OB EXAM 3 COMPREHENSIVE STUDY GUIDE

Complete Core Review: Chapters 21–26, 3.1–3.4, 5, 9, 6–8 | Obstetrical & Gynecological Nursing

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Chapter 21: Postpartum Complications

1. Postpartum Infections

Postpartum infections occur from birth up to 6 weeks (or up to 1 year) postpartum. Defined as a temperature of 38.0°C (100.4°F) or higher on any 2 consecutive days during the first 10 days postpartum (excluding the first 24 hours). Common general signs include fever, tachycardia, chills, lethargy, pelvic pain, and purulent discharge.

- **Endometritis:** Infection of the uterine lining, most commonly occurring after cesarean birth, chorioamnionitis, or prolonged rupture of membranes (PROM >24 hours). Symptoms: uterine tenderness/pain during palpation, foul-smelling lochia, fever, chills, and lethargy. Nursing Care: Administer IV broad-spectrum antibiotics (e.g., clindamycin + gentamicin or ampicillin), monitor lochia, assess fundal tone, promote hydration, and monitor for signs of pelvic sepsis.
- **Mastitis:** Infection/inflammation of breast tissue, typically unilateral, occurring during lactational stasis or through nipple cracks/fissures caused by poor latch. Symptoms: localized hard, red, warm, intensely painful breast area, flu-like symptoms, high fever, and chills. Nursing Care: Continue frequent breastfeeding or pumping every 2–3 hours to clear stasis (milk is safe for infant), apply warm compresses before feeding and cold packs after, administer antibiotics (e.g., dicloxacillin/cephalexin), take NSAIDs for pain, and ensure proper latch mechanics.
- **Wound Infections:** Infections affecting surgical incisions (C-section) or perineal lacerations/episiotomies. Evaluated using REEDA (Redness, Edema, Ecchymosis, Discharge [purulent], Approximation). Nursing Care: Maintain clean/dry wound site, sitz baths for perineal wounds, antibiotic administration, hand hygiene education, and wound debridement/packing if incisional abscess forms.
- **Postpartum Urinary Tract Infections (UTIs):** Risk heightened by intrapartum urinary catheterization, birth trauma, and regional anesthesia. Symptoms: dysuria, urgency, frequency, suprapubic pain, hematuria. Pyelonephritis adds high fever, severe chills, and Costovertebral Angle (CVA) tenderness. Treatment: oral or IV antibiotics, continuous urine output monitoring, and encouraging fluid intake (>3 L/day).
- **Thrush (Candida Infection):** Fungal infection affecting nipples/areola and infant's oral mucosa. Symptoms: severe, deep shooting/burning nipple pain during or after feeds, pink, shiny, or flaking nipples. Nursing Care: Simultaneous antifungal treatment for parent (topical nystatin or miconazole) and infant (oral nystatin suspension) to prevent cross-reinfection.

2. Postpartum Hemorrhage (PPH)

ACOG defines PPH as cumulative blood loss ≥ 1,000 mL OR blood loss accompanied by signs or symptoms of hypovolemia within 24 hours of birth regardless of delivery route. Clinical intervention is initiated promptly if blood loss exceeds 500 mL following vaginal delivery.

- **Early (Primary) PPH:** Occurs within the first 24 hours post-delivery. Most commonly caused by uterine atony (70% of cases).
- **Late (Secondary) PPH:** Occurs from 24 hours up to 12 weeks postpartum. Most commonly caused by retained placental fragments or uterine subinvolution.

The 4 T's of PPH Etiology

- **Tone (Uterine Atony - 70%):** Failure of the uterine muscle to contract and compress spiral arteries. Risk factors: uterine overdistension (macrosomia, twins, polyhydramnios), prolonged or precipitous labor, high parity, oxytocin induction, chorioamnionitis, full bladder, and magnesium sulfate administration.
- **Trauma:** Lacerations of cervix, vagina, or perineum; pelvic hematomas; uterine rupture; or uterine inversion. Suspected when bright red, continuous bleeding occurs despite a firm, contracted uterus.
- **Tissue:** Retained placental tissue, membranes, or blood clots preventing full uterine contraction.
- **Thrombin:** Coagulopathies preventing normal clot formation (e.g., DIC, von Willebrand disease, idiopathic thrombocytopenic purpura).

