

NRS 125
Student Lab
Manual

NRS 125

Week 1 Uncomplicated acute and chronic alterations in oxygenation

Week 2 Uncomplicated acute and chronic alterations in perfusion

Week 3 Uncomplicated acute and chronic alterations in the perioperative patient (**EXAM 1**)

Week 4 Uncomplicated acute and chronic alterations in immunity, infection, and inflammation

Week 5 Uncomplicated acute and chronic alterations in cellular regulation

Week 6 Uncomplicated acute and chronic alterations in metabolism (**EXAM 2**)

Week 7 Uncomplicated acute and chronic alterations in digestion and elimination

Week 8 Uncomplicated acute and chronic alterations in mobility

Week 9 Uncomplicated acute and chronic alterations in sensory perception, cognition, and intracranial regulation (**EXAM 3**)

Week 10 reproductive health antepartum

Week 11 reproductive health intrapartum

Week 12 reproductive health newborn care (**EXAM 4**)

Week 13 reproductive health high risk pregnancy

Week 14 reproductive health high risk newborn

Week 15 reproductive health involution, family planning, contraception (**EXAM 5**)

Week 16 Cumulative **final exam**

WEEK 1

OBJECTIVES:

Assess patients with uncomplicated acute and chronic alterations in oxygenation.

Analyze collected data as it pertains to uncomplicated acute and chronic alterations in oxygenation.

Use collected data to formulate a plan of care as it pertains to uncomplicated acute and chronic alterations in oxygenation.

Implement the plan of care in uncomplicated acute and chronic alterations in oxygenation.

Evaluate goals and therapeutic outcomes in uncomplicated acute and chronic alterations in oxygenation.

Theory:

Please review videos prior to class

COPD case study (To be done in class).

Hx: CAD, MI, HTN, COPD, Bronchitis, anxiety, ETOH daily, former smoker, lives with spouse, uses oxygen at home- 2liters via nasal cannula.

68 year old female presents to the emergency department with worsening shortness of breath. She is wheezing with diminished bases bilaterally. She has irregular respirations, conversing in short phrases, and is using accessory muscles to breathe. The patient states she went to bed feeling well but woke up feeling agitated and short of breath. She called 911. EMS treated her

with a nebulizer treatment Proventil and Atrovent and solumedrol 125mg IV. ETCO=255 initially now 75.

Once she arrived to the ER, her vital signs are 121/70, 117, 26-30, 97.6F, 88% on room air. Her Chest x ray showed bilateral pleural effusions. Her lab values are PT 14.2, INR 1.3, WBC 13.5 with 5 bands, platelets 514, glucose 310, BUN 10, Creatinine 1.0, Na+ 134, CO2 35, ck 24, ABG's: pH 7.290, pCO2 64, bicarb 29.9, blood & urine culture results pending, current weight is 58.97kg

Patient is admitted to the medical/surgical unit with the following orders:

D5NS with 20meq of KCl @ 75mL/hr

Zithromax 500mg IV qd

Rocephin 1gm IV once a day qd

Solumedrol 40mg IV q12h qd

Protonix 40mg po once a day qd

Lipitor 20mg po qd

ASA 81mg po qd

Toprol XL 25mg po qd

Pulmicort neb q12h qd

Celexa 20mg po qd

Ativan 1mg po qhs prn anxiety

Blood sugar checks every 6 hours with sliding scale coverage.

1. What is the significance for each of these medications to be ordered?
2. What would you expect this patient's next set of blood gas recording to be if the treatment is effective?
3. What treatment plan would you expect for COPD?
4. What are your priority nursing diagnoses this patient?

5. What are your priority nursing interventions for this patient?

Lab:

Objectives: Demonstrate suctioning a client with tracheostomy or endotracheal tube

Demonstrate collecting a sputum specimen

Demonstrate giving medications via inhalation

Demonstrate purse lip breathing

Please be prepared to demonstrate all prior skills learned in NRS 112.

These are the skills learned in NRS 112.

<i>General Assessment</i>
Measuring height
Measuring weight
Head to toe assessment

<i>Vital Signs</i>
Assessing body temperature
Assessing an apical pulse
Assessing peripheral pulses
Assessing respiration
Assessing blood pressure
Using a pulse oximeter

<i>Activities of Daily Living</i>
Changing an occupied bed
Providing morning and evening care
Providing special oral care for a client who is unconscious or debilitated
Bathing an adult or pediatric client
Changing gown for client with an IV
Providing perineal-genital care
Providing foot care
Removing, cleaning and inserting a hearing aid

Medication Administration
Preparing medications from ampules
Preparing medications from vials
Administering oral medications
Administering medications by enteral tube
Administering sublingual medications
Administering ophthalmic medications
Administering otic irrigation
Administering nasal medications
Administering topical medications
Applying a transdermal medications patch
Administering rectal medication
Administering intradermal injections
Administering subcutaneous injections
Administering subcutaneous anticoagulant injections
Administering intramuscular injection
Using the Z track method for IM injections

End of Life Care
Performing postmortem care

Elimination
Collecting a urine specimen
Obtaining stool specimens
Assisting with a bedpan
Assisting with a urinal
Assisting a client to the commode
Applying an external urinary device

Infection
Hand hygiene
Donning and removing clean gloves
Donning and removing isolation attire
Using a mask

Mobility
Performing passive range of motion exercises
Supporting a client's position in bed
Moving a client up in bed
Turning a client to the lateral or prone position in bed
Assisting a client to sit on side of bed
Transferring a client between bed and chair
Assisting a client to ambulate
Assisting a client to use a cane
Assisting a client to use a walker

Nutrition
Administering a tube feeding
Administering a gastrostomy or jejunostomy feeding
Providing continuous feeding via a small bore nasointestinal/jejunostomy tube

Oxygenation
Administering oxygen via nasal cannula, face mask or face tent

Safety
Applying a Mummy immobilizer

Tissue Integrity
Performing a dry dressing change
Preventing pressure ulcers (assessment and staging)
Applying a transparent film dressing
Irrigating a wound
Using alginates on wounds
Using a hydrocolloid dressing
Applying a transparent wound barrier

Once the skills from NRS 112 are reviewed, the skills for the current semester can be displayed.

