

NURSING 101: FOUNDATIONS OF NURSING

UNIT II: THE CLINICAL UNIT – PART II - ADMINISTRATION OF MEDICATIONS:

CLINICAL OBJECTIVES

AT THE COMPLETION OF THIS UNIT, THE STUDENT:

1. Describes the pharmacodynamic and pharmacokinetic properties of medications.
2. Identifies various drug names and what each name represents.
3. Discuss legislation to control medications and nurse's legal responsibilities in drug administration.
4. Explains individual factors that influence medication actions.
5. Describes the necessary components of a medication order and differentiates between the types of medication orders.
6. Identifies the ten "rights" of medication administration.
7. Identifies the various routes for medication administration.
8. Discusses the use of the nursing process throughout medication administration.
9. Demonstrates knowledge of dosing equivalents to perform drug dosage calculations correctly.
10. Discusses the implications of herbal medication use on nursing care.
11. Identifies the purpose(s) and principles of IV therapy.
12. Discusses isotonic, hypotonic, and hypertonic IV solutions, and identifies appropriate uses for each.
13. Demonstrates knowledge of dosage calculation in determining IV flow rates.
14. Demonstrates understanding of correct procedures for initiating, maintaining and monitoring IV therapy.
15. Demonstrates understanding of assessment, prevention and treatment of IV therapy complications.
16. Describes appropriate, evidence-based resources, including websites, to reference current medication information.
17. Identifies evidence-based practice/best practice standards related to medication administration.
18. Exhibits accountability when administering medications in all healthcare settings.

CONTENT/ HOURS		TEACHING STRATEGIES	SUPPORTING ACTIVITIES	EVALUATION METHODS
III.	<ul style="list-style-type: none"> e. Barcode Scanning The Medication Order <ul style="list-style-type: none"> a. Communicating Medication Orders b. Components of a Medication Order c. Types of Medication Orders d. Medication Reconciliation e. Medication Dispensing Systems 	<p>Cooperative Learning: Components of Med Order/Matching</p>		Unit Exam Quiz Class Prep Clinical Evaluation Labs/ Competencies
IV.	<ul style="list-style-type: none"> Rights of Safe Medication Administration <ul style="list-style-type: none"> a. Ten Rights b. Look Alike/Sound Alike Medications c. Medication Errors 	<p>Visual based Learning: ATI Nurse Lucy Video, That Nursing Prof, Beebe Net: Look Alike/Sound Alike Meds</p>		
V.	<ul style="list-style-type: none"> Prac+Safe Introduction <ul style="list-style-type: none"> a. Orientation to Prac+Safe 	<p>Cooperative Learning: Med Rights Practice Prac+Safe</p>		
VI.	<ul style="list-style-type: none"> Using the Nursing Process to Prevent Med Errors <ul style="list-style-type: none"> a. Assessment b. Planning c. Implementation d. Evaluation 	<p>Game Based Learning: Safe Med Admin Review</p>		
VII.	<ul style="list-style-type: none"> ATI Medication Template <ul style="list-style-type: none"> a. Reference Sources b. Med Classification c. Med Purpose d. Complications e. Med Administration f. Contraindications/ Precautions g. Med Interactions h. Nursing Interventions i. Client Education j. Evaluation of Medication Effectiveness 	<p>Cooperative Learning: ATI Medication Templates</p>	<p>ATI Active Learning Templates: Medication</p>	
		<p>Visual Based Learning: Beebe Medication Color Coded Teaching Forms Demonstration</p>	<p>Clinical Experience</p> <p>Pre/ Post Conference</p>	
		<p>Game Based Learning: Kahoot!</p>		
VIII.	<ul style="list-style-type: none"> Dosage Calculations <ul style="list-style-type: none"> a. Measurement Systems b. Common Equivalents 		<p>Class Preparation: Equivalents Worksheet</p>	

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<ul style="list-style-type: none"> c. Converting Units of Measurement d. Rounding Guidelines, Zeroes and Decimal Points e. Dosage Calculations <ul style="list-style-type: none"> i. Ratio and Proportion Model ii. Desired Over Have iii. Dimensional Analysis f. Resources IX. Oral Medications <ul style="list-style-type: none"> a. Advantages/Disadvantages of Oral Route b. Rates of Absorption c. Forms of oral medications d. Nursing Process <ul style="list-style-type: none"> i. Preparation ii. Assessment iii. Implementation e. Clinical judgment scenarios f. Herbal therapies/Medical Marijuana X. Topical Medications <ul style="list-style-type: none"> a. Skin Preparation Procedure b. Ophthalmic Medication Procedure c. Otic Medication Procedure d. Nasal Medication Procedure e. Rectal Suppositories Procedure f. Vaginal Medication Procedure g. Inhaled Medication Procedure XI. Enteral Medications <ul style="list-style-type: none"> a. Assessment b. Preparation c. Procedure d. Clinical Judgment Scenario XII. Parenteral Medications <ul style="list-style-type: none"> a. Advantages/Disadvantages 	<p>Cooperative Learning: Prac+Safe Oral and Liquid calculations</p> <p>Cooperative Learning: In class oral medication activity</p> <p>Experiential Learning: Medication Escape Room</p> <p>Interactive Lecture: NGT med administration scenario</p> <p>Visual Based Learning:</p>	<p>Class Preparation: Prac+Safe Dosage Calculation Modules</p> <p>ATI: Safe Medication Dosage Modules</p>	<p>Unit Exam Quiz Class Prep Clinical Evaluation</p> <p>IM Competency</p>

