I. **Labor and Delivery**

A. *Initiation of labor*

a. Changes in the estrogen-progesterone levels

1. Progesterone decreases

A. Hormone of pregnancy (Higher level during pregnancy - Higher then estrogen)

B. But decreases after Labor

2. Estrogen increases

A. Increases

b. Prostaglandin levels increases

1. Stimulate smooth muscle contractions
2. Start late in the pregnancy
3. Help with

A. Efface

B. Dilate

B. *Premonitory Sign of Labor*

a. *Cervical Changes*

1. Soften
2. Dilate
3. Effaced

b. *Lightening*

1. Dropping of Baby - lower portion
2. ***They can now breath easily - Away from diapraghm
3. 2 weeks before Term
4. They can breath now but - Increase Urinary Frequency

c. Increased Energy level "*NESTING*"

1. Gets busy

A. Cleaning the house

B. Getting equipment needed for baby

C. Prepare the Nest for the Egg

2. Happens 2-3 days before actual birth
3. Due to decrease in progesterone
4. Increase in Epinephrine

d. *Bloody Show*

1. Uterus starts to pass pink blood-tinge mucus

e. *Braxton Hicks Contraction*

1. Not effective
2. Doesn't cause descending of the baby
3. NOT Labor Contraction
4. Irregular uterine contraction

f. Increase Secretion - Vaginal

1. Due to Increase in estrogen

C. ***This is the reason why mother comes in all the time

a. Once a Week

Difference between True and False Labor

A. **True Labor**
   a. Becomes regular - stronger - longer
      1. As they progress they come closer together
   b. Contraction
      1. Intense when walking
   c. Pain -
      1. Starts - Lower Back ----> Radiating ----> Lower portion of the abdomen
   d. Cervix
      1. Softening and Effacing and Dilatation
   e. Blood Tinge discharge
      1. Passing of the mucus plug
   f. Spontaneous rupture of the membrane
   g. Presenting part begins to engage

B. **False Labor**
   a. Contraction -
      1. Stop when walking
   b. Pain
      1. Abdomen
      2. Above the umbilicus
   c. Cervix
      1. Soft but no significant changes
   d. Presenting part starts to engage

Stages and phases of Labor

A. **Divided into four stages:**
   a. Dilatation stage, expulsive stage, Placental stage, Restorative stage
      1. Dilatation stage
         A. Dilate - 10cm at less
      2. Expulsive stage
         A. Baby comes out
      3. Placental stage
         A. Placenta comes out
      4. Restorative stage
         A. Apprehensive about what happens - Watch carefully

B. **First Stage of Labor**
   a. Dilatation and Effacement of the cervix
   b. *Dilation*
      1. 0 -10 cm
   c. *Effacement*
      1. 0-100% effacement
   d. *Contraction*
      1. Regular
      2. Increases in
         A. frequency, duration, strength
   e. **Phases of the First Labor**
      1. **Latent Phase**
         A. *Cervix*
            a. *Dilate* -
               1. 0 - 3 cm
            b. *Effacement* -
               1. 0 - 40%
         B. *Contraction*
            a. Regular
            b. Duration
               1. 5 -10 minute
               2. Last 30 - 45 second - Contraction

2. **Active Phase**
    A. *Cervix*
        a. *Dilate* -
            1. 4 - 7 cm
        b. *Effacement* -
            1. 40 - 80%
    B. *Contraction*
        a. *Duration*
            1. 2 - 5 minute mñgq-5
            2. Last 45 - 60 second - Contraction
    C. *Fundus*
        a. Not Hard
    D. *Mood*
        a. Feeling of helplessness
3. **Transition Phase**
    A. *Cervix*
        a. *Dilate* -
            1. Complete @ 10 cm
        b. *Effacement* -
            1. Complete @ 100%
    B. *Contraction*
        a. *Duration*
            1. Every 2 minute
            2. Last 60 - 90 second - Contraction
    C. *Mood*
        a. Hostile - Significant other

C. **Second Stage of Labor**
a. **Expulsion Stage**
1. Begins with full dilatation of the Cervix -
    A. *Dilation* - 10 cm
    B. *Effacement* - 100%
2. Last till delivery of the baby
3. *Objective Sign*
    A. Cervix - Fully Dilated - Fully Effaced
    B. Sudden perspiration in the upper lips
    C. Vomitting
    D. Increasingly Restless
    E. Involuntarily bearing down

D. **Third Stage of Labor**
a. **Placental Stage**
1. Begins with birth of the baby
2. Ends with delivery of the placenta
b. This is the time when you check if the placenta is intact
c. *Shultz side*
1. Baby side - Smooth
2. Shiny side
d. *Duncon side*
1. Maternal Side - Endo
2. Rough side
3. Fleshy looking

E. **Fourth stage of Labor**
a. **Restorative**
1. Begins with expulsion of placenta
b. Starts 1-4 hours after delivery of the placenta
c. Important side
1. Because of hemorrhage - Lost of FLuid
2. Check for Gestational HTN
3. Temperature might go up a bit

Factors affecting the labor Process (**5 "P's"**)