SKILL 13.19: Providing Tracheostomy Care			
Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order and gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			
2. Prepared client and equipment. a. Assisted client to semi-Fowler or Fowler position to promote lung expansion. b. Suctioned tracheostomy tube, if needed. c. If suctioning was required, allowed client to rest and restore oxygenation. d. Opened tracheostomy kit or sterile basins. e. Established sterile field. f. Opened other sterile supplies as needed. g. Poured soaking solution and sterile normal saline into separate containers. h. Applied clean gloves. i. Removed oxygen source. j. Unlocked inner cannula and removed it by gently pulling it outward toward self in line with its curvature. Placed inner cannula in soaking solution. k. Removed soiled tracheostomy dressing. Placed soiled dressing in gloved hand and peeled glove off so that it turned inside out over dressing. Removed and discarded gloves and dressing. Performed hand hygiene.			
3. Cleaned inner cannula. a. Removed inner cannula from soaking solution. b. Cleaned lumen and entire inner cannula thoroughly using brush or pipe cleaners moistened with sterile normal saline. Inspected cannula for cleanliness. c. Rinsed inner cannula thoroughly in sterile normal			

<p>saline.</p> <p>d. After rinsing, gently tapped cannula against inside edge of sterile saline container. Used pipe cleaner folded in half to dry only inside of cannula.</p>			
<p>4. Replaced inner cannula and secured it in place.</p> <p>a. Inserted inner cannula by grasping outer flange and inserting cannula in direction of its curvature.</p> <p>b. Locked cannula in place by turning lock into position to secure flange of inner cannula to outer cannula.</p>			
<p>5. Cleaned incision site and tube flange.</p> <p>a. Used sterile applicators or gauze dressings moistened with normal saline and cleaned incision site.</p> <p>b. Used hydrogen peroxide mixed with sterile normal saline; (used a separate sterile container if this is necessary) to remove crusty secretions around the tracheostomy site. Did not use directly on the site.</p> <p>c. Cleaned flange of tube.</p> <p>d. Thoroughly dried client's skin and tube flanges with dry gauze squares.</p>			
<p>6. Applied sterile dressing.</p> <p>a. Used a commercially prepared tracheostomy dressing or opened and refolded a nonraveling 4 x 4 gauze dressing into a V shape.</p> <p>b. Placed dressing under flange of tracheostomy tube.</p> <p>c. Ensured that tracheostomy tube is securely supported while applying dressing.</p>			
<p>7. Returned bed to lowest height. Removed and discarded sterile gloves. Performed hand hygiene.</p>			

SKILL 13.18: Suctioning the Client with a Tracheostomy or Endotracheal Tube

Procedure	Performed		Comments
	Yes	No	
<p>1. Gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.</p>			
<p>2. Prepared client.</p> <p>a. Placed client in semi-Fowler position if not contraindicated.</p>			

<p>3. Prepared equipment (open suction system).</p> <ol style="list-style-type: none"> a. Attached resuscitation apparatus to oxygen source. Adjusted oxygen flow to 100%. b. Opened sterile supplies. c. Poured sterile normal saline or water in sterile basin. d. Placed sterile towel, if used, across client's chest below tracheostomy. e. Turned on suction and set pressure in accordance with agency policy. f. Applied goggles, mask, and gown if necessary. g. Applied sterile gloves. h. Held catheter in dominant hand and connector in non-dominant attached suction catheter to suction tubing. 			
<p>4. Flushed and lubricated the catheter.</p> <ol style="list-style-type: none"> a. Placed catheter tip in sterile saline solution. b. Occluded thumb control with non-dominant hand's thumb and suctioned a small amount of sterile solution through catheter. 			
<p>5. Hyper oxygenate lungs with a resuscitation bag before suctioning (if no copious secretions).</p> <ol style="list-style-type: none"> a. Summoned an assistant if one was available for this step. b. Using non-dominant hand turned on oxygen to 12 to 15 L/min. c. If client was receiving oxygen, disconnected oxygen source from tracheostomy tube using nondominant hand. d. Attached resuscitator to tracheostomy or endotracheal tube. e. Compressed BVM device three to five times as client inhaled. f. Observed rise and fall of client's chest to assess adequacy of each ventilation. g. Removed resuscitation device and placed it on bed or client's chest with connector facing up. 			
<p>Variation: Closed Suction System (In-Line Catheter)</p>			
<ol style="list-style-type: none"> 1. If catheter was not attached, applied clean gloves, aseptically opened a new closed catheter set, and attached ventilator connection on T piece to ventilator tubing. Attached client connection to endotracheal tube or tracheostomy. 2. Attached one end of suction connecting tubing to suction connection port of closed system and other end of connection tubing to suction device. 			

<ol style="list-style-type: none"> 3. Turned suction on, occluded or kinked tubing, and depressed suction control valve to set suction to appropriate level. 4. Used ventilator to hyper-oxygenate client's lungs. 5. Unlocked suction control mechanism if required by manufacturer. 6. Advanced suction catheter enclosed in its plastic sheath with dominant hand. Steadied T piece with non-dominant hand. 7. Depressed suction control valve and applied intermittent suction for no more than 10 seconds and gently withdrew catheter. 8. Repeated as necessary. 9. When suctioning was completed, withdrew catheter into its sleeve and closed access valve, if appropriate. 10. Flushed catheter by instilling normal saline into irrigation port and applied suction. Repeated until catheter was clear. 11. Closed irrigation port and closed suction valve. 12. Returned bed to lowest height. Removed and discarded gloves. Performed hand hygiene. 			
---	--	--	--

SKILL 13.17: Oropharyngeal, Nasopharyngeal, and Nasotracheal Suctioning

Procedure	Performed		Comments
	Yes	No	
<ol style="list-style-type: none"> 1. Checked physician's order and gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure. 			
<ol style="list-style-type: none"> 2. Prepared client. <ol style="list-style-type: none"> a. Positioned conscious person with functional gag reflex in semi-Fowler position with head turned to one side for oral suctioning or with neck hyperextended for nasal suctioning. b. Positioned unconscious client in lateral position facing self. c. Placed towel or moisture-resistant pad over pillow or 			

under chin.			
<p>3. Prepared the equipment.</p> <p>a. Turned suction device on and set to appropriate negative pressure on suction gauge.</p> <p><i>For Oral and Oropharyngeal Suction</i></p> <p>b. Applied clean gloves.</p> <p>c. Moistened tip of Yankauer or suction catheter with sterile water or saline.</p> <p>d. Did not apply suction during insertion.</p> <p>e. Advanced catheter about 10 to 15 cm (4 to 6 in.) along one side of mouth into oropharynx.</p> <p>f. Applied suction to secretions that collect in the vestibule of the mouth and beneath the tongue, if necessary.</p> <p>g. Removed and discarded gloves. Performed hand hygiene.</p> <p><i>For Nasopharyngeal and Nasotracheal Suction</i></p> <p>b. Opened lubricant.</p> <p>c. Opened sterile suction package.</p> <p>d. With sterile gloved hand, picked up sterile suction catheter and attached it to suction connecting tubing being held in nonsterile gloved hand.</p> <p>e. Tested pressure of suction and patency of catheter by applying sterile gloved finger or thumb to port or open branch of Y-connector to create suction.</p> <p>f. As needed, applied or increased supplemental oxygen.</p>			
<p>4. Lubricated and introduced the catheter.</p> <p>a. Lubricated catheter tip with sterile water or saline.</p> <p>b. Removed oxygen with non-dominant hand, if appropriate.</p> <p>c. Without applying suction, inserted catheter into either naris and advanced it along floor of nasal cavity.</p>			
<p>5. Performed suctioning:</p> <p>a. Applied finger to the suction control port to start suction and gently rotated the catheter.</p> <p>b. Applied intermittent suction for 5 to 10 seconds while slowly withdrawing the catheter. Removed finger from the control and removed the catheter.</p>			
<p>6. Rinsed catheter and repeated suctioning as before.</p> <p>a. Rinsed and flushed catheter and tubing with sterile water or saline.</p> <p>b. Re-lubricated catheter and repeated suctioning until air</p>			