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<ul style="list-style-type: none"> b. Older Adult Considerations c. Equipment <ul style="list-style-type: none"> i. Syringes ii. Needles d. Preventing Needlesticks e. Disposal f. Preparing Parenteral Meds <ul style="list-style-type: none"> i. Withdrawing medications <ul style="list-style-type: none"> 1. Vial 2. Ampule ii. Reconstitution g. Administration of Parenteral Meds <ul style="list-style-type: none"> i. Intradermal Injections ii. Subcutaneous Injections iii. Intramuscular Injections <ul style="list-style-type: none"> 1. Landmarks 2. Procedure h. Clinical Judgment Scenario <p>XIII. IV Therapy</p> <ul style="list-style-type: none"> a. Purpose and Principles of IV therapy b. Legal Implications c. Body Fluids and Electrolytes d. IV Solutions <ul style="list-style-type: none"> i. Isotonic ii. Hypertonic iii. Hypotonic e. Healthcare Provider's Orders f. IV Infusion Equipment <ul style="list-style-type: none"> i. Solutions ii. IV Catheters g. Venipuncture Sites h. PIVs i. PICCs j. Central Lines 	<p>Demonstration Videos</p> <p>Interactive Learning: In class demonstrations of procedures</p> <p>Cooperative Learning: IM injection case study</p> <p>Experiential Learning: IM Demonstration Stations</p> <p>Visual Based Learning: Isotonic, Hypotonic & Hypertonic Solutions Video</p> <p>Experiential Learning: IV assessment scenarios, Faculty facilitated IV skills stations/labs</p>	<p>Clinical Experience Pre/Post Conference</p> <p>ATI: Safe Medication Dosage Modules</p> <p>Class Preparation: Amoeba Sisters Video Worksheet</p>	<p>Labs</p> <p>Unit Exam, Quiz, Class Prep, Clinical Evaluation, IM Evaluation</p>

CONTENT/ HOURS	TEACHING STRATEGIES	SUPPORTING ACTIVITIES	EVALUATION METHODS
<ul style="list-style-type: none"> k. Primary Tubing l. Secondary Tubing m. IV Bag and Tubing Labels n. Calculating IV Flow Rates o. Calculating Manual Flow Rates p. Calculating Infusion Time q. Regulating and Monitoring of IV Infusions r. Initiating, Maintaining, and Monitoring IV Therapy <ul style="list-style-type: none"> i. Types of IV Med Administration ii. IV Med Considerations - CARDS <ul style="list-style-type: none"> 1. Compatibility 2. Amount 3. Rate of Administration 4. Dilution 5. Supplies, Site, Storage, Stability s. IV Procedures <ul style="list-style-type: none"> i. Devices to control infusion rate ii. IV setups iii. Priming IV Tubing iv. Loading and Programming a Secondary Infusion v. Activating Minibags vi. IV Piggybacks vii. Y Site Infusion viii. Tips and Tricks ix. Resources t. CARDS Practice Activities u. Monitoring and Maintaining IV site <ul style="list-style-type: none"> i. Maintaining Patency ii. Flushing a saline lock iii. Replacing IV Solution iv. Discontinuing PIV v. Beebe Healthcare Policies 	<p>Interactive Lecture: Calculating IV Flow Rates</p> <p>Problem-based Learning: IV Calculations Worksheet</p> <p>Problem-based Learning: Prac+Safe IV calculations</p> <p>Visual Based Learning: IV procedure demo videos/ Baxter Pump Demonstration Video</p>	<p>Clinical Experience Pre/Post Conference</p>	<p>Unit Exam Quiz Class Prep Clinical Evaluation IV Competency</p>

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<ul style="list-style-type: none"> vi. Documentation v. Complications of IV Therapy <ul style="list-style-type: none"> i. Infiltration/Extravasation ii. Phlebitis/ Thrombophlebitis iii. Fluid Overload iv. Cellulitis v. Air Embolus vi. Catheter Embolus vii. Documentation 	<p>Interactive Lecture: Review of article “Where Did This Patient’s IV Therapy Go Awry?”</p>		