

## Woman's Health Problems Which Can Influence On The Pregnancy

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When a woman enters pregnancy with chronic conditions such as cardiovascular or kidney disease, both she and the fetus can be at risk for complications. Education of a woman and her family about danger signs to watch for during pregnancy, and actions to minimize complications whenever possible

In addition to preexisting illnesses, the pregnant woman, like every other person can develop non-pregnancy-related illnesses or suffer from trauma during a pregnancy.

When illnesses occur despite there safeguards, nursing care focuses on:

- Preventing diseases from the fetus
- Helping the mother regain her health as quickly as possible



### One family member with illness affects all family members



### Nursing interventions for the pregnant woman with a chronic illness

- Take a rest during the day time more
- Take two times more afternoon sleep time than normal
- Teaching new or additional measures to maintain health
- Teaching the families some new skills how to look for a pregnant with one or another chronic disease

## High-Risk Pregnancy

A High-Risk Pregnancy is one in which a concurrent disorder, pregnancy-related complication, or external factor jeopardizes the health of the mother, the fetus, or both.

The pregnancy of a woman who is diabetic, for example, is automatically termed one with greater than normal risk because the fetus is growing in an environment in which hyperglycemia is the rule

## Sexual Transmitted Infections



## STI

- STIs most important to identify during pregnancy, fetus or newborn
- Infected partner should also be treated or the disease can recur from cross-infection

## A Woman With Candidiasis



## A Woman With Candidiasis

- Caused by the fungus Candida
- 90 % of woman will have it sometime in their lifetime
- Candidiasis occurs more frequently during pregnancy than normally because of the increased estrogen level present during pregnancy, which causes the vaginal pH to be less acidic

### A Woman With Candidiasis

- Women with repeated infections should have their urine tested for glucose to determine whether gestational diabetes is present
- It also occurs in the woman who took antibiotics for other infection and HIV positive pregnant
- Vaginal application of an over-the-counter antifungal cream such as miconazole for 7 days or single dose of oral fluconazole



### A Woman With Trichomoniasis



### A Woman With Trichomoniasis

Trichomoniasis is an infection caused by a single-cell protozoan spread by coitus. A woman notices a yellow-gray, frothy, odorous vaginal discharge. It is important that trichomoniasis infections be identified and treated because they may be associated with preterm labor, premature rupture of membranes, and post-cesarean infection. The drug of choice – metranidazole (Metranidazole was once thought to be teratogenic, but the CDC now confirms it is safe in either early or late pregnancy)

### A Woman With Bacterial Vaginosis



### A Woman With Bacterial Vaginosis

- Bacterial vaginosis is local infection of the vagina by the invasion of, most commonly, Gardnerella vaginalis organisms
- The treatment is oral metronidazole or clindamycin for 7 days. Untreated G.Vaginalis infections are associated with amniotic fluid infections

### A Woman With Chlamydia



### A Woman With Chlamydia

- Chlamydia is one of the most common types of vaginal infections seen in both pregnant and non-pregnant women
- Screening for this infection doing in the first prenatal visit. If woman has a multiple sexual partners screening may be repeated again
- The infection caused by a gram-negative intracellular parasite, causes a heavy, gray-white vaginal discharge
- Therapy – for no pregnant – doxycycline, tetracycline; for pregnant – azithromycin, amoxicillin

### A Woman With Syphilis



### A Woman With Syphilis

Syphilis is a systemic disease caused by the spirochete *Treponema pallidum*. The first stage of syphilis is a painless ulcer (chancre) on the vulva or vagina. All women are screened for syphilis at a first prenatal visit. Women who have multiple sexual partners are screened on 36 weeks as well. One injection of benzathine penicillin is the drug of choice for treatment of syphilis during pregnancy. After therapy, a woman may experience a hypotension, fever, tachycardia, muscle aches

### A Woman With a Herpes Simplex



### A Woman With a Herpes Simplex

The herpes can be transmit true the placenta or to new born child. To help avoid transmission, woman with active lesions are scheduled for cesarean birth. If no lesions are present, a vaginal birth is preferable

