Pregnancy

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PREGNANCY, FETAL DEVELOPMENT AND BIRTH

Ovulation - occurs 14 days before start of next menstrual cycle.

Gamete - sperm or egg before conception

Conception - fertilization of sperm and egg.

Zygote - fertilized egg

Blastocyst - one week after fertilization time of implantation.

Embryo - implanted fertilized egg until 10 week LMP (last menstrual period).

Pregnancy Length - 280 days, 40 weeks or 9 months. Pregnancy loss before 20 weeks is considered a miscarriage, after 20 weeks is pre-term or premature.

Average Baby Weight - 7 1/2 pounds yet more or less is normal. Low birth weight is less that 5 pounds.

Maternal Weight Gain - 25 - 30 pounds.

Cautions - Abstaining from taking medications, over-the-counter or prescription, unless directed by her doctor is important. Prenatal vitamins may be prescribed. For health of mother and fetus she should not smoke, drink or take street drugs during pregnancy. The pregnant woman should not use saunas, whirlpools, or take long **hot** baths during pregnancy, especially the first month. Temperature may increase risk of neural tube defects.

HEALTHY PREGNANCY

I. Pregnancy
  A. Pregnancy diagnosis
    1. Tests
      a. accurate testing can be done as early as 10 days after conception.
        (1) although early testing can be done a positive result may not occur right away

        (2) the test is looking for the hormone HCG (human chorion gonadotropin), the hormone produced in pregnancy

        (3) some women may not produce enough HCG until one to two weeks after conception

        (4) a pregnancy test performed too far into the pregnancy will also produce an inaccurate result showing a negative test.

        (5) an ectopic pregnancy may not produce a positive pregnancy test causing a misdiagnosis

        (6) always follow up any result with physical exam or 2nd test if pregnancy symptoms persist

      b. type of testing
        (1) urine
        (2) blood
        (3) pelvic exam
        (4) ultrasound

    2. Symptoms
      a. missed period or late period
        (1) some women will still bleed or spot even though they are pregnant
        (2) some women bleed or spot throughout their pregnancy
        (3) if bleeding suddenly occurs a problem may exist and a clinician should be seen immediately

      b. frequent urination
      c. breast tenderness
      d. fatigue
      e. nausea

    3. Ultrasound
      a. a diagnostic tool that can help to see inside the uterus with sound waves
        (1) can be used to determine approximate age of the fetus
        (2) can help to see how the fetus is growing
        (3) can also see the sex of the fetus sometimes

II. Prenatal Care

A. **Prenatal care can help to watch the mother and fetus to see that the pregnancy is progressing without complications.**

1. **Maternal health**
   - **a.** gestational diabetes
   - **b.** anemia
   - **c.** sexually transmitted infections
   - **d.** health history that could indicate potential problems
   - **e.** substance abuse issues
   - **f.** nutrition
   - **g.** appropriate weight gain
   - **h.** gestational hypertension

2. **Fetal health**
   - **a.** growth rate
   - **b.** heart beat

B. **Routine of prenatal care**

1. **For normal uncomplicated pregnancy**
   - **a.** Doctor visits
     - once a month until 28 weeks
     - every 2-3 weeks until 36 weeks
     - weekly until the baby is born

2. **What to expect**
   - **a.** questions and testing
     - LMP (1st day of your last menstrual period)
     - blood pressure
     - weight
     - medical history
     - urine for protein, sugar and signs of infections
     - pelvic exam
     - father's blood type
   - **b.** each visit the clinician will
     - measure the abdomen (for size of the uterus)
     - listen for the fetal heart beat
     - weight gain
     - blood pressure

C. **What these tests and checks may indicate**

1. **underdevelopment of the fetus**
   - **a.** low birth weight is the leading cause of infant death.
     - **(1)** more likely to die in the first month

b. women who do not receive prenatal care are 3 times more likely to deliver a baby of low birth weight and the baby is more likely to die, compared to a mother who gets prenatal care in the first trimester.