CMQCC Policy, QBL & Maternal Sepsis Screening

- **Quantitative Blood Loss (QBL):** Mandatory objective measurement replacing subjective Estimated Blood Loss (EBL). Involves weighing all blood-soaked materials (1 gram = 1 mL) and subtracting dry weights, combined with direct volumetric measurement in calibrated under-buttocks drapes.
- **CMQCC PPH Staging:** Stage 0 (Normal: <500 mL vag / <1000 mL C-section); Stage 1 (Blood loss >500 mL vag / >1000 mL C-section or vital sign change >15%): Activate protocol, fundal massage, IV oxytocin, Methergine/TXA; Stage 2 (Continued bleeding up to 1500 mL): Mobilize team, second-line uterotonics, Bakri balloon, blood products; Stage 3 (Blood loss >1500 mL or unstable vitals): Massive transfusion protocol, surgical intervention.
- **CMQCC Maternal Sepsis Screening:** Positive screen requires 2 of 4 criteria: Temp <36.0°C or ≥38.0°C; HR >110 bpm; RR >24/min; WBC >15,000, <4,000, or >10% bands. Requires immediate lactate check, blood cultures, and broad-spectrum IV antibiotics within 1 hour.

Pharmacological Management of PPH (Uterotonics & Hemostatics)

Medication	Dose / Route	Contraindications	Nursing Considerations
Oxytocin (Pitocin)	10–40 units in 1000 mL IV fluid OR 10 units IM	None for postpartum hemorrhage	First-line agent. Continuous IV infusion; do not give IV push bolus.
Methylergonovine (Methergine)	0.2 mg IM q2–4h (or PO)	HYPERTENSION, Preeclampsia, CAD	Check BP prior to administration. Do NOT give if BP > 140/90 mmHg.
Carboprost (Hemabate)	250 mcg IM or intramyometrial q15–90 min (max 8 doses)	ASTHMA, Active hepatic/cardiac disease	Causes severe diarrhea, nausea, fever, and bronchospasm. Give antiemetics/antidiarrheals.
Misoprostol (Cytotec)	800–1000 mcg PR (rectally) single dose	History of allergy to prostaglandins	Rapid onset. Causes transient shivering, fever, and abdominal cramping.
Tranexamic Acid (TXA)	1 gram IV in 100 mL over 10 min (within 3 hrs of	Active thromboembolic disease	Antifibrinolytic hemostatic agent. Second dose given if

	birth)	bleeding continues after 30 min.

HIGH-YIELD NCLEX NOTE: POSTPARTUM HEMORRHAGE FIRST-LINE ACTION
When PPH is recognized, the nurse's immediate priority is continuous bimanual fundal massage until the uterus contracts. Simultaneously call for help, assess/empty the bladder via straight catheterization, administer rapid IV fluids with Oxytocin, and record QBL!

3. Breastfeeding Difficulties & LATCH Assessment

- **Ineffective Latch:** Grasping only the nipple tip causes nipple destruction, severe trauma, cracked/bleeding nipples, and ineffective milk transfer leading to poor infant weight gain. Corrected by aligning infant nose-to-nipple, waiting for a wide open mouth, and drawing a deep mouthful of areola.
- **Engorgement:** Swollen, painful, hard breast tissue occurring days 3–5 as milk transitions. Interventions: Frequent feeds (every 2–3 hours), warm showers/compresses before feeding to induce letdown, cold compresses or cold cabbage leaves after feeds to diminish edema, and oral analgesics.
- **LATCH Tool Evaluation:** Systematic assessment scored 0–2 across 5 criteria (Max score 10):
- • **L (Latch):** 0 = sleepy/no latch; 1 = repeated attempts, holds nipple; 2 = grasps areola, flanged lips, rhythmic sucking.
- • **A (Audible Swallowing):** 0 = none; 1 = a few with stimulation; 2 = spontaneous, frequent audible swallows.
- • **T (Type of Nipple):** 0 = inverted; 1 = flat; 2 = everted (everted after stimulation).
- • **C (Comfort of Breast/Nipple):** 0 = severe pain, cracks, bleeding; 1 = moderate pain, reddened; 2 = soft, intact, painless.
- • **H (Hold/Positioning):** 0 = full staff assistance required; 1 = minimal assistance; 2 = completely independent parent position.

