Conception, Pregnancy, and Childbirth Issues
Improving the Chances of Conception

• Time intercourse so it occurs around the time of ovulation.
  – Keep a *basal body temperature chart*.
• Best to have intercourse about four times during the week in which the woman is to ovulate.
• Best position for conceiving is with the woman on her back.
• Lubricants and/or suppositories may kill sperm or block their entrance into the uterus.
Sexual Intercourse - Man on Top
Prenatal Testing

• AFP Blood Test - testing the alphafetoprotein level can indicate the possibility that a fetus has a neural tube defect or Down Syndrome. One pregnancy in ten has unusual AFP level, requiring further tests.

• Sonogram – use of high frequency sound waves to outline the shape of the fetus, allowing detection of abnormalities in body shape or rate of growth.
Prenatal Testing

- **Amniocentesis** cannot be done until second trimester. A small amount of amniotic fluid is withdrawn and analyzed (a karyotype is created) Capable of providing an early diagnosis of:
  - most chromosomal abnormalities
  - some genetically produced biochemical disorders
  - sex-linked diseases carried by females

- **Chorionic villus sampling** (CVS). Tiny piece of placental membrane is obtained and analyzed, providing same information as amniocentesis but can be done 8 weeks earlier.
Chorionic Villus Sampling
Prenatal Testing

- Fetoscopy – insertion of a very narrow tube in abdomen, piercing the uterus. Fetoscope is then inserted, allowing direct observation of the fetus and the placenta.
The Stages of Pregnancy: First Trimester Emotions

• Emotional state during pregnancy varies according to several factors:
  – Women who desire the pregnancy are less anxious than women who do not.
  – Low income is associated with depression during pregnancy.
  – Women with a supportive partner are less likely to be depressed.
  – In the first trimester, women’s anxieties often center on concerns about miscarriage.
The Stages of Pregnancy: Second Trimester

• Physical problems include constipation and nosebleeds.

• **Edema** (water retention and swelling) in the face, hands, wrist, ankles, and feet may be a problem.

• **Colostrum**, a thin amber or yellow fluid, may come out of the nipples beginning about the 19th week.
The Stages of Pregnancy: Psychological Well Being

• Psychological well-being is greater among women who:
  – have social support
  – have higher incomes
  – experience fewer concurrent stressful life events
The Postpartum Period: Emotions

Postpartum depression is characterized by:

– depressed mood
– insomnia
– tearfulness
– feelings of inadequacy
– fatigue
Causes of Postpartum Depression

• Physical exhaustion, including low levels of estrogen and progesterone
• Feeling overwhelmed with responsibilities of parenthood
• Financial issues associated with giving birth and acquiring all the things that will be needed to care for a baby
• Being estranged from the baby’s father
• Initial feelings of ambivalence toward the baby (“I must be a horrible mother”)
Drs. K & K’s Goofy Idea

• In the 1970s, pediatricians Marshall Klaus & John Kennell popularized the idea that there is a “critical period” or “sensative period” in the minutes & hours immediately after birth, during which the mother & infant should bond to each other.

• No scientific evidence for the sensitive-period-for-bonding hypothesis.
The Postpartum Period: Sex

- Couples should wait at least two weeks before resuming intercourse.
- Breastfeeding women report significantly less sexual activity and lower sexual satisfaction, maybe because lactation suppresses estrogen production, which results in decreased vaginal lubrication.
Breast Feeding Advantages

• #1 reason -- Breastfeeding ensures temporary immunity against any disease the mother has had or been inoculated against.

• Advantages for the mother include quicker shrinking of the uterus to its normal size and faster loss of the weight gained during pregnancy.

• It’s free – formula costs a fortune and have to hassle with bottle washing/sterilizing, etc.
Challenges

• Newborns eat every 2 hours – only mom can feed unless milk is pumped out & put in bottles
• Jealousy issues with dad & siblings
• What mom eats, baby eats – colic, Rx issues
• Returning to work issues
• Cultural factors including when to stop breast feeding
Infertility

- PID (pelvic inflammatory disease) is the most common cause of infertility in women.
- Other causes include: failure to ovulate, blockage of fallopian tubes, and cervical mucus that blocks the passage of sperm (hostile mucus).
- The most common cause in men is infections in the reproductive system caused by sexually transmitted diseases.
New Reproductive Technologies

• **Artificial insemination** involves artificially placing semen in the vagina to produce a pregnancy.

• **Sperm banks** store frozen sperm.
  – Some 70 percent of the money spent on sperm-bank services in 2002 ($65 million) was for purchases via the Internet.

• With **embryo transfer**, a fertilized, developing egg is transferred from the uterus of one woman to the uterus of another.
New Reproductive Technologies

• **In vitro fertilization (IVF):** scientists make sperm and egg unite outside the human body (in a test tube).

• **GIFT** (gamete intra-fallopian transfer): sperm and eggs (gametes) are collected and then inserted together into the fallopian tube.
Issues in Reproductive Technology

• *Cloning*: the reproduction of an individual from a single cell taken from a donor or parent.

• There is much interest in techniques that will allow couple to choose whether to have a boy or girl (*gender selection*).