

HIGH-RISK PREGNANT CLIENT

- cardiovascular or kidney disease ⚡ chronic
- ⚡ both can be at risk
- close observation ⚡ Nursing care for a woman
- ⚡ danger signs to watch

High-Risk Pregnancy

- ⚡ concurrent disorder → jeopardizes health

particular circumstances

- ⚡ enter pregnancy with a chronic illness
- ⚡ develop a complication of pregnancy
- ⚡ poor coping mechanisms,
- ⚡ poverty,
- ⚡ lack of support people,
- ⚡ genetic inheritance,

FACTORS THAT CAUSE A PREGNANCY AS HIGH RISK

PREPREGNANCY	PREGNANCY	LABOR AND BIRTH
<ul style="list-style-type: none"> History of drug dependence (including alcohol) History of intimate partner abuse History of mental illness History of poor coping mechanisms Cognitive challenged Survivor of childhood sexual abuse 	<ul style="list-style-type: none"> Loss of support person Illness of a family member Decrease in self esteem Drug abuse (including alcohol and cigarette smoking) Poor acceptance of pregnancy 	<ul style="list-style-type: none"> Severely frightened by labor and birth experience Inability to participate because of anesthesia Separation of infant at birth Lack of preparation for labor Birth of infant who is disappointing in some ways (such as sex, appearance, or congenital anomalies) Illness of newborn

PSYCHOLOGICAL

FACTORS THAT CAUSE A PREGNANCY AS HIGH RISK

PREPREGNANCY	PREGNANCY	LABOR AND BIRTH
<ul style="list-style-type: none"> OCCUPATION INVOLVING HANDLING OF TOXIC SUBSTANCES (INCLUDING RADIATION AND ANESTHESIA GASES) ENVIRONMENTAL CONTAMINANTS AT HOME ISOLATED LOWER ECONOMIC LEVEL POOR ACCESS TO TRANSPORTATION FOR CARE HIGH ATTITUDE HIGHLY MONTHLY LIFESTYLE POOR HOUSING LACK OF SUPPORT PEOPLE 	<ul style="list-style-type: none"> REFUSAL OF OR NEGLECTED PRENATAL CARE EXPOSURE TO ENVIRONMENTAL TERATOGENS DISRUPTIVE FAMILY INCIDENTS DECREASE ECONOMIC SUPPORT CONCEPTION LESS THAN 1 YEAR AFTER LAST PREGNANCY 	<ul style="list-style-type: none"> LACK OF SUPPORT PERSON INADEQUATE HOME FOR INFANT CARE UNPLANNED CESAREAN BIRTH LACK OF ACCESS TO CONTINUED HEALTH CARE LACK OF ACCESS TO EMERGENCY PERSONNEL OR EQUIPMENT

SOCIAL

FACTORS THAT CAUSE A PREGNANCY AS HIGH RISK

PREPREGNANCY	PREGNANCY	LABOR AND BIRTH
<ul style="list-style-type: none"> Visual or hearing challenges Pubic inadequacy or misshape Uterine incompetence, position or structure Secondary major illness (heart disease, dm, kidney disease, hypertension, chronic infection such as TB, hemiphilic, or blood disorder, malignancy) Poor geneticologic or obstetric history History of previous poor pregnancy outcome History of child with congenital anomalies Obesity and underweight History of inherited disorder Psykic inflammatory disease Potential of blood incompatibility Younger than age 18 years or older than 35 years Cigarette smoker Substance abuser 	<ul style="list-style-type: none"> Subject to trauma Fluid or electrolyte imbalance Intake of teratogen such as drugs Multiple gestation A bleeding disruption Poor placental formation or position Gestational dm Nutritional deficiency of iron, folic acid, or protein Poor weight gain Pregnancy induced hypertension Infection Amniotic fluid abnormality Post maturity 	<ul style="list-style-type: none"> Hemorrhage Infection Fluid and electrolyte imbalance Dysbriccia Precipitous birth Lacerations of cervix or vagina Cephalopelvic disproportion Internal fetal monitoring Retained placenta

PHYSICAL

PRE-GESTATIONAL CONDITIONS AFFECTING OUTCOMES

1. Cardiac disease
2. diabetes mellitus
3. thyroid problems
4. asthma
5. obesity

RHEUMATIC HEART DISEASE (RHD)

- ⚡ bacteria called **streptococcus**
- ⚡ permanent damage to heart valves
- ⚡ begins with strep throat
- ⚡ inflammatory → heart, joint, skin, or brain
- ⚡ heart work harder to pump blood.
- ⚡ **Physical Exam:** look 4 murmur or rub
- ⚡ **confestive heart failure:** damage is permanent/heart cannot pump out all of the blood