<p>passage was clear.</p> <p>c. Allowed sufficient time between each suction for ventilation and oxygenation. Limited suctioning to 5 minutes total.</p> <p>d. Encouraged client to breathe deeply and to cough between suctioning. Used supplemental oxygen, if appropriate.</p>			
<p>7. Obtained specimen if required.</p> <p>a. Used a sputum trap.</p> <p>b. Attached suction catheter to tubing of sputum trap.</p> <p>c. Attached suction tubing to sputum trap air vent.</p> <p>d. Suctioned client.</p> <p>e. Removed catheter from client. Disconnected sputum trap tubing from suction catheter. Removed suction tubing from trap air vent.</p> <p>f. Connected tubing of sputum trap to air vent.</p> <p>g. Connected suction catheter to tubing.</p> <p>h. Flushed the catheter to remove secretions from tubing.</p>			
<p>8. Promoted client comfort.</p> <p>a. Offered to assist client with oral or nasal hygiene.</p> <p>b. Assisted client to position that facilitated breathing.</p>			
<p>9. Disposed of equipment and ensured availability for next suction.</p> <p>a. Disposed of catheter, gloves, water, and waste container.</p> <p>b. Emptied and rinsed suction collection container as needed or indicated by protocol.</p> <p>c. Ensured supplies were available for next suctioning.</p>			
<p>10. Assessed effectiveness of suctioning.</p> <p>a. Auscultated client's breath sounds and ensured they were clear of secretions. Observed skin color, respiratory rate, heart rate, level of anxiety, and oxygen saturation levels.</p>			
<p>11. Returned bed to lowest height. Performed hand hygiene.</p>			

SKILL 13.2: Obtaining Nose and Throat Specimens

Procedure	Performed		Comments
	Yes	No	
1. Gathered equipment and supplies. Introduced self,			

<p>explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.</p>			
2. Assisted client to sitting position if possible.			
3. Open cultured tube and placed it on the sterile wrapper. Removed one sterile applicator and held it by stick end, keeping remainder sterile. Kept the swab end from becoming contaminated.			
4. Collected the specimen.			
Variation: Obtaining a Throat Specimen			
<ol style="list-style-type: none"> 1. Asked client to tilt head back, open mouth, extend tongue, and say "ah." 2. Used the penlight to illuminate the posterior pharynx while depressing the tongue with a tongue blade. Depressed the anterior third of tongue firmly without touching the throat. 3. Inserted a swab into the mouth without touching any part of the mouth or tongue. 4. Gently and quickly swabbed along the tonsils making sure to contact any areas on the pharynx that were reddened or contained exudates. 5. Removed the swab without touching the mouth or lips. 6. Inserted the swab into the sterile tube without allowing it to touch the outside of the container. Pushed the tip of the swab into the liquid medium. 7. Crushed the ampule of the culture medium at the bottom of the tube. 8. Placed top securely on the tube, taking care not to touch the inside of the cap. 9. Repeated above steps with second swab. 10. Discarded the tongue blade in the waste container. 11. Returned bed to lowest position. Removed and discarded gloves. Performed hand hygiene. 			
Variation: Obtaining a Nasal Specimen			
<ol style="list-style-type: none"> 1. Asked client to blow nose to clear nasal passages. Checked nostrils with penlight to check for patency. 2. Gently inserted lighted nasal speculum, if used. 3. Inserted the sterile swab carefully through the speculum 			

<p>without touching the edges.</p> <p>4. When reaching the area of mucosa that was reddened or contained exudate, rotated the swab quickly.</p> <p>5. Removed the swab without touching the speculum.</p> <p>6. Removed the nasal speculum, if used.</p> <p>7. Inserted the swab into the culture tube. Crushed the ampule at the bottom of the tube and pushed the tip of the swab into the liquid medium.</p> <p>8. Repeated above steps for the other nostril.</p>			
Variation: Obtaining a Nasopharyngeal Culture			
<p>1. Followed procedure for obtaining nasal specimen, with these exceptions:</p> <p>2. Used special cotton-tipped swab on flexible wire</p> <p>3. Without opening package, bent swab into a curve, then opened package without contaminating swab.</p> <p>4. Gently passed swab through more patent nostril about 8–10 cm (3–4 in.) into nasopharynx.</p>			
5. Labeled and transported the specimens to the laboratory.			

SKILL 2.30: Administering Metered-Dose Inhaler Medications

Procedure	Performed		Comments
	Yes	No	
1. Checked medication order. Gathered MAR, metered-dose nebulizer, medication canister, and extender if needed. Removed appropriate medication from medication drawer, shelf, or refrigerator. Checked MAR with medication label to verify correct medication and expiration date. Signed out controlled medicines following agency policy.			
2. Checked the medication label three times for safety: <ul style="list-style-type: none"> a. When it was taken from medication drawer b. Compared it to the MAR c. Compared it to the MAR in client’s room or when ready to leave medication preparation area 			
3. Prepared correct amount of medication without contaminating it.			
4. Introduced self and verified client’s identity using two identifiers. Provided privacy, explained procedure and how results would be used. Performed hand hygiene. Checked			

MAR and client allergy status. Determined if specific assessment was indicated before administering medication (e.g., vital signs) and assessed client.			
5. Prepared client by explaining that nebulizer delivers a measured dose of drug with each push of medication canister.			
6. Instructed the client to prepare for using the metered-dose nebulizer as follows: a. Ensure that canister is firmly and fully inserted into inhaler. b. Remove mouthpiece cap. Holding inhaler upright, shake inhaler vigorously for 3 to 5 seconds to mix medication evenly. c. Exhale comfortably. d. Hold inhaler with canister on top. e. Hold inhaler 2-4 cm from open mouth <i>OR</i> Put mouthpiece into mouth, with opening toward the throat. Close lips tightly around the mouthpiece.			
7. Instructed client to prepare for using the metered-dose inhaler with spacer as follows: a. Ensure that canister is firmly and fully inserted into inhaler. b. Remove cap from mouthpiece, and insert MDI mouthpiece into spacer. c. Holding inhaler and spacer, shake vigorously for 3 to 5 seconds to mix medication evenly. d. Exhale comfortably. e. Hold inhaler with canister on top. f. When using a spacer, always put mouthpiece into mouth, with opening toward the throat. Close lips tightly around the mouthpiece.			
8. Instructed client to administer medication as follows: a. Press down once on the MDI canister and inhale slowly and deeply through mouth. b. Hold breath for 10 seconds or as long as possible. c. Remove inhaler from or away from mouth. d. Exhale slowly through pursed lips.			
9. Repeat the inhalation if ordered. Wait 1 to 2 minutes between inhalations.			
10. After using inhaler, rinse mouth with water and spit it out.			
11. Clean the MDI mouthpiece (and spacer, if used) daily, using mild soap and water.			