4. Cesarean Birth Discomforts & Nursing Care

- **Incisional Pain:** Severe pain upon movement/coughing. Interventions: Administer multimodal analgesia (IV/PO opioids, NSAIDs like Ketorolac), teach incision splinting using a firm pillow over lower abdomen during movement/coughing, and utilize the football (clutch) position for breastfeeding to prevent abdominal pressure.
- **Gas Pain & Constipation:** Caused by surgical bowel manipulation, immobility, and anesthesia. Interventions: Early and frequent ambulation, avoiding cold carbonated drinks, administering simethicone (Gas-X), and giving stool softeners (docusate sodium) with plentiful fluid intake.
- **Recovery & Activity Restrictions:** No lifting anything heavier than the newborn (~10 lbs) for 6 weeks. No driving while taking prescription opioids. Maintain sequential compression devices (SCDs) and promote early ambulation to prevent Deep Vein Thrombosis (DVT).

5. Postpartum Mental Health & Substance Abuse

- **Postpartum Blues ('Baby Blues'):** Self-limiting mood disturbance affecting up to 80% of postpartum individuals. Onset: days 2–3 postpartum, resolves spontaneously within 2 weeks without treatment. Symptoms: emotional lability, weeping spells, anxiety, fatigue, and irritability.
- **Postpartum Depression (PPD):** Moderate-to-severe clinical depression affecting 10–15% of birthing individuals. Onset: within first 4 weeks up to 1 year postpartum. Lasts longer than 2 weeks. Symptoms: persistent sadness, intense panic/anxiety, worthlessness, inability to care for infant, lack of bonding. Screening: Edinburgh Postnatal Depression Scale (EPDS) (score >10 requires evaluation). Treatment: Psychotherapy, SSRIs (Sertraline), and zuranolone/brexanolone.
- **Postpartum Psychosis (PPP):** Medical psychiatric emergency (0.1–0.2% of births). Rapid onset of visual/auditory hallucinations, delusions (e.g., infant is possessed), extreme paranoia, and mood swings. High risk of suicide or infanticide. Requires immediate inpatient hospitalization, antipsychotics, and strict supervision.
- **Substance Abuse & NAS:** Intrapartum substance use (cocaine, opioids, alcohol) increases risk for placental abruption, IUGR, preterm labor, and Neonatal Abstinence Syndrome (NAS). Nursing role: nonjudgmental trauma-informed screening, social work consult, and referral to maternal mental health resources.

Chapter 22: Immediate Care of the Newborn

1. APGAR Scoring System

Evaluated at 1 minute and 5 minutes post-birth (and 10 minutes if 5-minute score is <7). Scores range from 0 to 10 across 5 categories.

Category	0 Points	1 Point	2 Points
A – Activity (Tone)	Flaccid, limp, no movement	Some flexion of extremities	Active motion, well-flexed
P – Pulse (Heart Rate)	Absent	Slow (< 100 bpm)	Normal (> 100 bpm)
G – Grimace (Reflex)	No response to stimulation	Grimace / minor facial motion	Vigorous cry, cough, sneeze
A – Appearance (Color)	Pale, blue, or central cyanosis	Pink body, blue hands/feet (Acrocyanosis)	Completely pink body & extremities
R – Respiration (Effort)	Absent (Apneic)	Slow, irregular, weak cry	Good, vigorous cry

- **APGAR Interpretation:** 7–10 = Normal transition (routine care, warmth, skin-to-skin); 4–6 = Moderate depression (stimulation, blow-by oxygen, airway clearing, warmth); 0–3 = Severe distress (immediate full resuscitation, PPV, chest compressions).

2. Physiological Adaptations to Extrauterine Life

- **Cardiovascular Shunt Closures:** Triggered by umbilical cord clamping and first breath oxygenation:
- • **Ductus Venosus:** Bypassed liver in utero. Clamping cord reduces inferior vena cava flow; functionally closes within minutes; anatomically becomes ligamentum venosum.
- • **Foramen Ovale:** Intra-atrial valve shunting right-to-left in utero. First breath expands lungs → decreases pulmonary vascular resistance → increases left atrial pressure, forcing one-way valve closed against atrial septum.
- • **Ductus Arteriosus:** Shunted blood from pulmonary artery to aorta in utero. Rising arterial PaO2 and decreased placental prostaglandins cause muscle constriction; functionally closes within 15–24 hours.
- **Respiratory Initiation:** Driven by mechanical compression during vaginal squeeze, thermal cold exposure, chemical changes (transient hypoxia/hypercapnia), and tactile stimulation. Surfactant (lipoprotein secreted by Type II pneumocytes) reduces surface tension to prevent end-expiratory alveolar collapse. Normal RR: 30–60 breaths/min. Periodic breathing (<20s pauses) is normal; true apnea (≥20s pause with bradycardia) is pathologic.
- **Behavioral Periods of Reactivity:** 1) First Period of Reactivity (0–30 min): Newborn alert, active, vigorous sucking reflex (ideal time for initial breastfeeding). 2) Period of Decreased Responsiveness (30 min–2 hrs): Sleep state, quiet, vitals normalize. 3) Second Period of Reactivity (2–8 hrs): Re-awakening, alert, passage of meconium, mucus clearing.