### A Woman With Gonorrhea



### A Woman With Gonorrhea

Gonorrhea is an STI caused by the gram-negative coccus *Neisseria gonorrhoeae*. A yellow-green vaginal discharge may be present, or a woman can be asymptomatic. Gonorrhea is associated with spontaneous miscarriage, preterm birth, endometritis in the postpartum period. Gonorrhea treated with amoxicillin and probenecid. Therefore, cefixim or im ceftriaxone is the current recommended therapy

### A Woman With Human Papillomavirus Infection



### A Woman With Human Papillomavirus Infection

The infection present in 10 – 30 % of woman and is most common in woman who have multiple sexual partners. First they appears like some papillary structures, after they spread, enlarge; increased the size during pregnancy because the high vascular flow; they may be secondary ulcerated and infected. Treatment: podophyllum applied directly to lesions. Woman can choose to leave the lesions during pregnancy and after delete them during postpartum period

### A Woman With Streptococcal B



### A Woman With Streptococcal B

- It is not unusual for some healthy women to harbor Group B streptococcus bacteria in their rectum and vagina. These microorganisms do not usually cause disease when few in number, but when they grow in number and colonize these areas, bacterial infection can become severe.
- A woman who is pregnant and tests positive for Group B strep or GBS may pass the bacteria to her baby during childbirth
- Recommendation for all pregnant women to be scanned on B Streptococcus at 35 to 38 weeks

## A Woman With Streptococcal B

Although harmless to most adults, pregnant women may experience health problems associated with these bacteria, which can cause:

- UTI or urinary tract infection
- Chorioamnionitis (infection of the amniotic fluid and placenta)
- Bacteremia (infection of the blood)
- Sepsis (severe, widespread blood infection)

After normal delivery, GBS can also lead to infection of the inner lining (endometrium) of the uterus. For mothers who deliver by C-section, wound infection risk is increased

## A Woman With Streptococcal B

A prenatal test for group B strep may also be done to protect a baby from exposure to the bacteria during normal childbirth. Although not all babies develop infection, affected babies could suffer from severe complications immediately or even sometime after birth. These life-threatening complications include:

- Pneumonia (lung infection and inflammation)
- Meningitis (infection of the membranes covering the brain)
- Bacteremia
- Sepsis

Women who test positive for GBS are usually given antibiotics during childbirth to eliminate bacteria in their birth canals

## How to Prevent My Baby from Getting Group B Strep Infection

- Mothers who test positive and are at high risk for GBS infection will be given IV antibiotics to reduce their babies' chances of developing the infection after birth. Some women are carriers of group B strep, which means that the bacteria live in their gastrointestinal tract without causing symptoms. They may or may not test positive all the time, thus it is important to screen pregnant women for GBS at 35-37 weeks of pregnancy. Antibiotics are not given before the onset of labor since the bacteria can thrive again after treatment.
- The decision to have antibiotic treatment depends on you, if you have a low risk of having GBS. Some homeopathic physicians recommend taking herbal remedies to prevent infection a few weeks before delivery

## A Woman With HIV Infection



Women with HIV need information and support to help them make the best choices for themselves and their babies.

## A Woman With HIV Infection

In developing countries, between one in three and one in four babies born to HIV-positive women are born with HIV themselves. Some of these babies become infected during pregnancy, but most become infected during the birth itself.

There appears to be a greater risk of HIV transmission during pregnancy and childbirth if the mother has a high viral load, or if her immune status is poor. Her viral load will be higher if she:

- has become HIV positive just before or during her pregnancy
- is continuing to be exposed to the HIV virus through unprotected sex in pregnancy
- has symptomatic HIV

## A Woman With HIV Infection

Poor diet, having another STI such as gonorrhoea, chlamydia or syphilis or having other infections such as malaria also appear to increase the risk of transmission from an HIV-positive mother to her baby. In general, the better the health of the mother, the less likely she is to transmit HIV to her baby

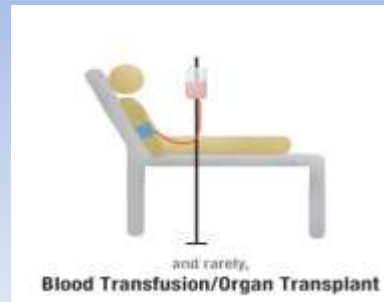
## HIV can be transmitted



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HIV is spread from an infected person to another person through direct contact with some of the body's fluids. It is not spread easily. Only certain body fluids from an HIV-infected person can transmit HIV:

- Blood
- Semen (cum)
- Pre-seminal fluid (pre-cum)
- Rectal fluids
- Vaginal fluids
- Breast milk

## A Woman With HIV Infection

The disorder is caused by a retrovirus that infects and disables T lymphocytes. Without T lymphocytes, the body cannot fight infection through either T-cell or B-cell activity. Risk factors include:

- Multiple sexual partners
- Bisexual partners
- Intravenous drug use by the individual or sexual partner
- Blood transfusions

## Does the HIV and AIDS means the same?



The terms "HIV" and "AIDS" can be confusing because both terms refer to the same disease. However, "HIV" refers to the virus itself, and "AIDS" refers to the late stage of HIV infection, when an HIV-infected person's immune system is severely damaged and has difficulty fighting diseases and certain cancers. Before the development of certain medications, people with HIV could progress to AIDS in just a few years. But today, most people who are HIV-positive do not progress to AIDS. That's because if the person have HIV and take ART consistently, it can keep the level of HIV in the body low

## HIV

When the HIV virus invades T lymphocytes (T4 cells), it substitutes its own RNA and DNA for the cell's DNA. T4 cells die, reducing a woman immune system functioning. When T4 below 500 cells/mm<sup>3</sup> or the viral load rises above 5 000 copies/ml, it is difficult for an infected woman to resist opportunistic infections

## HIV

- A woman with HIV infection may also have contracted other STIs such as syphilis, gonorrhea, chlamydia, hepatitis B, so they should be screened for this as well.
- Because the pregnant woman is in the high risk for developing toxoplasmosis and cytomegalovirus infection the history should include questions about fresh meat, cats and recent mild, flulike symptoms
- Tuberculosis also occurs at a higher rate in HIV – positive people

## HIV

Twenty percent to 50 % of infants born to untreated HIV-positive woman will contract the virus and develop AIDS in the first year of life. However, if zidovudine (ZVD) is administered to the woman beginning with the 14 th week of pregnancy and the newborn receives the drug for 6 weeks after birth, the risk of perinatal transmission can be reduced to only 8% to 10%; Nevirapine may reduce the incidence even more





## HIV

The woman who are identified like HIV-positive are usually advised not to become a pregnant until more is learned about how to prevent transmission to fetus. A goal of the therapy is to maintain the CD4 cell count at greater than 500 cell/mm<sup>3</sup> by administering (in addition to ZVD) one or more protease inhibitors, such as ritonavir, with nucleoside reverse transcriptase inhibitor

## HIV

- Kaposi sarcoma, a rare malignancy that tends to occur with AIDS, is normally treated with chemotherapy. Chemotherapy is contraindicated during early pregnancy, but can be used in late one.
- Trombocytopenia may be present as a part of HIV, which make woman poor candidate for epidural injection for anesthesia or for episiotomy

## Cancer And Pregnancy

- Cancer occurs in up to 1 in 1000 pregnancies
- There is no proof that pregnant woman are more prone to cancer than other woman or that pregnancy change the course of existing disease

## Cancer And Pregnancy

If a woman is in the first trimester of pregnancy when a malignancy is diagnosed, she and her partner are asked to make a difficult decision: to delay treatment to avoid teratogenic risks to a fetus from treatment; to abort the pregnancy to allow chemotherapy or radiating treatment to be initiated. As a rule, woman can receive chemotherapy in the second and third trimesters without adverse fetal effects

## Mental illness and pregnancy

- A woman with mental illness should be caring by both – a psychiatric care team and prenatal care group
- If some medication prescribed they should be deeply checked to the possible harmful to the fetus
- Some mental problem can appeared in pregnancy first time

## A Woman With A Cardiac Disease

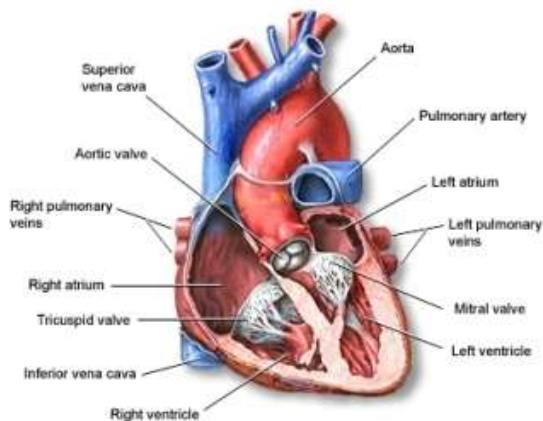


## A Woman With A Cardiac Disease

A pregnant woman with a cardiac disease need a team approach to care during pregnancy. This woman should begin prenatal care as soon as she suspect that she is pregnant (1 week after the first missed menstruation). Like ideal the woman should come to her obstetrician before the pregnancy