12. Performed hand hygiene.			
13. Documented medication on MAR and in client's record, including assessment findings, if indicated.			
14. Continued to assess client for desired drug action and possible side effects or adverse reactions.			

SKILL 2.31: Administering Dry Powder Inhaled (DPI) Medication

Procedure	Performed		Comments
	Yes	No	
1. Checked medication orders. Gathered MAR, correct medication, instructions insert, and handheld inhalation device. Removed appropriate medication from medication drawer, shelf, or refrigerator. Checked MAR with medication label to verify correct medication and expiration date. Signed out controlled medicines following agency policy.			
2. Checked the medication label three times for safety: <ul style="list-style-type: none"> a. When it was taken from medication drawer b. Compared it to the MAR c. Compared it to the MAR in client's room or when ready to leave medication preparation area 			
3. Prepared correct amount of medication without contaminating it.			
4. Introduced self and verified client's identity using two identifiers. Provided privacy, explained procedure and how results would be used. Performed hand hygiene. Checked MAR and client allergy status. Determined if specific assessment was indicated before administering medication (e.g., vital signs) and assessed client.			
5. Took dry powder capsule package and inhalation device to client's room.			
6. Assisted client to a sitting position.			
7. Removed capsule from package, peeling back foil cover to expose only one capsule. Opened the outer cap of inhaler device (pull cap upward) and opened the mouthpiece. Inserted the capsule into center of chamber of the inhalation device.			

8. Held device upright, and, leaving outer cap open, closed mouthpiece/lid firmly until a click is heard and left outer cap open. Pressed the side mounted piercing button in completely, then released.			
9. Had client breathe out completely.			
10. Had client keep his/her head in upright position, place lips tightly round the mouthpiece, and breathe slowly and deeply with sufficient energy to hear the medication capsule vibrate.			
11. Had client hold the deep breath as long as comfortable, then return to normal breathing.			
12. Had client repeat steps 9 through 11 if indicated in medication package insert.			
13. Opened mouthpiece and discarded remaining capsule. Closed mouthpiece and outer cap and stored at client's bedside.			
14. Cleaned unit only as necessary, using warm water and allowing device to air dry <i>thoroughly</i> before next use.			
15. Performed hand hygiene.			
16. Continued to assess client for desired drug action and possible side effects or adverse reactions.			

SKILL 2.32: Administering Medication by Non-pressurized (Nebulized) Aerosol (NPA)

Procedure	Performed		Comments
	Yes	No	
1. Checked medication orders. Gathered equipment/supplies. Removed appropriate medication from medication drawer, shelf, or refrigerator. Checked MAR with medication label to verify correct medication and expiration date. Signed out controlled medicines following agency policy.			
2. Checked the medication label three times for safety: <ul style="list-style-type: none"> a. When it was taken from medication drawer b. Compared it to the MAR c. Compared it to the MAR in client's room or when ready to leave medication preparation area 			
3. Prepared correct amount of medication without contaminating it.			

4. Introduced self and verified client's identity with two identifiers. Provided privacy, explained procedure and how results would be used. Performed hand hygiene. Checked MAR and client allergy status. Determined if specific assessment was indicated before administering medication (e.g., vital signs) and assessed client.			
5. Diluted medication as ordered and placed in nebulizer chamber.			
6. Attached one end of tubing to compressed air source and other end of tubing to nozzle on nebulizer.			
7. Kept nebulizer chamber vertical and connected top of chamber to mask or T-piece.			
8. Held mouthpiece in protective cover, attached to one end of T-piece, and attached corrugated tubing to other end of T-piece.			
Administering NPA			
1. Turned on air or oxygen (8 L/min) source, and observed for mist flow.			
2. Had client place mouthpiece in mouth and close lips.			
3. Instructed client to breathe normally in and out of mouthpiece or mask.			
4. Had client take a deep breath and hold for several seconds, then exhale slowly every 3–5 breaths.			
5. Turned power (air or oxygen flow) off, and unplugged compressor (if used) or reset prescribed O ₂ flow rate.			
6. Cleaned mouthpiece, and placed equipment in plastic bag at bedside. (Disposed of and replaced components according to agency policy.)			
7. Performed hand hygiene.			
8. Documented medication on MAR and in client's record, including assessment findings, if indicated.			
9. Continued to assess client for desired drug action and possible side effects or adverse reactions.			

SKILL 13.5: Pursed-Lip Breathing

Procedure	Performed		Comments
	Yes	No	

1. Introduced self, explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client.			
2. Assisted client to assume a comfortable semi-Fowler or sitting position in bed or on chair.			
3. Taught client to inhale through nose and then purse lips and exhale slowly and gently, making a slow "whooshing" sound without puffing out the cheeks. 4. Instructed client to inhale deeply through nose and count to 3. 5. Had client concentrate on tightening abdominal muscles while exhaling slowly and evenly through pursed lips while counting to 7 or until client could not exhale anymore. 6. Taught client how to perform pursed-lip breathing while walking. 7. Instructed client to use this exercise whenever feeling short of breath and to gradually increase to 5 to 10 minutes four times a day.			
8. Performed hand hygiene.			

Clinical:

Critical thinking activities.

Identify at least two interventions or educational topics for each identified risk factor.

Risk Factor	Relation to Alteration in Oxygenation	Nursing Interventions/Educational Topic

TAKE A BREATH AWAY

Associated Concepts:
Oxygenation

The purpose of this activity is perform respiratory assessments on multiple clients, identify the abnormalities and associated rationale for each, and discuss priority nursing interventions.

Related Concept Learning Outcomes:

1. Differentiate common assessment procedures used to examine respiratory health across the life span.

- Demonstrate the nursing process in providing culturally competent and caring interventions across the life span for individuals with common alterations in oxygenation.

Part 1 Instructions: Perform a respiratory assessment on three different clients. Fill out the table below for the physical assessment components and describe abnormal assessments for each client.