3. Thermoregulation & Cold Stress Management

Newborns are homeothermic, requiring a Neutral Thermal Environment (NTE) (axillary temp 36.5°C–37.5°C / 97.7°F–99.5°F) to minimize oxygen and metabolic consumption.

The 4 Mechanisms of Heat Loss

- **Evaporation:** Loss of heat when liquid turns to vapor. (e.g., wet amniotic fluid at birth, bathing). Prevention: Dry thoroughly immediately at birth, remove wet linens, cover head with warm hat.
- **Conduction:** Heat transfer via direct physical contact with cooler cold objects. (e.g., cold scale, cold hands, unheated exam table). Prevention: Place warm blanket on scales, prewarm radiant warmers, skin-to-skin contact.
- **Convection:** Heat loss to surrounding cooler air currents. (e.g., drafts from open windows, AC vents, ceiling fans). Prevention: Keep delivery room warm (≥25°C/77°F), avoid drafts, keep swaddled.
- **Radiation:** Heat transfer to cooler solid surfaces NOT in direct contact. (e.g., cold exterior wall or window nearby). Prevention: Keep cribs away from outside cold walls and windows.

Nonshivering Thermogenesis & Cold Stress Cascade

- **Nonshivering Thermogenesis (NST):** Newborns cannot shiver. Cold exposure triggers sympathetic catecholamines to metabolize Brown Adipose Tissue (Brown Fat) located in interscapular, neck, axillae, and renal regions.
- **Cold Stress Pathophysiological Cascade:** Cold Exposure → Increased Metabolic Rate → Rapid Glycogen Depletion → HYPOGLYCEMIA → Increased O2 Consumption → HYPOXIA → Decreased Surfactant Production → Respiratory Distress & Pulmonary Vasoconstriction → METABOLIC ACIDOSIS.

Chapter 23: Newborn Assessment

1. Physical Assessment Norms & Red Flags

- **Vital Signs Norms:** Heart Rate: 110–160 bpm (100 in deep sleep, 180 crying); Respirations: 30–60 breaths/min; Temperature: 36.5°C–37.5°C (97.7°F–99.5°F) axillary; BP: 60–80 / 40–50 mmHg.
- **Respiratory Distress Red Flags:** Tachypnea (>60/min), nasal flaring, intercostal/subcostal retractions, grunting on expiration, central cyanosis (blue lips/tongue).

2. Head Trauma Differentiation

Condition	Anatomical Location	Crosses Suture Lines?	Clinical Significance & Risks
Molding	Cranial bone overlap	N/A	Normal shaping to fit birth canal; resolves in 24–48 hours.
Caput Succedaneum	Edema of soft scalp tissue	YES (Crosses sutures)	Present at birth; soft/edematous; resolves spontaneously in 3–4 days without treatment.
Cephalhematoma	Subperiosteal blood accumulation	NO (Bound by suture lines)	Appears hours after birth; firm; risk of hyperbilirubinemia/jaundice as RBCs breakdown.
Subgaleal Hemorrhage	Bleeding in subgaleal aponeurosis	YES (Crosses sutures & neck)	MEDICAL EMERGENCY! Massive blood loss into scalp; progressive pallor, tachycardia, hypovolemic shock.

3. Primitive Newborn Reflexes

- **Moro (Startle):** Sudden drop or loud noise causes extension and abduction of arms with hands forming a 'C', followed by flexion/adduction. Disappears at 4–6 months.
- **Rooting & Sucking:** Stroking cheek causes infant to turn head toward stimulus and open mouth. Sucking triggered when object touches palate.
- **Palmar & Plantar Grasp:** Placing finger in palm/sole causes digits to curl downward and grasp firmly.
- **Babinski Reflex:** Stroking lateral sole from heel upward across ball causes dorsiflexion of big toe and fanning of all other toes. (NORMAL in newborn up to 12–24 months; pathologic in adults).
- **Tonic Neck ('Fencer'):** Turning head to one side causes arm/leg on that side to extend while opposite limbs flex. Disappears at 3–4 months.