NURSING CARE FOR MOTHER WITH RHD

RHEUMATIC HEART DISEASE (RHD) (cont)

antenatal

Assessment

- ⚡ Get the bp in sitting or lying position + same position
- ⚡ Instruct to report coughing + Determine edema
- ⚡ undergo ECG, CXR(use lead apron), or 2D echo

Rest

- ⚡ client needs two rest periods
- 1. **FULLY RESTING** —not getting up
- 2. **FULL NIGHT'S SLEEP** —rest in left lateral recumbent position (prevent supine hypotensive syndrome)

NUTRITION

- ⚡ limit salt intakebut not severely restricted
- ⚡ iron supplement to help prevent anemia.

MEDICATION

- ⚡ **Digoxin** — check the heart rate below 60bpm/slow fetal heart rate
- ⚡ **Penicillin Antibiotic**—prevent recurrence of rheumatic fever
- ⚡ **prophylactic penicillin antibiotic** —protection from subacute bacterial endocarditis.

AVOIDANCE OF INFECTION

- ⚡ Avoid visiting
- ⚡ monthly screening
- ⚡ inform health personnel

LABOR AND BIRTH

- ⚡ Monitor fetal heart rate and uterine contractions
- ⚡ Assess a woman's blood pressure, pulse and respirations frequently.

POSTPARTUM

- ⚡ Antiembolic stockings and ambulation may needed
- ⚡ encourage uterine involution such as oxytocin (Pitocin)
- ⚡ Kegel exercises
- ⚡ stool softener

Pregnant Women With Cardiac Disease

Assessment

Ask for the history of:

- rheumatic fever
- heart lesion
- Dyspnea
- paroxysmal nocturnal dyspnea
- Orthopnea
- Hemoptysis
- Prophylaxis with long acting penicillin

Examination

What to expect during examination?

- Murmur
- Accentuated heart sound
- Arrythmia
- Central cyanosis
- Displaced apex belt

left side heart failure

- Gallop rhythm
- crepotations over lung bases
- pleural effusion

right side heart failure

- Congested neck vein,
- enlarged tender, liver, ascites
- edema lower limbs

Diagnostic Test

- **Chest x-ray** (cardiac enlargement, pulmonary congestion or pleural effusion)
- **Echo cardiography/2d echo** (cardiac structure and functions)
- **Electrocardiogram** (ECG)

Effects of Heart Disease on Pregnancy

- Abortion
- Intrauterine Growth Retardation
- still birth
- premature labor
- Intrauterine fetal demise

MANAGEMENT

- antenatal visit
- More rest
- Diet is directed
- avoid infection
- Hospitalization



Pregnant Women With Cardiac Disease (cont)

MEDICAL TREATMENT

- DIGOXIN**: indicated in *atrial fibrillation* to slow the ventricular response and in *acute heart failure* to increase myocardial contractility.
- DIURETICS**: used in an *acute and chronic heart failure* with potassium supplement in prolonged therapy.
- BETA-ADRENERGIC BLOCKERS**: as propranolol may be indicated for *arrhythmia* associated with ischemic heart disease.
- AMYNOPHYLLINE**: relieves *bronchospasm*
- HEPARIN**: is indicated in patients with *artificial valves or atrial fibrillation*
- MORPHINE 15mg IV**: is given to treat *acute pulmonary edema* by decreasing anxiety venous return
- ADMINISTRATION OF OXYGEN**

SURGICAL TREATMENT

- THERAPEUTIC ABORTION**: considered in class III and IV
- CARDIAC SURGERY**: alternative

CLASSIFICATION OF HEART DISEASE

HEART DISEASE is divided into *4 categories* based on criteria established by the *New York State Heart Association*.

LABOR AND DELIVERY

Class 1

- ⚡ No discomfort
- ⚡ EASY AND NOT A PROLONGED

Class 2

- ⚡ ordinary activity
- ⚡ EASY AND NOT A PROLONGED

Class 3

- ⚡ less than ordinary activity
- ⚡ complete bed rest
- ⚡ NO "TRIAL LABOR"
- ⚡ ELECTIVE CESAREAN SECTIO

CLASSIFICATION OF HEART DISEASE (cont)

Class 4

- ⚡ dyspnea at rest
- ⚡ usually advised to avoid pregnancy.
- ⚡ NO "TRIAL LABOR"
- ⚡ ELECTIVE CESAREAN SECTIO

POSTPARTUM

- ⚡ Observation for 48 hours
- ⚡ early ambulation is desirable to avoid thromboembolism
- ⚡ Breastfeeding is not allowed
- ⚡ ligation maybe advised