## A Woman With A Cardiac Disease

The danger of pregnancy in a woman with cardiac disease occurs primarily to increase in circulatory volume. The most dangerous time for the woman – 28 – 32 weeks



## Woman with left-sided heart failure

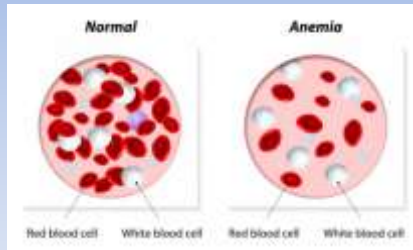
- Occurs a conditions such mitral stenosis, mitral insufficiency and aortic coarctation
- Fatigue, weakness and dizziness; heart rate increased and peripheral vasoconstrictions occurs
- Pulmonary edema become severe, the woman cannot sleep, just orthopnea position relaxing her condition; she can also mentions about paroxysmal nocturnal dyspnea



## Woman with right-sided heart failure

- Pulmonary valve stenosis, atrial and ventricular septal defects
- Blood pressure decreases in aorta because less blood is reaching it, pressure is high in vena cava, increased portal circulatory (liver enlargement)
- This women can be advised to not be pregnant
- If she became a pregnant, they can be hospitalized for the last trimester of pregnancy (need always oxygen administration)

## Anemia and Pregnancy



## Anemia and Pregnancy

Anemia has been defined by the Centers for Disease Control and Prevention as a hemoglobin concentration of less than 11 g/dL in the first and third trimester of pregnancy and less than 10.5 g/dL in the second trimester. Anemia is broadly classified as acquired or hereditary

## Anemia and Pregnancy

**Iron-deficiency anemia.** The most common cause of anemia in pregnancy is iron deficiency. The iron requirements of pregnancy are considerable, and most women enter pregnancy with low iron stores.

- In pregnancy, a woman needs an additional 1,000 mg of elemental iron. 300 mg goes to the fetus. 500 mg is used to expand the maternal red cell mass. 200 mg is shed through the gut and skin

## Anemia and Pregnancy

- The level of hematocrit naturally decreases during the second trimester of pregnancy, because of the greater expansion of maternal plasma volume compared with the increase in red cell mass and hemoglobin mass
- Late in pregnancy, hemoglobin mass continues to increase while plasma volume remains steady

## Anemia and Pregnancy

- Because of the normal transfer of iron from the mother to the fetus, the fetus does not suffer from iron-deficiency anemia
- While maternal absorption of iron is increased in pregnancy, treatment involves additional daily elemental iron (200 mg in divided doses) to correct the anemia and maintain adequate stores

## Anemia and Pregnancy

**Megaloblastic anemia.** This condition, which is rare in the United States, is characterized by impaired DNA synthesis. It occurs in pregnant women who consume neither fresh vegetables nor foods with a high content of animal protein.

- Folic acid deficiency is the most common form

## Anemia and Pregnancy

- Many women also have iron deficiency
- Vitamin B 12 deficiency is rare but should be checked for in women with a gastrectomy, Crohn's disease, or ileal resection
- Ethanol consumption may be a contributing factor
- Symptoms and signs of megaloblastic anemia during pregnancy include nausea, vomiting, and anorexia
- Treatment includes a well-balanced diet, oral iron, and folic acid

## Pulmonary disease



## Pulmonary disease

### Physiologic changes associated with pregnancy

- Mechanical changes of chest cavity
- a. Upward displacement of diaphragm (as much as 4 cm)
- b. Increase in transverse diameter of chest (2 cm)
- c. Increase in chest circumference (5 to 7 cm)
- d. Increased diaphragmatic excursion
- e. Increase in subcostal angle