- **Stepping / Walking:** Holding infant upright with feet touching flat surface causes stepping motions. Disappears at 3–4 weeks.

4. Gestational Age Assessment & Screenings

- **New Ballard Score:** Assesses gestational age based on 6 Neuromuscular maturity indicators (posture, square window, arm recoil, popliteal angle, scarf sign, heel-to-ear) and 6 Physical maturity indicators (skin, lanugo, plantar surface creases, breast tissue, eye/ear stiffness, genitalia).
- **Classifications:** AGA (Appropriate for Gestational Age: 10th–90th percentile); SGA (Small for Gestational Age: <10th percentile); LGA (Large for Gestational Age: >90th percentile).
- **Mandatory Newborn Screenings:** 1) Universal Metabolic Screen (PKU, hypothyroidism, sickle cell - heel stick after 24 hrs of protein feeds); 2) Critical Congenital Heart Disease (CCHD) pulse oximetry screen (right hand & foot check at >24 hrs; pass = >95% and <3% difference); 3) Universal Hearing Screen (AABR/OAE prior to discharge).

Chapter 24: Care of the Typical Newborn

1. Safety, Care & Immunizations

- **Car Seat Safety:** Rear-facing car seat in back seat until age 2. Retainer clip at axillary (armpit) level. 45-degree angle to prevent airway obstruction.
- **Safe Sleep & SIDS Prevention:** ABC Rule: **A**lone, on my **B**ack, in a warm **C**rib. Firm mattress, fitted sheet, no pillows, stuffed animals, or loose blankets/bumpers. Avoid co-sleeping.
- **Hepatitis B Immunization:** First dose administered IM in vastus lateralis prior to discharge. (If mother is HBsAg positive, give Hep B Vaccine AND Hepatitis B Immune Globulin [HBIG] within 12 hours of birth at separate sites).

2. Cord Care & Circumcision Management

- **Umbilical Cord Care:** Keep clean, dry, and open to air. Fold diaper down below cord stump to prevent urine contamination. Cord separates in 10–14 days. Monitor for omphalitis (foul odor, purulent drainage, redness).
- **Circumcision Care (Gomco/Mogen vs. Plastibell):** Gomco/Mogen clamp requires petroleum jelly gauze applied to glans with every diaper change for 3–5 days to prevent diaper sticking. Plastibell device does NOT use petroleum jelly (plastic ring falls off in 5–8 days). Normal finding: yellow exudate/granulation tissue forms on glans by day 2 (do NOT wash or scrape off!). Monitor for first void within 12–24 hours and active bleeding.

3. Infant Feeding, Jaundice & Hypoglycemia

- **Breastmilk Phases:** Colostrum ('liquid gold' - day 1–3: high protein, antibody/IgA rich, laxative effect); Transitional milk (days 3–5); Mature milk (Foremilk: watery, quenches thirst; Hindmilk: fat-rich, promotes weight gain).
- **Voiding & Stooling Norms:** Day 1: 1 wet / 1 meconium stool; Day 2: 2 wet / 2 transitional stools; Day 3: 3 wet / 3 stools; Day 4+: 6–8 wet diapers / 3–4 yellow, seedy breastmilk stools per 24 hours.

- **Physiologic vs. Pathologic Jaundice:** Physiologic Jaundice: Appears AFTER 24 hours post-birth (peaks day 3–5), benign bilirubin elevation from immature fetal liver. Pathologic Jaundice: Appears WITHIN FIRST 24 hours or total bilirubin rises >5 mg/dL/day or >15 mg/dL total (caused by Rh/ABO incompatibility or hemolysis). Phototherapy Care: Eye shields on, diaper only, monitor temp q2–4h, promote hydration, unmask only for feeding.
- **Hypoglycemia & Infant of Diabetic Mother (IDM):** Blood glucose threshold < 40–45 mg/dL. Signs: jitteriness, tremors, lethargy, poor feeding, high-pitched cry, hypothermia, apnea. Interventions: Immediate formula or breastmilk feeding; recheck glucose 30–60 min post-feed; IV dextrose 10% if refractory.

Chapter 25: Care of the Newborn at Risk

1. Birth Trauma & Complications

- **Clavicle Fracture:** Most common birth injury following shoulder dystocia. Signs: crepitus upon palpation, localized swelling, asymmetric Moro reflex, crying upon movement of affected arm. Management: gentle handling, immobilize arm against chest.
- **Brachial Plexus Palsy (Erb-Duchenne):** Paralysis of upper arm nerves (C5–C6) caused by lateral traction on head during delivery. Sign: 'Waiter's tip' position (arm adducted, internally rotated, wrist flexed).
- **Facial Nerve Palsy:** Facial nerve compression from forceps or pressure on sacral promontory. Sign: asymmetry when crying (unaffected side moves, affected side flat). Resolves in days to weeks.