Respiratory Assessment	Normal Findings	Client #1 Diagnosis:	Client #2 Diagnosis:	Client #3 Diagnosis:
Nasal Assessment				
Respiratory Rate Assessment				
Oxygen Saturation				
Inspection of Thoracic Cavity				
Inspection of the Muscles of Breathing				
Inspection and Palpation of the Thoracic Wall for Symmetry				

Color of Skin				
Nail Beds				
Auscultation of Lung Fields RUL RLL RML LUL LLL				
Describe Abnormal Client Assessment Data	Not applicable			

RUL, right upper lobe; RLL, right lower lobe; RML, right middle lobe; LUL, left upper lobe; LLL, left lower lobe

Part 2 Instructions: Perform an oxygenation assessment interview on *each* client using the following as a guide for interviewing.

Current Respiratory Problems

- Have you noticed any changes in your breathing pattern (e.g., shortness of breath, difficulty breathing, need to be in an upright position to breathe, or rapid and shallow breathing)?
- If so, which of your activities might cause these symptoms to occur?
- How many pillows do you use to sleep at night?

History of Respiratory Disease

- Have you had colds, allergies, asthma, tuberculosis, bronchitis, pneumonia, or emphysema?
- How frequently have these occurred? How long did they last? And how were they treated?
- Have you been exposed to any pollutants?

Lifestyle

- Do you smoke? If so, how much? If not, did you smoke previously, and when did you stop?
- Does any member of your family smoke?
- Is there cigarette smoke or other pollutants (e.g., fumes, dust, coal, asbestos) in your workplace?
- Do you drink alcohol? If so, how many drinks (mixed drinks, glasses of wine, or beers) do you usually have per day or per week?
- Describe your exercise patterns. How often do you exercise and for how long?

Presence of Cough

- How often and how much do you cough?
- Is it productive, that is, accompanied by sputum, or nonproductive, that is, dry?
- Does the cough occur during certain activity or at certain times of the day?

Description of Sputum

- When is the sputum produced?
- What is the amount, color, thickness, and odor of the sputum?
- Is it ever tinged with blood?

Presence of Chest Pain

- How does going outside in the heat or the cold affect you?
- Do you experience any pain with breathing or activity?
- Where is the pain located?
- Describe the pain. How does it feel?
- Does it occur when you breathe in or out?
- How long does it last, and how does it affect your breathing?

- Do you experience any other symptoms when the pain occurs (e.g., nausea, shortness of breath or difficulty breathing, light-headedness, palpitations)?
- What activities precede your pain?
- What do you do to relieve the pain?

Presence of Risk Factors

- Do you have a family history of lung cancer, cardiovascular disease (including strokes), or tuberculosis?
- The nurse should also note the client's weight, activity pattern, and dietary assessment. Risk factors include obesity, sedentary lifestyle, and diet high in saturated fats.

Medication History

- Have you taken or do you take any over-the-counter or prescription medications for breathing (e.g., bronchodilator, inhalant, narcotic)?

If so, which ones? And what are the dosages, times taken, and results, including side effects? Are you taking them exactly as directed?

Part 3 Instructions: Identify the client who is most at risk for alterations in oxygenation and develop at least five priority interventions for the client. Provide rationale for each intervention.

- 1.
- 2.
- 3.
- 4.
- 5.

Week 2

Objectives:

Assess patients with uncomplicated acute and chronic alterations in perfusion.

Analyze collected data as it pertains to uncomplicated acute and chronic alterations in perfusion.

Use collected data to formulate a plan of care as it pertains to uncomplicated acute and chronic alterations in perfusion.

Implement the plan of care in uncomplicated acute and chronic alterations in perfusion.

Evaluate goals and therapeutic outcomes in uncomplicated acute and chronic alterations in perfusion.

Theory: Please review videos prior to class.

Lab:

Objectives:

Demonstrate the application of anti-embolism stockings

Demonstrate the application of sequential compression devices

Finish skills from week 1 prior to moving on to week 2.

SKILL 14.3: Applying Anti-embolism Stockings (Graduated Compression Stockings, and Elastic Stockings)

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order and gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			
2. Took measurements as needed to obtain correct size stockings. a. Measured length of both legs from heel to gluteal fold (for thigh-length stockings) or from heel to popliteal space (for knee-length stockings).			

<ul style="list-style-type: none"> b. Measured circumferences of each calf and thigh at widest point. c. Compared measurements to size chart on stockings package. 			
<ul style="list-style-type: none"> 3. Prepared client. <ul style="list-style-type: none"> a. Assisted client to a lying position in bed. b. Washed and dried legs as needed. 			
<ul style="list-style-type: none"> 4. Applied stockings. <ul style="list-style-type: none"> a. Reached inside stocking from top, and grasping heel, turned upper portion of stocking inside out so the foot portion is inside stocking leg. b. Asked client to point toes, then positioned stocking on client's foot. With heel of the stocking down and stretching each side of stocking, eased the stocking over toes. c. Grasped the loose portion of the stocking at the ankle and gently pull the stocking over the leg, turning it right side out in the process. 			
<ul style="list-style-type: none"> 5. Returned bed to lowest height; provided comfort and safety for the client. Performed hand hygiene. 			

SKILL 14.5: Applying Sequential Compression Devices (SCDs)

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order and gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			
2. Performed neurovascular assessment noting circulation, motion, and sensation in lower extremities.			
3. Placed client in dorsal recumbent or semi-Fowler's position.			
4. Measured client's legs as recommended by manufacturer.			

5. Applied sequential compression sleeves. a. Placed sleeve under each leg with opening at the knee. b. Wrapped sleeves around legs and secured with Velcro. c. Allowed two fingers to fit between the leg and sleeve.			
6. Connected the sleeves to the control unit. Adjusted the alarms and pressures as needed. Repositioned bed to lowest height.			
7. Performed hand hygiene.			

Clinical:

Perfusion

NOT JUST A MATTER OF THE HEART

Associated Concepts:

Perfusion, Associated Concepts

The purpose of this activity is to identify alterations in related concepts in the assigned clients and discuss the correlation to the concept of perfusion.

Related Concept Learning Outcomes

1. Examine the relationship between perfusion and other concepts/systems.

Client Diagnosis:

Part 1 Instructions: Identify all alterations in concepts that interrelate with perfusion that are occurring in your assigned client. Use the following list of concepts. For each identified interrelated concept, provide a brief description of the alteration (include any clinical manifestations and diagnostics seen in your client) and how it is related to the concept of perfusion.

Concept	Alteration	Relationship to Perfusion
Acid–Base Balance		
Cellular Regulation		
Cognition		
Comfort		
Fluid and Electrolytes		
Intracranial Regulation		
Oxygenation		

Perfusion

THE UPS AND DOWNS OF BLOOD PRESSURE

Associated Concepts:

Perfusion

The purpose of this activity is to review features related to measuring blood pressure.

Related Concept Learning Outcomes

1. Perform common procedures used to assess blood pressure.
2. Identify client risk factors related to blood pressure measurement.