2. **Inadequate weight gain**
   a. mother may not have proper nutrition or calorie intake

3. **High blood pressure**
   a. indicating a health concern for mother and fetus

4. **Gestational diabetes**
   a. increases risk of the fetus growing too large during pregnancy
      (1) may cause problems for vaginal delivery

D. **No two pregnancies are alike**
   1. **Even if with a previous uncomplicated pregnancy, another pregnancy may have complications.**

E. **Prenatal care offers opportunities to learn about**
   - what to expect during pregnancy
   - birthing classes
   - emotional and financial support

F. **Prenatal care is an opportunity to discuss behaviors that are putting the fetus and mother at risk.**
   1. **Mothers who need help with addictions, smoking, alcohol, drugs, or eating should discuss these issues with their clinician**

   2. **Getting prenatal care for these women is extremely important for their health and the health of the fetus.**

IV. FETAL DEVELOPMENT

A. **Normal pregnancy - 40 weeks LMP**
   1. **Pregnancy lasts 280 days, 40 weeks or 9 months. Pregnancy loss before 20 weeks is considered a miscarriage, after 20 weeks is Pre-term or premature.**

   2. **LMP - last menstrual cycle** (counting starts the first day of bleeding)

B. **Average weight gain 28 pounds**
   1. **Healthy weight gain 25 - 35 pounds (single fetus)**
   2. **Babies born weighing less than 5.5 pounds are 40 times more likely to die in their first month**

C. **Fetal survival - 28 weeks and after (7th month)**
   1. **Babies born before 28 weeks have little chance of survival**

D. **First maternal feeling (quickening) 16 weeks (4th month)**

E. **Stages of fetal development**

1. **Zygote - fertilized egg**

2. **Blastocyst - one week after fertilization time of implantation.**

3. **Embryo - implanted fertilized egg until 10 week LMP (last menstrual period).**

4. **First trimester**
   a. 1st Month
      (1) the embryo is one quarter inch long and looks like a tadpole
         (a) heart, brain, spinal cord, and lungs beginning to form

      (2) "bag of waters" begins to form, regulates womb temperature and allow for proper growth

      (3) by months end, heart beats regularly and blood begins to circulate. Ears and eyes begin to form

      (4) tissue that eventually forms backbone, skull, and ribs and related muscles is visible

      (5) no weight gain in mother yet

      (6) breasts may feel tender, feeling fatigued, frequent urination, may feel nauseated

   b. 2nd Month
      (1) the embryo is two inches long and weighs one third of an ounce.
      (2) arms and legs lengthen and toes become distinct.
      (3) liver and stomach begin to function
      (4) eyes become pigmented and eyelids form
      (5) ears, nose and mouth take shape
      (6) head makes up nearly half of the embryo
      (7) brain grows rapidly and directs body's first movements
      (8) yolk sac shrinks in size as digestive tract develops
      (9) end of 2nd month now call a fetus
      (10) still no noticeable weight gain in mother
      (11) continued possible feelings of nausea, frequent urination, and fatigue

   c. 3rd Month
      (1) the fetus is 3-4 inches long and weighs about one ounce
      (2) the fetus moving vigorously and more often, yet not felt by mother
      (3) bones continue to grow
      (4) kidneys begin to function

(5) differences between sexual gender (boys and girls) may be seen
(6) can now open and close mouth, and swallow
(7) first ridges of fingernail may be seen
(8) mother may have small weight gain of 2-3 pounds
(9) increase need for calories and nutrients
(10) may still be feeling nausea, fatigue and frequent urination

5. **Second trimester**

a. 4th Month

(1) most of the organs are formed and may begin to function
(2) the fetus is about 6 - 7 inches long and weigh about 2 pound
(3) fingerprints fully developed and fingernails appear
(4) the placenta is fully formed
(5) umbilical cord grows and thickens
(6) air passageways develop
(7) first movements may be noticed by the mother
(8) feeling of fatigue, nausea and frequent urination should be lessening
(9) mother may have gained 3 - 4 pounds
(10) her belly is growing, may begin to "show"

b. 5th Month

(1) fetus is 8 - 9 inches long and weighs about 1 pound
(2) eyelashes, eyebrows and scalp hair appear
(3) blood supply to lungs increases
(4) silky body hair and waxy vernix protect the skin from the amniotic fluid
(5) mothers weight gain still only 3 - 4 pounds
(6) possible shortness of breath stronger feeling of movements
(7) increased need for sleep

c. 6th Month

(1) the fetus is 12 inches long and weighs about 1 2 pounds
(2) the baby opens and closes its eyes, and can hear sounds
(3) fetus can bring thumb to mouth, and grip firmly with its hand
(4) fetus is very active with kicking and stretching
(5) mother is noticeably pregnant

