

- Chapter 6

- Nursing Care of Mother and Infant During Labor and Birth
- Key Terms
- Acrocyanosis Amnioinfusion
- Amniotomy Crowning
- Dilate Doula
- Efface Fetal bradycardia
- Fetal tachycardia Fontanelle
- Molding Nucal cord
- Station Sutures
- Cultural Influences on Birth Practices
- Role of woman in labor and delivery
 - Cultural preferences require flexibility
- Role of father/partner in labor and delivery
 - May be driven by cultural practices
- Settings for Childbirth
- Hospitals
 - Advantages
 - Disadvantages
- Freestanding birth centers
 - Advantages
 - Disadvantages
- Home

- Advantages
- Disadvantages
- Components of the Birth Process
- The Four “Ps”
 - Powers
 - Passage
 - Passenger
 - Psyche
- Factors that Influence the Progress of Labor
- Preparation
- Position
- Professional
- Place
- Procedures
- People
- Uterine Contractions
- Effect of contractions on the cervix
 - Efface
 - Dilate
- Phase of contractions

— Increment

— Peak

— Decrement

● Frequency

● Duration

● Intensity

— Mild

— Moderate

— Firm

● Maternal pushing

● Cervical Effacement and Dilation

● Contraction Cycle

● Nursing Tip

● Provide emotional support to the laboring woman so she is less anxious and fearful

● Excessive anxiety or fear can cause greater pain, inhibit the progress of labor, and reduce blood flow to the placenta and fetus

● The Passage

● Bony pelvis

— True

● Directly involved in childbirth

— Inlet

— Midpelvis

— Outlet

— False

- Flares
- Upper portion of pelvis

● Soft tissues

— If previous delivery, will yield more readily to contractions and pushing efforts

— May not yield as readily in primiparas or older women

● The Passenger—Fetal Skull

● The Passenger—Fetal Lie

● The Passenger—Presentation

● Classifications of Fetal Presentations and Positions

● Psyche

● Mental state can influence the course of labor

● The woman's cultural and individual values influence how she will cope with childbirth

● Normal Childbirth

● Signs of Impending Labor

● Braxton Hicks contractions

● Increased vaginal discharge

● Bloody show

● Rupture of the membranes

● Energy spurt

● Weight loss

- Mechanisms of Labor
- Descent
 - Station
- Engagement
- Flexion
- Internal rotation
- Extension
- External rotation
- Expulsion
- Birth Station
- Mechanisms of Labor
- Admission to the Hospital or Birth Center
- When to Go to the Hospital or Birth Center
- Contractions
- Ruptured membranes
- Bleeding other than bloody show
- Decreased fetal movement
- Any other concern
- Admission Data Collection
- Three major assessments performed promptly on admission

- Fetal condition
- Maternal condition
- Impending birth
- Admission Procedures
- Permits/consents
- Laboratory tests
- Intravenous infusion
- Perineal prep
- Determining fetal position and presentation
- Comparison of False and True Labor
- False labor
 - Contractions irregular
 - Walking relieves contractions
 - Bloody show usually not present
 - No change in effacement/dilation of cervix
- True labor
 - Contractions gradually develop a regular pattern
 - Contractions become stronger and more effective with walking
 - Discomfort in lower back/abdomen
 - Bloody show often present
 - Progressive effacement and dilation of cervix
- Nursing Care Before Birth
- After admission to the labor unit, nursing care consists of

- Monitoring the fetus
- Monitoring the laboring woman
- Helping the woman cope with labor

- Monitoring the Fetus
- Fetal heart rate
- Intermittent auscultation
- Continuous electronic fetal monitoring
- Evaluating Fetal Heart Rate Patterns
- Baseline FHR
 - 110-160 BPM
- Fetal bradycardia
 - <110 BPM
- Fetal tachycardia
 - >160 BPM
- Baseline variability
- Moderate variability
- Marked variability
- Absent variability
- Accelerations
 - Early decelerations
 - Variable decelerations
 - Late decelerations
 - Prolonged decelerations
 - Recurrent decelerations
 - Intermittent decelerations