Instructions: Complete the following:

1. Identify any special considerations related to measuring blood pressure that your client may have.

Blood Pressure Special Considerations	Applies to Your Client?		Adaptation Needed
	yes	no	
Burns, wounds, or other trauma of arms			
Cast or bulky dressing on limb			
History of surgical removal of axilla lymph nodes			
Intravenous line infusing in limb			
Arteriovenous fistula present (such as for dialysis)			
Unable to auscultate blood pressure			
Infant?			
Young child?			
Older adult			
Fall risk			

2. What is orthostatic hypotension? Describe how to accurately assess for orthostatic hypotension.

3. Identify the impact on blood pressure readings for the following technique errors:

Factor Affecting Blood Pressure	What Reading Results?	
	Too high	Too low
Bladder cuff too narrow		
Bladder cuff too wide		
Arm unsupported		

Insufficient rest before assessment		
Repeating assessment too quickly		
Cuff wrapped too loosely		
Deflating cuff too quickly		
Deflating cuff too slowly		
Arm above level of heart		
Assessing immediately after meal, while client smokes, or while client is in pain		

4. Identify factors for blood pressure alterations that apply to your assigned client.

Blood Pressure Factors	Impact on Blood Pressure	Applies to Your Client?	
		yes	no
Race			
Activity level			
Stress			
Obesity			
Lifestyle choices			
Medications			
Illness process			
Body position			

5. Assess blood pressure on at least three clients using an automatic cuff and a manual (aneroid) cuff. How similar are the readings? Why might there be variations?

	Automatic Cuff Reading	Manual Cuff Reading
Client 1		

Client 2		
Client 3		

6. List the medications (including PRN medications) currently prescribed for your assigned client. Note any effect on blood pressure that the medications may exert.

7. Add any supplements or over-the-counter (OTC) medications that your client regularly takes. Note any effect on blood pressure that the medications may exert.

8. Identify a risk factor that your client may have that may affect his/her blood pressure. Review client education to decrease the impact the risk factor may have on the client's blood pressure.

THE BEAT GOES ON: ASSESSING PERFUSION

Associated Concepts:

Perfusion

The purpose of this activity is to review assessment features of the circulatory system.

Related Concept Learning Outcomes

1. Perform common procedures used to assess the pulse.
2. Identify client risk factors related to the cardiovascular system.

Instructions: Complete the following:

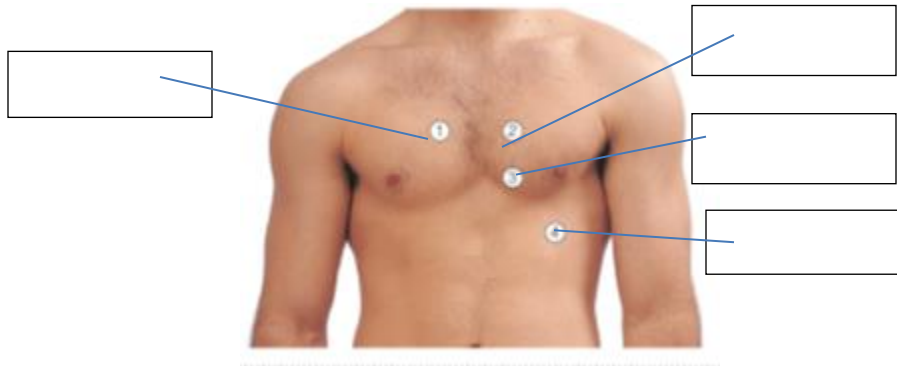
1. Identify modifiable and non-modifiable risk factors for cardiovascular alterations. Identify whether any of these risk factors apply to your assigned client and interventions to address the risk factors.

Modifiable Risk Factors	Apply to Your Client?		Non-modifiable Risk Factors	Apply to Your Client?		Interventions for Client
	yes	no		yes	no	

2. Identify what normal impact the following factors have on the pulse rate of an individual. Indicate if it is a factor that affects the pulse rate of your assigned client.

Factor Affecting Pulse	What Effect	Does Effect Impact Your Client?
Age		
Gender		
Exercise		
Fever		
Medications		
Hypovolemia		
Stress		
Position changes		
Disease pathology		

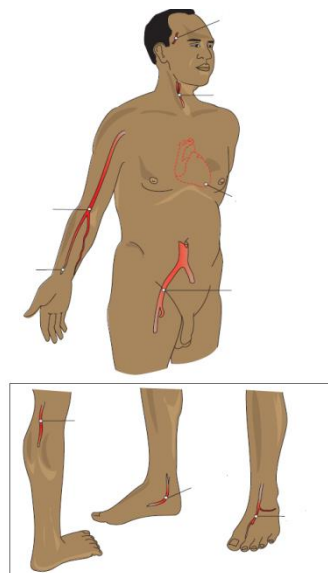
3. Label the following with which heart valve is auscultated at each site.



4. Auscultate the heart sounds for three clients at the above sites. Highlight any abnormal findings.

	Client 1	Client 2	Client 3
S ₁			
S ₂			
Extra sounds			
Heart murmur			

5. Identify nine common sites for palpating a pulse.



6. When is it appropriate to use each pulse site?
7. Palpate the nine pulse sites on three separate clients to assess for adequate perfusion. Which ones are more difficult to palpate? (Note: The pulse rate does not need to be counted when assessing for perfusion.)
8. Using a Doppler, assess for perfusion at a pulse site that was difficult to palpate. Be sure to use the device correctly.

Week 3

OBJECTIVES:

Assess uncomplicated acute and chronic alterations in the perioperative patient.

Analyze collected data as it pertains to uncomplicated acute and chronic alterations in the perioperative patient.

Use collected data to formulate a plan of care as it pertains to uncomplicated acute and chronic alterations in the perioperative patient.

Implement the plan of care in uncomplicated acute and chronic alterations in the perioperative patient.

Evaluate goals and therapeutic outcomes in uncomplicated acute and chronic alterations in the perioperative patient.

Theory:

Please review videos prior to class.

Perioperative unfolding case study in class.

vSIM

Stan Checketts-Preoperative Bowel Obstruction: Fluid and Electrolyte Imbalance

Lab:

Objectives:

Describe surgical asepsis.

Demonstrate donning sterile technique.

Illustrate how to care for and remove a nasogastric/orogastric tube.

Demonstrate how to change a dressing.

Demonstrate how to use an incentive spirometer.

Describe how to monitor I/O.

SKILL 15.3: Donning Sterile Gown and Gloves (Closed Method)

Procedure	Performed		Comments
	Yes	No	
1. Gathered sterile pack and ensured its sterility. Performed surgical hand antisepsis/scrub.			
2. Began donning sterile gown: a. Grasped sterile gown at the crease near the neck, held it away from body, and permitted it to unfold freely without touching anything including the uniform. b. Put hands inside shoulder of gown without touching outside of gown. c. Worked the hands down the sleeves only to the beginning of the cuffs. d. Had coworker wearing hair cover and mask reach inside arm seams and pull gown over shoulders. e. Coworker grasped the neck ties without touching the outside of the gown and pulled the gown upward to cover the neckline of the scrub person's uniform in front and back.			
Applied Sterile Gloves (Closed Method)			
3. Opened sterile glove wrapper while the hands were still covered by sleeves.			