6. **Third trimester**

a. 7th Month

(1) fetus head grows longer, weight gain about 2 - 2 2 pounds
(2) fetus exercising arms and legs
(3) if born prematurely fetus may have a remote chance of survival (after 26 weeks)
(4) lungs may begin producing hormone for breathing
(5) mother continues to gain weight and belly becomes larger
(6) may be feeling back aches or leg cramps
(7) possible swelling of ankles if standing for long periods
(8) increase in frequency of doctor visits

b. **8th Month**

(1) fetus now weighs about 4 pounds and is about 16 2 inches long
(2) decreasing fetal movements due to crowded space
(3) may see outline of foot, elbow or head against the abdominal wall
(4) skin of fetus smoothing out
(5) may enter final position in the uterus by months end
(6) if born at this time survival is likely yet may need time in the hospital
(7) sucking reflex may not be fully developed
(8) mother feeling fatigued
(9) mother may be anxiously awaiting pregnancy end yet ambivalent about birth
(10) frequency of urination may increase due to pressure on the bladder
(11) mother's nutritional needs still high yet she may not be able to eat much at each meal due to compressed stomach
(12) mother may have more frequent back aches and difficulty in sleeping

a. **9th Month**

(1) fetus is fully formed and body functions are complete
(2) if born at this time survival is assured, unless complications
(3) reaching full weight of 7 to 7 2 pounds on average, and length of 20 of more inches
(4) fingernails are completely formed
(5) fetus most likely positioned head down position for birth
(6) mother ready for delivery
(7) cervix may be showing signs of softening and dilation of cervix
(8) mother may be experiencing Braxton Hicks contractions, uterus practicing for labor
(9) mother will have gained a healthy 25 to 30 pounds on average

V. DELIVERY

A. Types of delivery

1. Vaginal

a. dilation of cervix to 10cm

2. Cesarean section

a. incision of abdomen & uterus
b. reasons
1) long labor
2) fetal distress
3) breech birth
4) infection
5) emergency
6) hypertension (high blood pressure)
7) genital herpes

B. Signs of labor

1. **Contractions - increasing in frequency & strength**

2. Rupture of membranes (water breaks)

C. **First stage labor - may take 10 or more hours**
   1. **Early phase**
      a. cervix dilates 4-5cm
      b. mild contraction 15-20 minutes apart lasting 60-90 minutes
      c. contractions increasing in regularity, until less than 5 min. apart

   2. **Active phase**
      a. cervix dilates 4-8cm
      b. strong contractions 3 minutes apart, lasting 45 seconds

   3. **Transition phase**
      a. cervix dilates 8-10cm
      b. contractions occur 2-3 minutes apart lasting 60 seconds

D. **Second stage labor**
   1. **Dilation is fully reached 10cm**
   2. **Birth of the baby**
   3. **Could take up to 2 hours**
   4. **Contractions slow 2-5 minutes apart lasting 60-90 seconds**
   5. **Pushing begins with this stage**

F. **Third stage labor**
   1. **Delivery of placenta**
   2. **Contractions closer together less painful**

VI. POSTPARTUM

A. **Physical changes**
   1. **Return of uterus to normal size takes about 6 weeks**
   2. **Lochia**
      a. vaginal discharge - mostly blood may last 10-14 days
   3. **Return of menstrual periods**
      a. breastfeeding
      b. not breastfeeding around 7-9 weeks
   4. **Fatigue**

PREGNANCY & POSTPARTUM COMPLICATIONS

I. **Preventable Birth Defects**

A. **Affects of drugs, alcohol, and tobacco on the pregnancy and fetus.**

1. Leading cause of preventable mental, physical and psychological problems in infants and children.

2. There are many screening tools for clinicians to use, yet few if any routinely use them.

B. **Substance/alcohol abuse**

1. **Alcohol Use**

a. no known safe level of alcohol consumption for pregnant women.

(1) pregnant women who drink between one and two drinks per day are twice as likely as nondrinkers to have low birth weight babies and increased risk for miscarriage during the second trimester.

(2) binge-like drinking, 5 or more drinks in a short amount of time may be more harmful to fetus than exposure to same amount of alcohol over longer period of time.

b. Heavy use of alcohol can cause fetal alcohol syndrome (FAS).

(1) number one preventable cause of mental retardation

(2) 1 - 3 of every 1,000 babies are born with FAS

c. About twice as many African American women report health problems due to drinking than do African American men.

d. Alcohol consumption during the first months of pregnancy may effect physical development of the fetus. Alcohol consumption during the later part of the pregnancy may effect brain development.

2. **Substance Abuse (illegal drugs)**

a. Infants born to mothers who used addictive drugs such as heroin, methadone, amphetamines, PCP, marijuana, crack and cocaine can give birth to addicted babies.

