UNIT 3 - DESCRIBING PREGNANCY, PRENATAL CARE, AND CHILDBIRTH

By Mrs. Kristen Harris
Objectives

1. Select from a list of early possible signs of pregnancy.
2. List normal body changes and discomforts during pregnancy.
3. Identify danger signals that might indicate a complication during pregnancy.
4. Describe the stages of prenatal development.
5. Answer questions about healthy prenatal development.
Objectives

6. Distinguish among available prenatal tests.
7. Plan a balanced diet for a pregnant woman.
8. Investigate factors influencing healthy prenatal development.
9. Name sings of approaching labor.
10. Name in order the stages of labor and delivery.
11. List the methods of childbirth.
Terms

- **Embryo** - Unborn child from the end of the second week after conception until the end of the second month of pregnancy

- **Fetus** - Unborn child from the end of the second month after conception to birth

- **Ovum** - A female cell or egg

- **Prenatal** - Period of time between fertilization of the egg and birth

- **Zygote** - One-celled organism formed by the union of a sperm and an ovum
Terms

- **Teratogens** - substances that are potentially harmful to the fetus

- **Alpha-fetoprotein** - a protein produced by a growing fetus; present in amniotic fluid and in the mother’s blood

- **Neural tube defect** - a fetal birth defect that is the result of improper development of the brain or spinal cord

- **Placenta** - mass of small blood vessels embedded in the uterine wall through which the fetus obtains nourishment
Ovulation and Pregnancy
Stages of Prenatal Development

- Period of the ovum
  - Conception through second week of life
  - Cell is formed by the united sperm and ripe ovum (egg)
  - Zygote contains the potential for everything the baby will become even though it is smaller than the point of a pencil
  - During this period
    - Zygote reaches the uterus
    - Attaches to the uterine lining
    - Begins to grow
Stages of Prenatal Development

- Period of the embryo
  - Second stage of prenatal development
  - End of second week to end of second month
  - Six weeks of rapid growth to a length of about one inch
  - Central nervous system develops
  - Lungs develop
  - Heart begins to beat
  - Surrounded by amniotic fluid that cushions and protects
Stages of Prenatal Development

- Period of the Fetus
  - Third and last stage of development
  - Extends from end of second month to birth
  - 3\textsuperscript{rd} Month
    - Arms, hands, fingers, feet, and toes are fully developed
  - 4\textsuperscript{th} month
    - Eyebrows and lashes
    - May suck thumb
Stages of Prenatal Development

- **5th month**
  - Can feel movement

- **End of 6th month**
  - Baby weighs as much as 2 lbs.
  - Skin is covered with heavy protective coating called vernix

- **7th and 8th month**
  - Baby is getting longer and fatter
  - Continues to grow and exercise
  - Once the baby has reached the 8th month, the babies survival chances are good
Stages of Prenatal Development

- End of 9th month
  - Approximately 40 weeks after conception
  - Full-term baby weighs about 7 ½ lbs and be about 20 inches long
  - Baby will drop into the pelvis
  - Head will engage in the birth position
  - Ready to be born
Pregnancy = _______ weeks, counted from 1st day of _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _________ _______
Healthy Prenatal Development

- Health of mother is directly linked to the health of the baby!
- Obtain proper and regular medical care
  - Start when pregnancy is suspected
  - Continue throughout pregnancy
- Preconception counseling can improve the health and safety of the mother and baby
Healthy Prenatal Development

- **Diet**
  - Should be Balanced
  - Consume an additional 300 calories per day from health food
    - Protein
    - Complex Carbs
    - Vitamins
    - Minerals
Healthy Prenatal Development

- **Exercise**
  - Should be pregnancy appropriate
  - Moderate exercise
  - Pregnancy is not a time to start an intensive exercise program
  - Avoid risky sports such as skiing, horseback riding, etc.
  - Always consult a doctor
Healthy Prenatal Development

- Avoid exposure to disease or infections
- Abstain from drinking alcohol
  - If the mother drinks, the baby drinks!
  - Can lead to serious birth defects
  - No “safe” limit
  - Women trying to conceive or suspect they are pregnant should NOT drink
- Quit Smoking and avoid cigarette smoke
  - Increased risk of miscarriage, premature birth, stillbirth, low birth weight, SIDS, and mental problems
Healthy Prenatal Development

- Stop unnecessary drugs
  - Prescription and non prescription drugs should be avoided, unless prescribed by a doctor who knows the patient is pregnant
- Reduce stress
- Avoid teratogens
- Postpone elective x-rays
- Refrain from raising the body temperature above 102 degrees
  - Ex. Hot tubs, saunas, and steam rooms
Parental Tests