<p>4. Put the glove on the non-dominant hand.</p> <ol style="list-style-type: none"> With dominant hand, picked up the opposite glove with the thumb and index finger, handling it through the sleeve. Positioned the dominant hand palm upward inside the sleeve. Laid the glove on the opposite gown cuff, thumb side down, with the glove opening pointed toward the fingers. Used the non-dominant hand to grasp the cuff of the glove through the gown cuff, and firmly anchor it. Used the dominant hand working through its sleeve, grasped the upper side of the glove's cuff, and stretched it over the cuff of the gown. Pulled the sleeve up to draw the cuff over the wrist as fingers were extended of the non-dominant hand into the glove's fingers. 			
<p>5. Put the glove on the dominant hand.</p> <ol style="list-style-type: none"> Placed the fingers of the gloved hand under the cuff of the remaining glove. Placed the glove over the cuff of the second sleeve. Extended the fingers into the glove and pulled the glove up and over the cuff. 			
<p>6. Completed gowning as follows:</p> <ol style="list-style-type: none"> Had a coworker hold the waist tie of the gown, using sterile gloves, forceps, or drape. Made a three-quarter turn, then took the tie and secured it in front of the gown <i>OR</i> Had coworker take the two ties at each side of the gown and tied them at the back of the gown. 			

SKILL 15.6: Pouring from a Sterile Container			
Procedure	Performed		Comments
	Yes	No	
1. Gathered equipment. Performed hand hygiene.			
2. Opened sterile container according to procedure.			
3. Placed container on firm surface.			
4. Took cap off the bottle and inverted the cap before placing it on a firm surface.			
5. Poured a small amount of liquid into the nonsterile container.			

6. Poured the liquid into the sterile container and not touching the container with the bottle. Did not reach over a sterile field if the container had been placed on one.			
7. Replaced the cap if liquid remained in the bottle. If total contents had been used, disposed of bottle in trash.			
8. Dated and initialed bottle if reusing.			

SKILL 12.5: Flushing/Maintaining a Nasogastric Tube

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order and gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			
2. Donned clean gloves. Disconnected NG tube from suction source if used.			
3. Placed towel under NG tube to protect sheets, placed emesis basin nearby.			
4. Checked for NG tube placement.			
5. Drew up 20–30 mL normal saline into irrigating syringe.			
6. Gently instilled normal saline into NG tube or removed syringe plunger, poured NS into syringe barrel, and allowed solution to flow in by gravity.			
7. Repeated procedure if necessary.			
8. Reconnected NG tube to suction or plug tube.			
9. Recorded instilled amount on I&O record.			
10. Returned bed to lowest height. Removed gloves and performed hand hygiene.			
11. Repositioned client for comfort.			

SKILL 12.6: Performing Gastric Lavage

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order and gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			
2. Per agency protocol (physician may insert) measured for tube insertion using the following guidelines. a. Measured distance from bridge of nose to earlobe to xiphoid process (NEX). b. Marked with pen or tape.			
3. Placed client in head-down, left side-lying position.			
4. Lubricated tube with water-soluble lubricant.			
5. Inserted tube nasogastrically or orogastrically about 50 cm (20 in.).			
6. Aspirated gastric contents with syringe before instilling solution. Saved specimen for analysis.			
7. Repeatedly instilled 50 to 100 mL normal saline or water and aspirated contents.			
8. Carefully monitored volume instilled and character and volume of aspirated contents.			
9. Repeated process until gastric return was clear, or as ordered.			
10. Instilled activated charcoal or administered a saline cathartic (as ordered).			
11. Pinched tube for removal, wrapped in towel, and disposed of equipment.			
12. Returned bed to lowest height. Removed and disposed of gloves and performed hand hygiene.			

SKILL 12.7: Removing a Nasogastric Tube

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order and gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			
2. Detached the tube. a. Applied clean gloves. b. Disconnected nasogastric tube from suction apparatus if present. c. Unpinned tube from client's gown. d. Removed adhesive tape securing tube to the nose.			
3. Removed the nasogastric tube. a. Asked the client to take a deep breath and hold it. b. Pinched the tube with the gloved hand. c. Smoothly withdrew the tube. d. Placed tube in a plastic bag. e. Observed the intactness of the tube.			
4. Ensured client comfort. a. Provided mouth care if desired. b. Assisted client as required to blow the nose.			
5. Disposed of the equipment appropriately. a. Placed bag with tube, and gloves in receptacle designated by agency. b. Placed bed in lowest position. c. Removed and discarded gloves. Performed hand hygiene.			

SKILL 18.7: Changing a Dressing for a Venous Ulcer

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order. Gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure. Opened sterile packages, and arranged on over-bed table. Place absorbent pad under wound.			
2. Donned clean gloves.			
3. Removed compression bandage and old dressing, and place in biohazard bag.			
4. Assessed and measured wound.			
5. Cleaned off debris by pouring cleansing solution over wound.			
6. Rinsed wound with sterile normal saline.			
7. Debrided wound, if ordered, using autolytic, chemical or mechanical method, as ordered.			
8. Dried wound using sterile 4 × 4 dressings. Placed in biohazard bag.			
9. Removed backing on moisture-retentive dressing, and placed over open wound site.			
10. Lowered bed and raised side rails.			
11. Perform hand hygiene			
12. Assessed peripheral circulation every 4 hours.			

SKILL 15.9: Changing a Dry Sterile Dressing

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order and gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			
2. Cleaned off over-bed table and placed sterile supplies on it.			
3. Placed bag for soiled dressings near the incision site. Exposed the incision area, maintaining as much warmth and privacy as possible.			
4. Open sterile packages and cut tape into appropriate-length strips.			
5. Removed tape slowly by pulling tape toward the wound.			
6. Donned clean gloves.			
7. Removed soiled dressings, and disposed of in the proper bag. Wet dressing with sterile normal saline if it adhered to the suture line.			
8. Assessed incision area for erythema, edema, or drainage.			
9. Assessed color of incision. (A healing incision looks pink or red.)			
10. Removed gloves and discarded.			
11. Moved over-bed table next to working area.			
12. Donned sterile gloves.			
13. Cleansed incision area with sterile swabs or 4 × 4 pads soaked in normal saline according to hospital policy. Cleansed from incision line outward, cleaning from top to bottom, using the swab only once. Discarded swabs or 4 × 4 pads in disposal bag.			
14. Placed 4 × 4 gauze pads over incision area, being careful not to touch incision or client with your gloves.			
15. Placed abdominal pad over incision, being careful not to contaminate the gloves.			