(1) addicted babies must undergo withdrawal after birth

(2) signs of withdrawal are increased sensitivity to noise, irritability, poor coordination, tremors, and feeding problems.

b. Crack/cocaine

(1) increased risk of miscarriage, and premature birth
(2) usually results in low birth weight babies
(3) increase risk of placenta abruptio (placenta tearing away from uterine wall)

(4) babies born addicted to crack are more likely to be irritable, cry easily, startle easily
(5) long term affects of crack/cocaine use may not be seen for many years after birth

c. marijuana

(1) affects of marijuana are not completely known
(2). may affect genitalia of fetus if used during the 4th month of pregnancy

d. LSD, PCP, etc.

(1) likely to cause severe birth defects, miscarriage and premature birth

e. Overall estimated rates of substance use during pregnancy were higher for African American women (11.3%) than for white women (4.5%).

C. **Tobacco Use**

1. **smoking / tobacco use**

a. increased risk of low birth weight
Trisk of developmental delays

b. premature delivery

c. spontaneous abortion

d. fetal death

e. infants born to smokers are more likely to have

- respiratory problems and potentially develop asthma later in life,
- frequent ear infections, leading to potential hearing loss
- higher risk of dying of sudden infant death syndrome (SIDS)

f. Secondhand smoke are more likely to cause problems in infants and children

- respiratory infections, bronchitis and pneumonia
- middle ear infections - may result in hearing loss
- reduced lung function
- increased risk in developing asthma, increased problems for asthmatic children.

D. Environmental

1. work environment

a. exposure to toxic substances

- lead
- radiation
- insecticides
- some solvents and industrial cleaning solutions

2. Economic

a. being poor may prevent a pregnant woman from getting

(1) nutritional needs met - resulting in poor growth of fetus and increased health risk of mother, as well as potential low infant birth weight.

- WIC - Women Infants and Children is a subsidized coupon program to help pregnant women, infants and children to purchase the appropriate nutritional foods

(2) prenatal care

3. Increase in body temperature

a. Avoid use of saunas, whirlpools, or long **hot** baths during pregnancy, especially the first month

(1) temperature may increase risk of neural tube defects

4. Toxoplasmosis

a. parasite associated with raw meat and cat feces

b. pregnant women should avoid consumption of raw or undercooked meats

c. pregnant women should avoid changing cat litter boxes, or at least use rubber gloves and wash hands thoroughly after

d. can result in causing birth defects to fetus, eye problem, blindness

II. COMPLICATIONS IN PREGNANCY

A. **Placentae abruptio**

1. The placenta begins to tear away from uterine wall

B. **Placenta previa**

1. The placenta is formed low in the uterus, under the fetus near the cervix

C. **Breech**

1. Fetus is not facing head down at time of delivery

D. **Multiple births**

1. Increase risk of premature birth
2. Potential low birth weights of the fetus
3. The more multiples the greater the risk to mother and fetuses

E. **Premature rupture of membranes**

1. If the amniotic sac ruptures a fetus must be delivered within 24 hours to reduce to risk of infection to the fetus.

F. **Incompetent cervix**

1. The cervix will prematurely dilate before the pregnancy can reach term
2. Premature delivery can be prevented by stitching the cervix closed and a pregnant woman remaining on bed rest

G. **Preterm Labor**

1. When the uterus begins contractions and the fetus is 20 weeks old

2.**Preterm Labor**

FIMR reviews found that more than half of the mothers whose babies died of prematurity didn't recognize or understand the severity of their symptoms of preterm labor. In many instances, mothers delayed seeking care, which reduced their physician's window of opportunity to offer interventions.

The Fourth National Fetal and Infant Mortality Review (NFIMR) Conference, FIMR: August 2-4, 2001 in Washington DC.

Nearly 12% of all US births in 1999 were preterm (less than 37 completed weeks of gestation), an increase of 11% since 1990. Low birth weight, accounting for 7.6% of all births, was unchanged

from 1998 to 1999 but has increased 9% from 1990. (NCHS, Vol 49, No.1) Preterm birth and low birth weight are strongly associated with infant mortality; however, at this time there aren't any evidence-based strategies that work to reduce these risks. These statistics have remained relatively unchanged over the years.