2. Prematurity, RDS & Surfactant

- **Respiratory Distress Syndrome (RDS):** Caused by surfactant deficiency in premature infants (<34 weeks). Leads to alveolar collapse, decreased lung compliance, and atelectasis. Treatment: Exogenous surfactant instilled via Endotracheal Tube (ETT), CPAP/mechanical ventilation. Risks: Bronchopulmonary Dysplasia (BPD) from prolonged O2 therapy.
- **Neonatal Resuscitation Program (NRP) Flowchart:** 1) Birth -> Term? Tone? Breathing? -> If yes, skin-to-skin. If NO: Warm, dry, stimulate, position airway. 2) If HR < 100 or apneic/gasping -> Start Positive Pressure Ventilation (PPV) with room air (21% O2). 3) Re-evaluate after 30s PPV: If HR < 60 bpm -> Start chest compressions (3:1 ratio with 100% O2) and advance airway. 4) If HR remains < 60 bpm -> Administer IV Epinephrine.

3. Neonatal Abstinence Syndrome (NAS)

- **Etiology & Symptoms:** Drug withdrawal resulting from maternal intrapartum opioid or substance use. Symptoms: high-pitched continuous cry, hypertonia, hyperreflexia, tremors, fever, sweating, nasal stuffing, sneezing, uncoordinated sucking, vomiting, diarrhea, excoriation.
- **Scoring & Nursing Management:** Scored using Finnegan NAS tool or Eat, Sleep, Console (ESC) model. Interventions: Swaddling, low-stimulation quiet room, small frequent high-calorie feedings, non-nutritive sucking, and pharmacological weaning (morphine/methadone) if scores remain high.

Chapter 26: Perinatal Bereavement

1. Principles of Perinatal Bereavement Care

- **Types of Loss:** Ectopic pregnancy, spontaneous abortion/miscarriage, stillbirth (intrapartum demise), and neonatal death.
- **Empathetic Nursing Communication:** Acknowledge the loss directly using the infant's name. Use active listening. Avoid cliché, unhelpful statements such as 'You can try again', 'It was God's plan', 'At least you didn't know them', or 'At least you have other children'.
- **Memory Making & Physical Care:** Provide parents with a memory box containing footprints/handprints, lock of hair, ID bands, tape measure, clothing, and high-quality photographs. Offer parents the opportunity to hold, bathe, dress, and spend uninterrupted time with their infant.
- **Staff Support & Debriefing:** Debriefing sessions for healthcare staff following difficult losses prevent secondary traumatic stress and burnout.

Chapters 3.1–3.4: Health Promotion & Well-Person Care

1. Preventive Screenings & Timing Across Lifespan

Screening Test	Recommended Timing / Age	Clinical Purpose & Guidelines
Cervical Pap Smear	Start age 21; q3yr (21–29); q5yr co-testing (30–65)	Detects cervical dysplasia/HPV. No Pap under age 21 regardless of sexual activity.
Screening Mammogram	Annual or biennial starting age 40–50 through 74	Early detection of breast cancer.
DEXA Scan (Bone Density)	Baseline at age 65 (younger if high risk)	Screens for Osteopenia / Osteoporosis (T-score ≤ -2.5).
Colonoscopy	Start age 45; repeat every 10 years	Colorectal cancer screening.
STI Screening	Annual Chlamydia/Gonorrhea <25 yrs; HIV once	Prevents Pelvic Inflammatory Disease (PID) and infertility.

2. Osteoporosis, Kegel Exercises & Leading Causes of Death

- **Leading Cause of Death in Women:** #1 Cardiovascular Disease (Heart Disease), followed by Cancer (Lung cancer is #1 killer; Breast cancer is #1 incidence).
- **Osteoporosis Prevention:** Weight-bearing exercises (walking, weight lifting), Calcium (1,200 mg/day) and Vitamin D (800–1,000 IU/day), smoking cessation, limiting alcohol/caffeine.
- **Kegel Exercises (Pelvic Floor Training):** Squeeze pelvic floor muscles for 3–5 seconds, relax for 3–5 seconds; 10 reps, 3x/day. Strengthens levator ani muscle to prevent Pelvic Organ Prolapse and Stress Urinary Incontinence.