A. **Passageway**
   a. "*Birth Canal*"
      1. Maternal pelvis
      2. Soft Tissue of the pelvis
      3. Pelvic floor
      4. Vagina
      5. Bone Pelvis
         A. Assess during the 1 Trimester
            a. Look up conjugate
         B. Ileum
         C. Ischium
         D. Pubis
         E. Sacral
         F. Separated by a brim
            a. From True pelvis
               1. Inlet Cavity and Outlet
      6. Introitus
         A. External opening of the vagina
B. **Passenger**
   a. Fetus
   b. Placenta
   c. Embryo
   d. Look up ATI - 129
C. **Powers**
   a. *Type*
      1. *Primary*
         A. Involuntary uterine contraction
            a. 1st Stage
               1. Dilate and Efface the cervix
            b. 2nd Stage
               1. Descent of the Fetus and Placenta
      2. *Secondary*
         A. Bearing down
            a. Increases intra-abdominal pressure
               1. Important in expulsion of the Fetus and Placenta
D. **Position**
   a. Affect adaptation to labor
      1. NSG - Help her
   b. Frequent Changes -- ****BETTER expulsion of Fetus****
      1. Improve Circulation
      2. Relieves Fatigue
      3. Increases Comfort
   c. Type of Delivery Position
      1. Squatting
      2. Side-Lying
E. **Psychological Response**
   a. How the women response to her whole experience in delivery
      1. Can impact delivery
         A. Was it a good delivery?
         B. No stress? or Stress?

Syllabus Page 13 - BIII

Congenital Anomolies

Covered in pediatric

Final - Intrapartum - Post-Partum - New - Born

Nursing Care During Labor and Birth

A. Stressful time - Family - Self
B. They need emotional support
    a. Even how many babies
    b. Even how young they are
    c. Don't look down

1. **General System Assessment**
    A. *Initial*
        a. Interview - Screening
        b. Check Lab finding
        c. Settled down in a bed
        d. After initial Assessment
    B. *2nd*
        a. VS
        b. IV - Might be started soon
            1. Rational - Don't know what will happen during the course of the labor
    C. *Culture*
        a. Respect any type of cultural - Tradition
        b. Might ask for Placenta
            1. Wrap it up - Give it to HER
        c. If dangerous -
            1. Do not
    D. *Physical* -
        a. *Check*
            1. Water ruptured - yes - no
                A. When did it happen?
                    a. If 24 hours or more - dangerous - Infection
                        1. Should have told her during pre-natal
                    b. *Nitrozine paper* - Test will determine
            2. Allergy
            3. *Leopold's Maneuvers*
                A. To get the position of the Fetus
                B. Determine number of Fetuses
                C. Determine presenting part
                D. Determine the Fetal lie and attitude
                E. Determine amount of Fetal part (Presenting Part) that has descended into the pelvis
                F. Where the PMI is - Fetal Heart Beat
            4. Fetal - IMPORTANT
                A. Fetal Heart
                    a. Rate - Pattern
                B. Fetal Monitor -
            5. Uterine Contraction

TEXTBOOK

Read 389-393 - Assessment

1. **Augmentation of Labor**
    A. Implemented in the management in hypo tonic uterine Contraction
        a. Not as intense as it should be
    B. <u>*Non-Invasive*</u>
        a. Empty the bladder
        b. Ambulation
        c. Position changes
        d. Relaxation
        e. Hydration
            1. Hydro therapy
                A. Augments Labor
        f. *** IF DOESNT WORK ***
    C. <u>*Invasive*</u>
        a. *Oxytocin* (*Mitocin*)
            1. Infusion
            2. *Adverse Reaction*
                A. If resting tone is - 20 mmHg
                B. If contraction last more than 90 second
                    a. Occur more frequently then every 2 minute
                C. May cause Rupture
            3. *Adverse Reaction* - Fetal
                A. *Non-reassuring Fetal HR*
                    a. Check baseline
                        1. Absent Variability
                        2. Late , Prolong Deceleration
                B. *Intervention*
                    a. D/C - Oxytocin infusion
                    b. Keep I.V line open - **Even when Oxytocin infusion is stop**
                    c. Oxygen by Face Mask
                        1. 8L/min
                    d. Notify Physician / Mid-Wife
                    e. Fetal Heart Rate - Monitor
                    f. Uterine Contraction / activity - Monitored
                        1. Uterine Monitor Machine
        b. Amniotomy
        c. Nipple Stimulation
            1. Increases the amount of Estrogen

HW:
Fetal Monitoring
Different Methods of Fetal Monitoring? - Normal Baseline
Fetal Heart Rate?
Fetal Tachycardia Rate?
Causes:
Profound anemia in the mother
Early Fetal Hypoxia
Fetal Anemia
Maternal Hypothyroidism
Amnioitis
Certain Drugs - Ritodrine , Terbutaline , Atropine
Fetal Bradycardia Rate?
Causes
Fetal Hypoxia
Maternal Hypotension
Prolong Umbilical Cord Compression
Fetal Arrhythmia
Abruptio Placentae
Uterine Rupture

Tuesday

- Pre-Term Labor
- Dystocia
- Ineffective Response to labor ----> Birth
- Cord prolapse
- Causes Death in Baby - Cut of Blood Supplies
- Post-Partum
- Read 300+
    - Leopolds Maneuvers
- Common Area
    - Fetal Heart Rate is Fast - heard