2. Warning sign

Certain problems may appear during any stage of pregnancy. Therefore, it is important to know how to reach your health care provider if warning signs appear during any time of day or night. Contact your health care provider immediately if any of the following warning signs occur:

- Severe abdominal pain or cramping, which could indicate preterm labor or ectopic pregnancy
- Frequent uterine contractions from 20-36 weeks, which could indicate preterm labor
- Vaginal bleeding, which could indicate preterm labor or ectopic pregnancy
- Steady leaking of watery fluid from vagina, which could indicate ruptured membranes (water breaking) or preterm labor
- Absence of or decrease in fetal movements after 20 weeks, which could indicate fetal distress
- Severe headaches and vision problems, which could indicate dangerously elevated blood pressure
- Persistent vomiting, which could lead to dehydration and starvation
- Chills or fever, which could indicate infection

Mild cramps or achiness is normal during pregnancy, and is usually caused by normal stretching of the ligaments. However, it is always a good idea to mention any mild signs and symptoms to your health care provider during prenatal visits

III Emotional

A. Stress

1. When stress builds up during pregnancy or after delivery it can be harmful for the pregnant woman, the infant and others in the house.

a. high levels of stress can cause

- fatigue
- sleeplessness
- anxiety
- poor appetite
- overeating
- headaches

2. Hormones can be responsible for mood swings during and after pregnancy

3. Recent studies suggest high levels of stress may increase the risk of preterm labor, low birth weight, and possible miscarriage.

a. stress may be caused by environmental situations, poor coping ability, stressful relationship, unplanned or mistimed pregnancy, etc.

b. these stresses may impact a woman=s behavioral choices and health related behaviors

- alcohol or substance abuse
- poor nutritional choices
- eating too little or too much
- tobacco use

4. These stresses may continue after pregnancy and may impact the mothers ability to cope with an infant who is high need.

B. **"Baby blues"**

1. **Normal feelings of depression, anxiety, and anger**
2. **Usually begin 3 days after birth**
3. **Usually last about 2 weeks**

C **Perinatal Mood Disorders**

1. **"Baby" blues that do not go away**

a. symptoms linger for weeks or months and interfere with daily functioning

2. Depression and anger begin to surface 1 to 2 months after childbirth

3. **Symptoms**

- feelings of sadness, doubt, guilt, helplessness or hopelessness
- feelings seem to increase with each week which begin to disrupt a woman's normal functioning
- may not be able to care for self or baby
- having trouble handling usual responsibilities at home or on the job
- not able to sleep even when tired
- sleeping all the time even while the baby is awake
- marked changes in appetite

- loss of interest in things that used to bring pleasure
- extreme concern and worry about the baby, or lack of interest in or feelings for the baby
- may feel unable to love her infant or her family anxiety or panic attacks
- feelings of being frightened of being left alone in the house with the baby
- fear of harming the baby
  (these feelings are almost never acted on, but they can be very frightening and may lead to guilty feelings, which only make the depression worse)
- thoughts of self-harm, including suicide
- mood swings
- unable to make simple decisions
- bizarre or frightening thoughts or dreams
- uncharacteristic silence and reclusiveness

4. About 10% to 28% of women who give birth develop PPD.

5. Potential risk factors that may increase chances of PPD.

a. have had PPD before
b. previous psychiatric history
c. recent stressful events
d. loss of loved one
e. moving to new city
f. family illness

6. Reasons for PPD

a. hormonal imbalance triggering chemical depression

b. changes in thyroid production

c. environmental factors
  (1) stress, feeling alone, and lack of support from family and friends
  (2) low self esteem and coping mechanisms
  (3) feeling inadequate as a mother
  (4) difficulties in breast feeding

d. psychological aspects
  (1) feelings about the pregnancy, either wanted or unwanted
  (2) feelings about parenting
    (a) expectations of parenting roles
    (b) expectations of infant behavior

(3) feelings about the relationship

e. most likely a combination of these

7. Screening for PPD

Edinburgh Postnatal Depression Scale (EPDS) A 10 question screening tool.

The EPDS may be used at 6-8 weeks to screen postnatal women. The child health clinic, postnatal check-up or a home visit may provide suitable opportunities for its completion.

