

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 ⚡ Pelvic inadequacy or misshape ⚡ Uterine incompetency, position or structure ⚡ Secondary major illness (heart disease, dm, kidney disease, hypertension, chronic infection such as TB, hemophilic 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 ⚡ Pelvic 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 ⚡ Myeloma ⚡ 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