## Pulmonary disease

- Changes in pulmonary function
- a. Increased tidal volume (30% to 40%)
- b. Decrease in expiratory reserve
- c. Increase in minute ventilation
- d. Decreased lung volume caused by displacement of diaphragm (Total lung volume decreases 5%, and residual volume decreases 20%.)
- e. No change in forced expiratory volume in 1 second

## Pneumonia of pregnant

In addition to being life-threatening to the mother when severe, pneumonia is also associated with preterm birth. Chest radiography during pregnancy can be accomplished with little radiation exposure to the fetus using lead shielding to the mother's abdomen

## Pneumonia of the pregnant

*Streptococcus pneumoniae*: most common bacterial pathogen

- Associated with smoking
- Sudden onset is characteristic

*Signs and symptoms include:*

- (1) Tachypnea
- (2) Fever
- (3) Shaking chills
- (4) Productive cough
- (5) Purulent sputum

**Diagnosis**

- (1) Lobar consolidation on chest radiograph (
- (2) Sputum culture and Gram stain
- (3) Blood culture

**Treatment** : Hospitalization , Intravenous penicillin followed by oral penicillin for 10 to 14 day

## Thromboembolic disease

Thromboembolic disease is the leading cause of death in pregnant and postpartum women.

Thromboembolic disease occurs in 0.02% to 0.3% of pregnant patients and in 0.1% to 1.0% of postpartum patients

Untreated deep vein thrombosis (DVT) in pregnancy causes pulmonary embolism (PE) in as many as 24% of patients

- The mortality rate is 15%
- If patients are treated adequately, the risk of PE is 4.5%, with a risk of mortality of less than 1%

## Keeping all mothers healthy

### Protect women from HIV

The only completely reliable way to stop mother-to-child transmission of HIV is to prevent all girls and women becoming HIV positive.

### Involve fathers

Talking to the male partner about HIV and parent-to-child transmission, and explaining to him what he can do to keep the pregnancy safe, can encourage him to practise safer sex and protect the health of his baby.

### Promote safer sex

Even after becoming pregnant, women should continue to practise safer sex (use a condom) unless they are absolutely certain that their partner is not HIV positive. Continuing to use condoms will also prevent STIs. Keeping to one sexual partner makes sex safer.

### Test for, and treat, all infections

An essential part of care for all pregnant women is to look for, ask about and treat, any infections the woman may have, especially STIs, tuberculosis (TB) and malaria.

## Keeping all mothers healthy

### Prevent malaria

In areas where malaria is common, malaria prophylaxis is an important part of antenatal care. It is even more important for women who are HIV positive, because an infection can increase the risk of transmission (see below). Pregnant women should take whichever antimalarial drug is recommended in their area, and sleep under an insecticide-treated bed net where possible.

### Promote a well-balanced diet

Eating a good diet, including all the necessary vitamins and minerals, is important for all pregnant women, but especially those who are HIV positive. It is difficult for many women to decide what they eat - poverty, custom or their status may mean they have few choices. Education about which local foods are most nutritious and the importance of pregnant women being well fed, needs to be ongoing. In many parts of sub-Saharan Africa, traditional foods are often more nutritious and cheaper than popular western diets.

## Keeping all mothers healthy

### Encourage rest

For many pregnant women, particularly where hard physical tasks are part of their daily routine, getting enough rest can be difficult. Supporting women to look after themselves during their pregnancy, including resting whenever they can, is important.

### Discourage smoking and the use of alcohol and other drugs

Smoking cigarettes, drinking alcohol and the use of some drugs and herbal remedies can harm the unborn child. HIV-positive women need to be especially careful, because anything that damages their health can lower their CD4 count.

### Avoid invasive medical procedures

Because of the risk of HIV and other infections being passed to the baby, procedures such as amniocentesis should be avoided unless they are really necessary (see Section 4, page 10).

### Avoid blood transfusions

Blood transfusions are still a source of HIV infection in some parts of Africa and should be avoided unless they are absolutely essential.

**Provide voluntary counselling and testing for HIV** (see Section 3, page 7) Many women do not know their HIV status and may wish to find out during pregnancy. Knowing their status can help women to make decisions that reduce the risk of transmitting HIV to their baby. Confidentiality is essential if women are to be encouraged to take up services offered and avoid the risks of their status becoming public



THANK YOU  
FOR  
YOUR  
ATTENTION!  
ANY QUESTIONS?