In the past 7 days:

1. I have been able to laugh and see the funny side of things
   - As much as I always could
   - Not quite so much now
   - Definitely not so much now
   - Not at all
2. I have looked forward with enjoyment to things
   - As much as I ever did
   - Rather less than I used to
   - Definitely less than I used to
   - Hardly at all
3. I have blamed myself unnecessarily when things went wrong
   - Yes, most of the time
   - Yes, some of the time
   - Not very often
   - No, never
4. I have been anxious or worried for no good reason
   - No, not at all
   - Hardly ever
   - Yes, sometimes
   - Yes, very often
5. I have felt scared or panicky for no very good reason
   - Yes, quite a lot
   - Yes, sometimes
   - No, not much
   - No, not at all
6. Things have been getting on top of me
   - Yes, most of the time I haven't been able to cope at all
   - Yes, sometimes I haven't been coping as well as usual
   - No, most of the time I have coped quite well
   - No, I have been coping as well as ever
7. I have been so unhappy that I have had difficulty sleeping
   - Yes, most of the time
   - Yes, sometimes
   - No, not very often
   - No, not at all

8. I have felt sad or miserable
   - Yes, most of the time
   - Yes, quite often
   - No, not very often
   - No, not at all

9. I have been so unhappy that I have been crying
   - Yes, most of the time
   - Yes, quite often
   - No, only occasionally
   - No, never

10. The thought of harming myself has occurred to me
   - Yes, quite often
   - Sometimes
   - Hardly ever
   - Never

8. **Treatment**
   - **a.** counseling
   - **b.** medications

C. **What to do**

1. **Talk to clinician about treatment options**
2. **If clinician is not responsive to feeling or symptoms look for another clinician**
   - **a.** get referrals for clinicians or counselors who work with women experiencing PPD.
   - **b.** communicate about your feeling to
     - **(1)** clinician
     - **(2)** partner
     - **(3)** family
     - **(4)** friend

IV. **Sexually Transmitted Infections**

Sexually transmitted infections are diseases spread from infected person to another through sexual intercourse or intimate skin to skin contact.

A. **Many people (male or female) do not show symptoms of STIs, or they may not recognize the symptoms.**

B. **People regard those who have an STI as "dirty, a slut, many sex partners, gross". These description may create a barrier for people to seek out diagnosis due to being classified negatively.**

C. **People who contract an STI are not bad people. They simply have come in contact with a disease that is contracted through sexual contact.**

1. **Modes of transmission include**
   - **a.** skin to skin contact of infected site
   - **b.** exchange of bodily fluids

c. vaginal, oral or anal intercourse

D. **Ethnicity, culture economic status, gender and age.**

1. **Approximately 12 million individuals are infected with an STI annually.**
   a. one in 4 Americans aged 15-55 will become infected during their lifetime
   b. one in 4 sexually active teenagers will graduate high school having been infected with a sexually transmitted infection

2. **Native American have higher reported gonorrhea rate and higher death rate from syphilis.**

3. **Hispanic Americans and African American have higher incidence of syphilis.**
   a. Hispanic men may be reluctant to use condoms due to cultural reasons.

4. **Low income individuals in urban areas are more likely to have sexually transmitted infections.**

5. **Sexually transmitted infections are considered epidemic among reproductive aged individuals.**
   a. women at risk
      1) a woman is more likely to contract an infection from a one time encounter with an infected partner, than a man will be infected by a female, except for skin to skin contact diseases.
      2) women are less likely then men to have symptoms (asymptomatic)
      3) it may be more difficult to diagnose STIs in women than in men
      4) More women than men live below the poverty level than men, therefore impacting their ability to get to or receive health care.
      5) women with frequent or chronic STIs are at higher risk for
         a) ectopic pregnancies
         b) infertility
         c) perinatal infections
         d) fetuses and children of women with STIs are often at risk for development of congenital abnormalities, mental retardation, illness and death

6. **It is estimated that 86% of infected individuals are between the ages of 15-29 years.**

a. adolescents are less likely to take precautions to avoid transmission of an STI

b. one in four sexually active teenagers will graduate high school having had an STI.

c. two thirds of reported cases of gonorrhea and chlamydia are to individuals under 24 years.

E. **Treatment is vital for those that can be cured.**
   a. diseases that are untreated can have life long affects
   b. untreated disease continues affecting the body even if symptoms disappear

F. **"Birth control" methods do not prevent transmission of STI, but barriers can.**
   1. **Proper use of a condom may reduce the risk of spread of such diseases as gonorrhea, chlamydia, and HIV.**

   2. **The use of condoms may not reduce risk of skin to skin transmitted diseases if the location of infection is not on the penis or inside the vagina. Barrier such as a dental dam placed over vaginal and anal area can reduce risk through oral sexual contact.**

G. **Abstinence is seen as the only method that is 100% effective for prevention of infection.**
   1. **STI's can be transmitted through skin to skin contact.**