Chapter 5: Family Planning & Contraception

1. Comprehensive Contraceptive Methods

- **Natural Family Planning (FABM):** Billings Cervical Mucus Method (fertile = clear, stretchy, slippery 'spinnbarkeit' mucus); Basal Body Temperature (BBT drop followed by 0.4°F–0.8°F rise post-ovulation due to progesterone).
- **Barrier Methods:** Condoms (male/female - ONLY method offering STI protection); Diaphragm/Cervical Cap (must leave in place 6 hours post-intercourse; requires refitting for ±10 lbs weight change or post-pregnancy).
- **Combined Hormonal Contraception (COCPs, Patch, Ring):** Contains Estrogen + Progestin (inhibits FSH/LH to prevent ovulation). CONTRAINDICATIONS: Age >35 AND smoker, history of Thromboembolism/VTE, Hypertension (>160/100), Migraine with Aura, or Breast Cancer.
- **Progestin-Only Pill ('Mini-Pill'):** Safe for breastfeeding women and those with estrogen contraindications. Requires strict daily administration at the exact same time (≥3 hour delay requires backup barrier method).
- **Depo-Provera (DMPA Injection):** Progestin IM injection q12 weeks. Side Effect: reversible loss of bone mineral density with prolonged use (>2 yrs). Encourage calcium/Vit D intake.
- **Long-Acting Reversible Contraception (LARC):** Mirena/Kyleena Levonorgestrel IUDs (3–8 yrs, thins endometrium); ParaGard Copper IUD (10–12 yrs, non-hormonal, acts as emergency contraceptive within 5 days, may increase heavy menses); Nexplanon Implant (3 yrs progestin rod).
- **Emergency Contraception:** Plan B One-Step (Levonorgestrel - OTC up to 72 hrs); Ella (Ulipristal acetate - rx up to 120 hrs); ParaGard Copper IUD insertion (most effective within 5 days).
- **Medication Abortion:** Mifepristone (blocks progesterone) followed 24–48 hours later by Misoprostol (causes uterine contraction/expulsion) up to 10–11 weeks gestation.

Chapter 9: Violence Against Women / IPV

1. Intimate Partner Violence (IPV) & Nursing Role

- **Walker's Cycle of Violence:** 1) Tension-Building Phase (minor friction, victim walks on eggshells); 2) Acute Battering Phase (uncontrolled release of severe physical/sexual violence); 3) Honeymoon Phase (abuser expresses remorse, promises change, loving gifts; cycle repeats with increasing severity).
- **Clinical Assessment Red Flags:** Inconsistent injury explanations, delayed treatment seeking, partner refuses to leave room or speaks for patient, frequent missed visits, chronic somatic complaints (headaches, pelvic pain).
- **Universal Nursing Action:** Screen ALL female patients individually in private without partner present. Develop a Safety Plan (emergency bag, key documents, cash, safe contact numbers, code word).
- **Sexual Assault Care (SANE):** Trauma-informed care, forensic evidence collection (rape kit), prophylactic STI antibiotics (Ceftriaxone + Doxycycline), emergency contraception, and psychological referral.

Chapter 6: Reproductive System Disorders

1. Functional Menstrual Disorders & Gynecologic Conditions

- **Dysmenorrhea:** Primary (prostaglandin-driven painful cramps without underlying pathology; treated with NSAIDs, heat, OCPs); Secondary (painful menses caused by pathology like endometriosis or fibroids).
- **Endometriosis:** Ectopic growth of endometrial tissue outside the uterine cavity (ovaries, pelvic peritoneum). Classic Triad: Dysmenorrhea, Dyspareunia (painful sex), and Infertility. Treatment: NSAIDs, GnRH agonists (Leuprolide), continuous OCPs, surgical ablation.
- **Polycystic Ovary Syndrome (PCOS):** Endocrine disorder defined by hyperandrogenism, ovulatory dysfunction (amenorrhea/oligomenorrhea), polycystic ovaries on ultrasound, insulin resistance, hirsutism, and obesity. Management: Weight loss, Metformin, OCPs, Spironolactone.
- **Perimenopause & Menopause:** Menopause = 12 consecutive months of amenorrhea (avg age 51). Hormone Replacement Therapy (HRT): Estrogen-only (for women who had a hysterectomy); Combined Estrogen-Progesterone (MANDATORY for women with intact uterus to prevent endometrial hyperplasia/cancer).