- Sinusoidal pattern
- Reassuring and Nonreassuring FHR and Uterine Activity Patterns
- Reassuring patterns
 - Stable fetal heart rate (FHR)
 - Moderate variability
 - Accelerations
 - Uterine contraction frequency greater than every 2 minutes; duration less than 90 seconds; relaxation interval of at least 60 seconds
- Nonreassuring patterns
 - Tachycardia
 - Bradycardia
 - Decreased or absent variability; little fluctuation in rate
 - Late decelerations
 - Variable decelerations
- Late Decelerations
- Monitoring the Woman
- Vital signs
- Contractions
- Progress of labor
- Intake and output
- Response to labor
- Six Lamaze Institute Basic Practices for Maternity Care
- Labor should begin on its own
- Woman should have freedom of movement

- Woman should have a birth support person or doula
- No routine interventions should be performed
- Woman should be in non-supine positions
- Woman should not be separated from infant
- Helping the Woman Cope with Labor
- Labor support
- Teaching
- Providing encouragement
- Supporting/teaching the partner
 - Teach how labor pains affect the woman's behavior/attitude
 - How to adapt responses to the woman's behavior
 - What to expect in his/her own emotional responses
 - Effects of epidural analgesia
- Stages and Phases of Labor
- First stage—dilation and effacement (can last 4 to 6 hours)
- Second stage—expulsion of fetus (30 minutes to 2 hours)
- Third stage—expulsion of placenta (5 to 30 minutes)
- Fourth stage—recovery
- Vaginal Birth After Cesarean
- Main concern
- Uterine scar will rupture
- Can disrupt placental blood flow

- Lead to hemorrhage
- Woman may need more support than other laboring women
- Nurse provides empathy and support
- Nursing Responsibilities During Birth
- Preparing the delivery instruments and infant equipment
- Perineal scrub
- Administering medications
- Providing initial care to the infant
- Assessing Apgar score
- Assessing infant for obvious abnormalities
- Examining the placenta
- Identifying mother and infant
- Promoting parent-infant bonding
- Immediate Postpartum Period:
Third and Fourth Stages of Labor
- Third stage—expulsion of placenta
 - Schulze or Duncan's
- Fourth stage—nursing care includes
 - Identifying and preventing hemorrhage
 - Evaluating and intervening for pain
 - Observing bladder function and urine output
 - Evaluating recovery from anesthesia

- Providing initial care to the newborn infant
- Promoting bonding and attachment between the infant and family
- Nursing Care Immediately After Birth
- Care of the mother
 - Observing for hemorrhage
 - Vital signs
 - Skin color
 - Location and firmness of uterine fundus
 - Lochia
 - Pain
 - Promoting comfort
 - Keep warm and dry
 - Ice to perineum to help reduce swelling and bruising
- Nursing Care Immediately After Birth (*cont.*)
- Care of the infant
 - Phase 1
 - From birth to 1 hour (usually in delivery room)
 - Phase 2
 - From 1 to 3 hours (usually in transition nursery or postpartum unit)
 - Phase 3
 - From 2 to 12 hours (usually in postpartum unit if rooming-in with the mother)
- Phase 1: Care of the Newborn
- Initial care includes

- Maintaining thermoregulation
- Maintaining cardiorespiratory function
- Observing for urination and/or passage of meconium
- Identifying the mother, father, and newborn
- Performing a brief assessment for major anomalies
- Encouraging bonding/breastfeeding

- Care of the Newborn
- Apgar Scoring
- Heart rate
- Respiratory effort
- Muscle tone
- Reflex response to suction or gentle stimulation on the soles of the feet
- Skin color
- Administering Medications to the Newborn
- Eye care
- Vitamin K (AquaMEPHYTON)
- Observe for Major Anomalies
- Head trauma from delivery
- Symmetry and equality of extremities
 - Are they of equal length?
 - Do they move with same vigor on both sides?

- Assess digits of hands and feet
 - Any evidence of webbing or abnormal number of digits
- Umbilical Cord Blood Banking
- This type of blood is capable of regenerating stem cells that are able to replace diseased cells
- Informed consent is essential
- Collect blood after cord has been clamped
- Blood must be transported within 48 hours of collection to blood banking facility