

1. Complementary, Alternative, and Integrative Therapies: Alternative Therapy for Benign Prostate Hypertrophy (Active Learning Template - System Disorder)
 - a. Alternative medicine refers to using a non-mainstreamed practice in place of conventional medicine
 - b. Complementary medicine refers to using a non-mainstreamed practice together with conventional medicine
 - c. Black cohosh acts as an estrogen substitute and treats manifestations of menopause
2. Safe Medication Administration and Error Reduction: Completing an Incident Report for a Medication Error (Active Learning Template - Basic Concept, RM Pharm RN 8.0 Chp 2 Safe Medication Administration and Error Reduction v2)
 - a. Complete an incident report within the time frame the facility specifies, usually 24 hr
 - b. Question the provider if the prescription is unclear or seems inappropriate for the client. Refuse to administer a medication if it seems unsafe, and notify the charge nurse or supervisor
 - c. Do not reference or include the incident report in the client's medical record.
3. Antibiotics Affecting Protein Synthesis: Planning Care for a Client Prescribed Erythromycin Lactobionate (Active Learning Template - Medication, RM Pharm RN 8.0 Chp 45 Antibiotics Affecting Protein Synthesis v2)
 - a. Antibiotics affecting protein synthesis are bacteriostatic and bactericidal.
 - b. Tetracyclines are broad-spectrum antibiotics that inhibit micro-organism growth by preventing protein synthesis.
 - c. Hormonal contraceptive effectiveness decreases with various antibiotics and therefore it is recommended clients use a back-up method.
4. Medications Affecting Coagulation: Teaching About Adverse Effects of Clopidogrel (Active Learning Template - Medication, RM Pharm RN 8.0 Chp 25 Medications Affecting Coagulation v2)
 - a. The goal of medications that alter coagulation is to increase circulation and perfusion.
 - b. Pharmaceutical agents that modify coagulation are used to prevent clot formation.

- c. Heparin prevents clotting by activating thrombin.
5. Dosage Calculation: Preparing Enoxaparin (Active Learning Template - Basic Concept)
 - a. Nurses are responsible for administering the correct amount of medication by calculating the precise amount of medication you give.
 - b. Nurses calculate IV flow rates for large-volume continuous IV infusions and intermittent IV bolus infusions using electric pumps.
 - c. Infusion pumps control an accurate rate of fluid infusion.
6. Airflow Disorders: Monitoring Effects of Prednisone (Active Learning Template - Medication, RM Pharm RN 8.0 Chp 17 Airflow Disorders v2)
 - a. Medication management usually addresses both inflammation and bronchoconstriction
 - b. Medications include bronchodilator agents (beta2-adrenergic agonists), methylxanthines, inhaled anticholinergics, and anti-inflammatory agents (glucocorticoids, mast cell stabilizers, and leukotriene modifiers)
 - c. Asthma is a chronic inflammatory disorder of the airways. It is an intermittent and reversible airflow obstruction that affects the bronchioles
7. Connective Tissue Disorders: Long-Term Adverse Effects of Glucocorticoids (Active Learning Template - Medication)
 - a. Gout (aka gouty arthritis) is a painful type of arthritis that is caused by elevated levels of uric acid, which can accumulate and cause localized inflammation in synovial areas
 - b. Rheumatoid arthritis (RA) is a chronic, progressive disorder with autoimmune and inflammatory components
 - c. Fibromyalgia is a syndrome characterized by muscle pain and fatigue
8. Endocrine Disorders: Identifying Need for Dosage Adjustment of Methimazole (Active Learning Template - Medication, RM Pharm RN 8.0 Chp 40 Endocrine Disorders v2)
 - a. The endocrine system is made up of glands that secrete hormones, which act on specific receptor sites
 - b. An endocrine disorder usually involves the over secretion or under secretion of hormones, or an altered response by the target area or receptor