- Amniocentesis
  - 16th week of pregnancy or after
  - Sample of amniotic fluid taken with a needle
  - Tests for birth defects or health problems
  - Can identify Down’s syndrome, reveal sex, determine fetal age and health status
  - Commonly done in women over 35
Parental Tests

- **Chorionic Villi Sampling**
  - Done between the 9\textsuperscript{th} and 11\textsuperscript{th} month
  - Determines health status
  - Slightly riskier than amniocentesis
  - Catheter is inserted into the uterus though the vagina
  - Samples are taken of the tissue encasing the fetus
Parental Tests

- Maternal-Serum Alpha-Fetoprotein Screening (MSAFP)
  - Blood sample is taken between 16\textsuperscript{th} and 18 week
  - May indicate neural tube defects (such as spina bifida), an absence of all or part of the brain, or to suggest a risk of Down’s Syndrome or other chromosomal defects
  - Requires further testing for confirmation
Ultrasound

- Sound waves are used to make a video image of the developing fetus
- Can reveal problems
  - Abnormally small or large head
  - Body malformations
- Can be used to:
  - Guide the needle during Amnio
  - Catheter for CVS
  - Diagnose twins
  - Estimate fetal age
Birth Defects

Click on image for health news clip.
Birth Defects

Fetal Alcohol Syndrome video
Signs of Pregnancy

- None of the following signs are positive indications of pregnancy.
- Reliable pregnancy test and exam by a physician can provide an accurate diagnosis.
- Some, all, or none of these symptoms may be experienced by a woman throughout pregnancy.
Signs of Pregnancy

- Missed menstrual period
- Food aversions
- Food cravings
- Full or tender breasts
- Nausea, or morning sickness
  - Experienced to some degree by 2/3 of pregnant women
  - Usually ends after the third month
Signs of Pregnancy

- Fatigue and feelings of tired or sleepiness even after getting plenty of rest
- Frequent urination
Body Changes and Discomforts

- Normal discomforts should be reported to the doctor during regular prenatal visits
- Back aches
- Bleeding gums
  - Pregnant women should see the dentist at least once during their pregnancy
- Constipation
- Frequent urination
- Gas (flatulence)
Body Changes and Discomforts

- Heartburn
- Hemorrhoids
- Increased vaginal secretions
- Leg Cramps
- Nausea or morning sickness
- Nosebleeds
- Shortness of breath
- Skin changes
- Swollen feet and ankles
- Tender breasts
- Uncomfortable bladder leakage
- Varicose veins
- Weight gain of 25-35 lbs.
Danger Signals

- Danger signals indicate that some treatment or intervention may be needed to prevent complications.
- Symptoms do not necessarily mean there is a medical problem, but they do often precede the possibility of a complication.
- If experiencing any of these symptoms, the doctor should be called immediately.
Danger Signals

- Abdominal pain
- Chill/fever
- Dimness or blurred vision
- Excessive or rapid weight gain
- Exposure/contraction of contagious disease
- Fainting
- Headaches
- Lack of fetal movement after the 28th week
- Painful, burning, or bloody urination
- Persistent vomiting
Danger Signals

- Regular, rhythmic contractions
- Sudden escape of fluids from the vagina
- Swelling of the face and/or fingers
- Unusual vaginal discharge
- Vaginal bleeding
Signs of Labor

One of all of the following signs may occur as signals of approaching labor

- Amniotic sac or “water” breaks
  - Followed by a flow of liquid from the vagina
- Contractions
  - Repeating cramps in the uterus and/or back
  - Gradually become stronger
  - Comes in shorter intervals
Signs of Labor

- “Show” appears
  - Small discharge of blood-tinged mucus from the vagina
Stages of Labor

- **Dilation Stage**
  - Uterine muscles begin to contract causing pressure necessary for dilation of the cervix
  - Three phases: early, active, and transitional
  - Averages about 12 hours for first time deliveries
Signs of Labor

- **Expulsion Stage**
  - Mother is actually pushing the baby out of her body
  - Can last from 20 min to an hour
Stages of Labor

- Afterbirth stage
  - Placenta is delivered
Methods of Childbirth

- Cesarean Section or C-Section
  - Baby is delivered through a surgical incision in mothers abdomen and uterus
  - Used when:
    - The baby needs to be delivered as soon as possible
    - Doctor determines that a vaginal birth could be dangerous to the mother or baby
Methods of Childbirth

- Natural Child Birth
  - Very little or no medication is given to the mother

- Child Birth with anesthetics
  - Local or general
  - Can reduce the discomfort of delivery
  - May slow the birth process, cause a sleepy baby, and/or slow the fetal heart rate
AND NOW....WHAT YOU HAVE ALL BEEN WAITING FOR!!!
THE VIDEO