   2. **Intercourse does not have to occur to become infected.**

   3. **Intimate sexual contact such as kissing an infected area, or rubbing on an infected area may result in transmission of such viruses as genital herpes or cold sores.**

   4. **STI's can be transmitted through vaginal, oral, and anal intercourse, or skin to skin contact of infected areas.**

H. **For best protection to prevent transmission is to maintain a long term mutually monogamous relationship.**

   1. **Know your partner well prior to sexual contact.**

   2. **And use a condom and spermicide to reduce risk.**

   3. **Symptoms do not always need to be present for infection to transmitted.**

I. Infections & Pregnancy

1. Many infections can cause severe complications to a pregnancy, the fetus, or the baby during delivery.

a. Women infected with an STI during pregnancy may suffer early onset of labor, premature rupture of the membranes surrounding the baby in the uterus, and uterine infections after delifer.

b. STIs can be transmitted from a pregnant woman to the fetus, newborn, or infant before, during or after birth.

1) Syphilis crosses the placenta and infects the developing fetus.

2) Gonorrhea, chlamydia, hepatitis B, and herpes are transmitted from the mother to the infant as the infant passes through the birth canal.

3) HIV infection can cross the placenta during pregnancy, infect the newborn during the birth process, and infect the infant during breast feeding.

c. Harmful effects on the baby may not be detected until months or even years after birth. Problems can include

- stillbirth
- low birth weight
- conjunctivitis (eye infections)
- pneumonia
- neonatal sepsis (infection in the blood stream)
- neurological damage (such as brain damage or motor disorder)
- congenital abnormalities(including blindness, deafness, or other organ damage)
- acute hepatitis
- meningitis
- chronic liver disease, cirrhosis of the liver

d. Women should request STI testing, many clinicians do not test automatically. Find out what you are being tested for.

e. Treatment during pregnancy

1) Bacterial infections can be treated and cured with antibiotics during pregnancy.

2) Viral infections can not be cured. Some treatments can be used during pregnancy to reduce symptoms.

2. Common vaginal infections and sexually transmitted diseases should be diagnosed and treated as soon as possible.

a. bacterial vaginosis has been linked to increased risk of miscarriage

1) this is a common infection in women and should not be ignored.

- symptoms can be an fishy smelling odor, itching, abnormal discharge from the vagina

Disease	Symptoms	Effects on Your Health	Effects on Fetus/Baby	Treatment
HIV/AIDS	long-lasting infections, diarrhea, night sweats, fever, weight loss, swollen glands, coughing, shortness of breath	immune system damage leading to cancer, pneumonia, brain damage, death	fetus can get virus from mother during pregnancy or delivery; immune system damage leading to death in a few years	mother treated with AIDS medication during pregnancy; after birth no effective cure
Chlamydia	itching or burning during urination, vaginal discharge, whitish discharge from penis, pelvic pain or no symptoms at all	pelvic inflammatory disease, sterility	may result in premature birth; baby can catch during vaginal birth, causing ear and eye infections, pneumonia	can be cured with antibiotics
Genital Herpes	sores on penis or vagina, vaginal discharge, fever, tiredness, itching, aches and pains	first attack very painful, recurrent flareups less painful	baby can catch during vaginal birth, causing severe skin infections, nervous system damage, blindness, mental retardation, death	symptoms can be treated; no cure for the disease; flaeups may occur 4 to 7 time per year
Gonorrhea	vaginal discharge, burning during urination; most women have no symptoms	pelvic inflammatory disease, infertility, arthritis	baby can catch during vaginal birth, causing serious eye infections, blindness	can be cured with drugs; babies are treated with eye drops after birth
Syphilis	sore on penis or vagina, mouth, anus or elsewhere; low fever, sore throat, other sores or rashes	if untreated, can cause damage to heart, blood vessels and nervous system, blindness, insanity and death	fetus can catch before birth, damaging bones, liver, lungs, blood vessels; infected fetuses can die before birth	can be cured with drugs; once fetus is damaged, there is no cure
Genital Warts	genital itching, irritation or bleeding; warts may appear as small, cauliflower-shaped clusters; may get worse during pregnancy	warts grow in size and number, may increase risk of cervical cancer	baby can catch virus during birth, causing wart growth inside the voice box and blocking windpipe	can be treated with drugs applied directly to warts, or with surgery to remove them; no cure

V. **Unwanted and mistimed pregnancy**

A. **Unintended pregnancy vs. intended pregnancy**

1. **Almost 60% of all pregnancies were unintended, either mistimed or unwanted altogether.**

a. results of unwanted or mistimed pregnancies

(1) 50% unwanted and mistimed pregnancies ended in abortion

(2) 44% resulted in live birth

(3) 6% result in miscarriage

b. of the unintended pregnancies it is estimated that 80% are to adult women, 20% to teenagers.

