical user failure rates
• Effectiveness = 100 - failure rate
  – Contraceptive A is 95% effective
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<th>Method</th>
<th>Failure Rate, Perfect Use, %</th>
<th>Failure Rate, Typical Use, %</th>
<th>Death Rate (per 100,000 Women)</th>
<th>Yearly Costs, $</th>
<th>Advantages</th>
<th>Disadvantages</th>
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1Based on 150 acts of intercourse. Prices are provided by Planned Parenthood, 2000, for full-paying clients (http://www.plannedparenthood.org/health-topics/birth-control-4211.htm). Prices are reduced for those with low incomes. Prices are higher for private physicians.
2Based on an average of $500 for the IUD or implant including insertion by a physician, and the assumption that the IUD will be used for two years. The cost per year is much less if the IUD is used for more than two years.
3Based on the death rate for pregnancies resulting from the method. Of every 100,000 live births in the United States, 12 women die (Cheng et al., 2003).
4But having a baby is expensive.
5These are one-time-only costs.

The Male Condom

- A thin sheath that fits over the penis.
  - Widespread use for contraception and protection against diseases dates from about 1843.
  - Catches semen and prevents it from entering the vagina.
  - Perfect-user failure rate is about 3%.
  - Typical-user failure rate is about 18%
    - Many failures result from improper or inconsistent use.
The Female Condom

- One ring of the female condom is inserted into the vagina while the other is spread over the vaginal entrance.
  - Prevents sperm from entering the vagina and blocks the entrance to the uterus.
  - Perfect-user failure rate is 5%.
  - Typical-user failure rate is 21%.
Sterilization

- Voluntary surgical contraception (VSC) is a surgical procedure whereby an individual is made permanently sterile.
  - **Vasectomy** is the male sterilization operation.
  - **Vasovasostomy** is the surgical procedure to reverse a vasectomy.
  - **Minilaparotomy** and **laparoscopy** are two of several techniques used to sterilize a woman.
  - In some cases it is possible to reverse female sterilization by using highly refined microsurgery techniques.
No-Scalpel Vasectomy
Tubal Ligation
The Pill: Combination Pills

• **Combination birth control pills** (oral contraceptives) such as Loestrin and Ovcon, contain estrogen and progestin.
  – Higher levels of estrogen inhibit FSH production, so the message to ovulate is never sent.
  – Higher levels of progestin keep cervical mucus very thick, making it difficult for sperm to get through.

• The use of combination pills is one of the most effective methods of birth control.
The Pill: Other Types of Pills

• Varying levels of estrogen and progestin
  – Most women do best with no more than 30 to 35 micrograms estrogen.

• **Triphasic pill** (Ortho Tri-Cyclen) - three phases in progestin levels.

• Progestin-only pills (Micronor, Nor-Q-D, and Ovrette) - also called mini-pills.
The Pill: Side Effects

• Serious side effects associated with use of the pill include:
  – Slight but significant increases in certain diseases of the circulatory system.
  – The pill may aggravate already existing cancers.
  – The amount of vaginal discharge and susceptibility to vaginitis increases.
  – About 20% of women report increased irritability and depression.
The Pill, the Patch, and the Ring

- The patch (Ortho Evra) contains the same hormones as combination birth control pills but is administered through the skin.
- The vaginal ring (NuvaRing) is a flexible, transparent ring made of plastic and filled with the same hormones as the combination pill but with slightly lower doses.
- *Emergency contraception* is available in pill form for emergencies such as rape or a condom breaking.
Depo-Provera Injections

• Depo-Provera (DMPA) is a progestin administered by injections. It works by:
  – Inhibiting ovulation
  – Thickening cervical mucus
  – Inhibiting growth of the endometrium
• More effective than the pill.
• Must be repeated every three months for maximum effectiveness.
The IUD

- The **intrauterine device (IUD)** is a small piece of plastic that is inserted into the uterus by a doctor or nurse practitioner, and remains in place until the woman wants to have it removed.
  - Immobilizes sperm that reaches the uterus and prevents them from moving into the fallopian tube.
  - Most common side effects are increased menstrual cramps, irregular bleeding, and increased menstrual flow.
Diaphragm and Cervical Cap

• The **diaphragm** is inserted into the vagina and fits snugly over the cervix.
  – A contraceptive cream or jelly must be applied.
  – Diaphragm blocks entrance to the uterus, while cream kills any sperm that gets past the barrier.
  – Failure rate of 20% due to improper use.

• The **cervical cap** fits more snugly over the cervix than the diaphragm and should also be used with a spermicidal cream.
Proper Use of a Diaphragm
The Cervical Cap
Spermicides

• Spermicides come in a tube or can, along with a plastic applicator which is filled and inserted into the vagina.
  – Applicator’s plunger pushes spermicide into the vagina near the cervix.
  – Consists of chemicals that kill sperm and an inert base that blocks entrance to the cervix.
  – Failure rates can be as high as 25%.
Douching

• A popular rumor among adolescents is that douching with Coca-Cola after intercourse will prevent pregnancy.
• Acidic solutions will kill sperm but it takes only seconds for sperm to reach the cervical mucus; once there, they are free to continue moving up into the uterus, & no douching solution will reach them.
• Female would have to be a championship sprinter to get herself up & douched soon enough!
Withdrawal

- *Coitus interruptus* (pulling out) is probably the most ancient form of birth control.
  - With a failure rate of around 19% it is not a very effective method.
  - Over long periods of time may contribute to sexual dysfunction in the man and woman.
Fertility Awareness (Rhythm) Methods

• Rhythm methods are the only form of “natural” birth control. They require abstaining from intercourse during the women’s fertile period.
  – The calendar method is based on the assumption that ovulation occurs about 14 days before the onset of menstruation.
  – In the Standard Days Method (SDM), a woman who knows that she is regular, with a cycle length of between 26 and 32 days, abstains from days 8 to 19.
Fertility Awareness (Rhythm) Methods

- With the **basal body temperature method** (BBT) the woman waits for her daily temperature to rise sharply on the day after ovulation.
  - Intercourse would be safe beginning about three days after ovulation.
- Additional rhythm methods are the **cervical mucus method** and the **sympto-thermal method**.
- The typical failure rate of all rhythm methods is around 25%. 
New Advances in Contraception

• Several new models of condoms are being tested.
• Male hormonal methods are being developed to suppress production of LH and FSH so that sperm would not be produced or would not developed properly.
• Several promising microbicides that could be used by themselves, or with a diaphragm or condom, are in clinical trials.
New Advances in Contraception

- **FemCap** and **Lea’s Shield** are both vaginal devices similar to the diaphragm.
- Reversible, nonsurgical sterilization involves injecting liquid silicone into the fallopian tubes.
  - The silicon hardens and forms a plug which could later be removed if the woman wished to become pregnant.
RU-486

Progesterone, a hormone produced by the ovaries, is necessary for the implantation and development of a fertilized egg.

Taken early in pregnancy, RU 486 blocks the action of progesterone and makes the body react as if it isn’t pregnant.

Prostaglandins, taken two days later, cause the uterus to contract and the cervix to soften and dilate. As a result, the embryo is expelled in 97% of the cases.