- c. Thyroid hormones are used for the emergency treatment of myxedema coma (IV route), a severe deficiency of thyroid hormone. Also used for cretinism and simple goiter
9. Bipolar Disorders: Intervention for a Lithium Level (Active Learning Template - Medication)
 - a. Bipolar disorders are primarily managed with mood-stabilizing medications (lithium carbonate)
 - b. Atypical antipsychotics (olanzapine) can be useful in early treatment to promote sleep and to decrease anxiety and agitation
 - c. Anxiolytics (clonazepam, lorazepam) can be useful in treating acute mania and managing the psychomotor agitation often seen in mania
10. Medications Affecting Coagulation: Clarifying a Prescription With Provider (Active Learning Template - Basic Concept, RM Pharm RN 8.0 Chp 25 Medications Affecting Coagulation v2)
 - a. Do not expel the air bubble in the syringe unless adjustments must be made to the dose
 - b. Advise clients of childbearing age to postpone pregnancy, and to notify the provider if they become pregnant during warfarin therapy
 - c. Plan for frequent PT monitoring for clients who are prescribed medications that interact with warfarin
11. Medications Affecting Coagulation: Self-Administration of Enoxaparin (Active Learning Template - Medication, RM Pharm RN 8.0 Chp 25 Medications Affecting Coagulation v2)
 - a. Heparin prevents clotting by activating antithrombin, thus indirectly inactivating both thrombin and factor Xa
 - b. Administer protamine, which binds with heparin and forms a heparin-protamine complex that has no anticoagulant properties
 - c. Hemorrhage can occur if medication administration leads to high activated partial thromboplastin time
12. Vitamins and Minerals: Administration of Ferrous Sulfate Elixir (Active Learning Template - Medication)

- a. Vitamins and minerals have important roles in the body, including the production of red blood cells, building bones, making hormones, regulating body fluid volume, and supporting nerve cell function
 - b. Iron preparations provide iron needed for RBC development and oxygen transport to cells
 - c. Potassium is essential for conducting nerve impulses, maintaining electrical excitability of muscle, and regulation of acid/base balance
13. Individual Considerations of Medication Administration: Risk Factors for Adverse Reactions in Older Adult Clients (Active Learning Template - Growth and Development, RM Pharm RN 8.0 Chp 6 Individual Considerations of Medication Administration v2)
- a. Because the percentage of body fat an individual has can alter the distribution of a medication, basing dosages on body surface area can be a more precise method of regulating an individual's response to a medication
 - b. Medication concentration in the body increases due to the inability to metabolize or excrete a medication rapidly enough, resulting in a toxic medication effect
 - c. Emotional state and expectations can influence the effects of a medication
14. Opioid Agonists and Antagonists: Administering Pain Medication to a Client Who Has Moderate Pain (Active Learning Template - Basic Concept, RM Pharm RN 8.0 Chp 36 Opioid Agonists and Antagonists v2)
- a. An agonist attaches to a receptor and produces a response
 - b. An agonist-antagonist binds to one receptor, causing a response, and binds to another receptor, which prevents a response
 - c. An antagonist attaches to a receptor site and prevents a response
15. Safe Medication Administration and Error Reduction: Priority Action When Administering a Controlled Substance (Active Learning Template - Basic Concept, RM Pharm RN 8.0 Chp 2 Safe Medication Administration and Error Reduction v2)
- a. Nurses are responsible for having knowledge of federal, state (nurse practice act), and local laws, and facilities' policies that govern prescribing and dispensing medications; preparing and administering medications; and evaluating clients' responses to medications

- b. Each facility has written policies for medication prescriptions, including which providers can write, receive, and transcribe medication prescriptions
 - c. Nurses compile a list of each client's current medications, including all medications with their dosages and frequency
16. Vitamins and Minerals: Evaluating Effectiveness of Sodium Polystyrene Sulfonate (Active Learning Template - Medication)
- a. Severe hyperkalemia can require treatment (calcium salt, glucose and insulin, sodium bicarbonate, sodium polystyrene sulfonate, peritoneal dialysis, or hemodialysis)
 - b. If with folic acid deficiency, concurrently increase intake of food sources of folic acid (liver, green leafy vegetables, citrus fruits, and dried peas and beans)
 - c. Folic acid is essential in the production of DNA and erythropoiesis (RBC, WBC, and platelets)