2. **Differentiating between intended and unintended is not always easy.**

a. feelings that impact whether pregnancy was intended or not include; ambivalence, confusion and denial.

b. societal factors influence feelings about pregnancy

3. **Mistimed pregnancy**

a. Of the unintended pregnancies

(1) 50% used a method of birth control during at some point during the month of conception

(2) 50% did not use any method during the month of conception

B. **Pregnancy options**

1. **Continue the pregnancy**

a. choose to evaluate the option of parenting

b. choose the option of adoption

2. **Terminate the pregnancy**

a. abortion

(1) 90% of all abortions occur in the first trimester

VI. **SIDS and Infant Death**

A. **What is SIDS**

1. **Sudden Infant Death Syndrome**

- sudden and silent--the victim was seemingly healthy.
- currently, unpredictable and unpreventable.
- a death that occurs quickly, with no signs of suffering, and is usually associated with sleep.
- a syndrome the first symptom of which is death.
- determined only after an autopsy, an examination of the death scene, and a review of the case history.
- an infant death that leaves unanswered questions and, thus, causes intense grief for parents and families.

B. What SIDS is not

- caused by vomiting and choking, or minor illnesses such as colds or infections.
- caused by the diphtheria, pertussis, tetanus (DPT) vaccines or other immunizations.
- contagious.
- child abuse.
- the cause of every unexpected infant death.

C. Risk factors that may contribute to infant death

1. maternal health and behavior during pregnancy and the baby's health before birth may influence risk of infant death

a. these risk factors are not conclusive predictors

Maternal risk factors include

- cigarette smoking during pregnancy
- maternal age less than 20 years
- poor prenatal care
- low weight gain
- anemia
- use of illegal drugs
- history of sexually transmitted infections or urinary tract infection

D. Current efforts to reduce infant death

1. Sleeping positions
   a. Babies should be positioned on their back for sleeping.
   b. Avoid putting babies on their stomachs

2. Avoid co-sleeping
   a. babies who sleep with parents in their beds are more likely to die from suffocation

3. Bed safety
   a. Avoid use of blankets, bumper pads, stuffed animals, only use tight fitting sheets

4. Recent survey's

A survey of almost 500 parents with children under age 3 found that only 31% of African-American parents surveyed put their babies to sleep on their backs. The "Safe Sleep" campaign is sponsored by CPSC, Gerber Products, the Health Resources and Services Administration's Bureau of Primary Health Care, and Black Entertainment Television.

VII. Shaken Baby Syndrome (SBS)

A. What is Shaken Baby Syndrome?

- is the resultant injuries that occur to an infant or young child after being shaken violently.
- Shaking must be of such a force that an individual would recognize the act is dangerous.

- SBS most often occurs when a child receives numerous rapid shakes; head impact is not necessary but does frequently occur
- SBS injuries can include: brain damage, blindness, paralysis, seizures or even death.

B. Why does it happen

- this form of serious child abuse usually happens because caregivers become enraged and lose control
- caregivers may be inadequately prepared for parenting, or may be under such stress that they cannot deal with the frustrations of parenting.

C. Who are the perpetrators and the victims

- Young males are most often the perpetrators of SBS, but other caregivers, such as babysitters
- SBS most often occurs prior to age one and seldom occurs after age 2
- twins are at higher risk than singletons of receiving a shaking assault

D. Preventing SBS

- Teach caregivers that they must never touch a child in anger
- Let parents and caregivers know that they need to have a plan to deal with crying infants or children and they need to be cautious about who care for their children
- Health care professionals, agencies, organizations and communities need to have supports in place so that parents and caregivers are less likely to harm children.

VIII. Impacts to women seeking prenatal care with a pregnancy complication.

A. A woman who is using alcohol, tobacco or illegal drugs is in high need for prenatal care and pregnancy healthy intervention.

1. Women entering prenatal care who are at risk or identified as using drugs or alcohol will

a. be referred to an appropriate agency to reduce or stop the behavior that is putting them and their pregnancy at risk.

(1) these agencies and services will help a pregnant woman to increase the chances of having a healthy pregnancy and healthy infant.

(2) she will be evaluated on her willingness and behavior changes that decrease the pregnancy risk factors.

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