2. Structural Disorders & Neoplasms

- **Pelvic Organ Prolapse:** Cystocele (prolapse of bladder into anterior vaginal wall); Rectocele (prolapse of rectum into posterior vaginal wall); Uterine Prolapse. Interventions: Kegel exercises, vaginal pessary fitting, surgical repair (Anterior & Posterior A&P repair).
- **Fibroids (Leiomyomas):** Benign estrogen-dependent smooth muscle tumors of uterus. Symptoms: menorrhagia (heavy bleeding), pelvic pressure, dysmenorrhea. Treatment: Myomectomy, Uterine Artery Embolization (UAE), Hysterectomy.
- **Gynecologic Malignancies:** 1) Cervical Cancer (caused by high-risk HPV 16/18; screened via Pap smear); 2) Endometrial Cancer (Cardinal Sign: **Postmenopausal Vaginal Bleeding** - requires immediate endometrial biopsy!); 3) Ovarian Cancer ('Silent killer' - vague GI symptoms, abdominal bloating, pelvic fullness).

Chapter 7: Genitourinary Infections

1. Sexually Transmitted Infections (STIs)

Infection	Clinical Manifestations / Signs	Treatment & Nursing Considerations
Chlamydia (Bacterial)	Most common STI. Often asymptomatic; mucopurulent cervicitis, dysuria.	Doxycycline 100 mg PO BID x 7 days (or Azithromycin if pregnant). Treat partners!
Gonorrhea (Bacterial)	Purulent yellow-green vaginal discharge, dysuria, PID risk.	Ceftriaxone 500 mg IM single dose. Co-treat for Chlamydia.
Syphilis (Bacterial)	Primary: Painless chancre;	Penicillin G Benzathine 2.4 million

	Secondary: Rash on palms/soles, condyloma lata.	units IM single dose.
Genital Herpes (HSV - Viral)	Painful fluid-filled vesicles, burning, fever.	Acyclovir / Valacyclovir. Active lesions at labor = mandatory C-section!
HPV (Viral)	Genital warts (condyloma acuminata); cervical dysplasia.	Gardasil-9 vaccine prevention. Topical trichloroacetic acid or cryotherapy.

2. Vaginal Infections & UTIs

- **Bacterial Vaginosis (BV):** Overgrowth of anaerobes (*Gardnerella*). Symptoms: thin, white/grey discharge, amine 'fishy' odor. Diagnostic: positive Whiff test with 10% KOH, **Clue Cells** on wet mount. Treatment: Metronidazole (Flagyl) PO - educate patient to strictly avoid alcohol!
- **Vulvovaginal Candidiasis (VVC):** Fungal infection (*Candida albicans*). Symptoms: thick, white, 'cottage-cheese' discharge, intense vulvar pruritus and erythema. Treatment: Fluconazole PO or topical miconazole.
- **Trichomoniasis:** Protozoan STI (*Trichomonas vaginalis*). Symptoms: frothy, yellow-green malodorous discharge, vulvar irritation, **Strawberry Cervix** (petechiae). Treatment: Metronidazole PO for BOTH sexual partners.
- **TORCH Infections:** **T**oxoplasmosis (cat feces/raw meat), **O**ther (Syphilis, Varicella, Parvovirus B19), **R**ubella, **C**ytomegalovirus (CMV), **H**erpes Simplex (HSV). All cause severe fetal congenital anomalies or death.

Chapter 8: Breast Disorders

1. Benign Breast Conditions & Breast Cancer

- **Fibrocystic Breast Changes:** Benign, nodular, tender breast tissue, bilaterally. Symptoms fluctuate with menstrual cycle (worse in luteal phase). Management: supportive bra, reducing caffeine, NSAIDs.
- **Fibroadenoma:** Benign, solitary, firm, rubbery, mobile, non-tender breast mass in young women. Diagnosed via ultrasound/biopsy.
- **Breast Cancer Risk Factors:** Female sex, age >50, BRCA1/BRCA2 genetic mutations, early menarche (<12), late menopause (>55), nulliparity or first child after 30, prolonged postmenopausal hormone therapy, family history.

> **HIGH-YIELD NCLEX NOTE: POST-MASTECTOMY LYMPHEDEMA PREVENTION**
> NURSING SAFETY PRIORITY: On the arm on the side of a mastectomy with axillary node dissection: NEVER perform Blood Pressure measurements, IV insertions, venipunctures, or blood draws! Place a dedicated alert band on the affected arm. Elevate arm on pillow to promote drainage.