16. Removed gloves and discarded.			
17. Taped dressing securely.			
18. Returned bed to lowest height and raised side rails. Positioned client for comfort.			
19. Performed hand hygiene.			

SKILL 18.8: Maintaining Closed Wound Drainage (Jackson–Pratt Drain)

Procedure	Performed		Comments
	Yes	No	
1. Checked physician’s order. Gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client’s identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			
2. Emptied drainage unit: a. Applied clean gloves. b. Placed the Hemovac or Jackson–Pratt unit on waterproof pad. c. Opened plug of drainage unit. d. Inverted unit and emptied it into collecting receptacle.			
3. Re-established suction. <i>Hemovac</i> a. Placed unit on a solid, flat surface with port open. b. Placed palm of hand on unit and pressed the top and bottom together. c. While holding top and bottom together, cleansed opening and plug with alcohol swab. d. Replaced the drainage plug before releasing hand pressure. <i>Jackson–Pratt</i> a. Compressed bulb with port open. b. While maintaining tight compression on the bulb, cleansed ends of emptying port. c. Inserted the plug into emptying port.			

4. Secured unit to the client's gown or positioned suction unit on the bed. Ensured that unit was below level of wound.			
5. Removed and discarded gloves, performed hand hygiene. Returned bed to lowest height.			

SKILL 18.3: Cleaning a Sutured Wound and Changing a Dressing on a Wound with a Drain

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order. Gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			
2. Exposed only the wound area.			
3. Removed binders and tape. <ul style="list-style-type: none"> a. Remove binders, if used, and place them aside. Untied tie tapes, if used. (Montgomery straps (tie tapes) are commonly used for wounds requiring frequent dressing changes.) b. If adhesive tape was used, removed it by holding down the skin and pulling the tape gently but firmly toward the wound. 			
4. Removed and disposed of soiled dressings appropriately: <ul style="list-style-type: none"> a. Applied clean disposable gloves and removed the outer abdominal dressing or surgipad. b. Lifted the outer dressing so the underside was away from the client's face. c. Removed the under dressing, taking care not to dislodge any drains. d. Assessed the location, type, and odor of wound drainage and the number of gauzes saturated or the diameter of drainage collected on the dressings. e. Discarded the soiled dressings in the bag. f. Removed and discarded gloves in moisture-proof bag. Performed hand hygiene. 			

<p>5. Set up the sterile supplies:</p> <ul style="list-style-type: none"> a. Opened the sterile dressing set and used surgical aseptic technique. b. Placed the sterile drape beside the wound. c. Opened the sterile cleaning solution and poured it over the gauze sponges in the plastic container. d. Applied sterile gloves. 			
<p>6. Cleaned the wound if indicated.</p> <ul style="list-style-type: none"> a. Cleaned wound using gloved hands or forceps and gauze swabs moistened with cleaning solution. b. If using forceps, kept tips lower than handles at all times. c. Used separate swab for each stroke, discarding each swab after use. d. Cleaned drain if present, without reaching over cleaned incision. Swabbed skin around drain using full or half circles, working from drain site outwards, using separate swab for each wipe. e. Supported drain while cleaning. f. Dried surrounding skin with dry gauze swabs. Did not dry incision or wound. 			
<p>7. Applied dressings to drain site and the incision.</p> <ul style="list-style-type: none"> a. Placed a pre-cut 4 x 4 gauze snugly around the drain. b. Applied the sterile dressings one at a time over the drain and the incision. Placed the bulk of the dressings over the drain area and below the drain, depending on client's usual position. c. Applied the final surgipad. Removed and discarded gloves. Secured the dressing with tape or ties. Returned bed to lowest height. Performed hand hygiene. 			

SKILL 13.4: Using an Incentive Spirometer

Procedure	Performed		Comments
	Yes	No	
<p>1. Gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client.</p>			

2. Prepared client. a. Assisted client to an upright position in bed or on chair.			
Variation: Flow-Oriented Incentive Spirometer			
1. Instructed client to use the spirometer as follows: a. Hold spirometer in upright position. b. Exhale normally. c. Seal lips tightly around mouthpiece, take in a slow deep breath to elevate the ball and then hold breath for 2 seconds, increasing to 6 seconds. Avoid brisk low-volume breaths that snap the ball to the top of the chamber. d. Remove mouthpiece and exhale normally. e. Cough productively, as needed, after using spirometer. f. Relax and take several normal breaths before using the spirometer again. g. Repeat the procedure to a total of 10 breaths, encouraging the client to take progressively deeper breaths up to the maximum goal. h. Repeat series of breaths once each hour while awake.			
Variation: Volume-Oriented Incentive Spirometer			
1. Set spirometer to the “target” volume. 2. Instruct client to use spirometer as follows: a. Exhale normally. b. Seal lips tightly around mouthpiece; take in a slow deep breath until piston is elevated to predetermined level c. Hold breath for 6 seconds d. Remove mouthpiece and exhale normally. e. Cough productively, as needed, after using spirometer. f. Relax and take several normal breaths before using spirometer again. g. Repeat procedure to a total of 10 breaths. h. Repeat series of breaths once each hour while awake. i. Taught client to record top volume achieved at each hour.			
3. Performed hand hygiene.			

SKILL 7.1: Monitoring Intake and Output

Procedure	Performed		Comments
	Yes	No	
1. Gathered equipment and supplies. Introduced self, explained			

what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client.			
2. Measured all fluid intake (including oral, IV, fluid medications, tube feedings, and catheter or tube irrigants) according to hospital values.			
3. Recorded time and amount of fluids in the appropriate space on bedside form.			
4. Checked bedside I&O record for approximate amounts of fluid containers.			
5. Totaled 8 or 12-hour shift fluid intake on bedside I&O record.			
6. Completed 24-hour intake record by adding together all shift totals.			
7. Donned clean gloves to measure output from all sources.			
8. Emptied urinal, bedpan, or drainage bag into client's graduated container. Documented all measurements of output fluids.			
9. Drained urine collection bag at end of shift into measuring container.			
10. If the client was incontinent of urine, estimated and recorded these outputs. Counted and weighed diapers or incontinent pads dry and soiled.			
11. If specified, recorded other sources of output, for example vomitus, liquid stool, gastric tube drainage, or wound drainage.			
12. Performed hand hygiene.			

Clinical:

Perioperative Care

FOLLOW THE CLIENT

Associated Concepts:

Perioperative Care, Tissue Integrity, Infection

Related Concept Learning Outcomes

1. Describe activities of each perioperative phase.
2. Identify the various roles within each perioperative phase.
3. Demonstrate the nursing process in providing caring interventions across the life span for individuals undergoing a surgical procedure.

The purpose of this activity is to identify nursing factors related to following an assigned client through the phases of a surgical procedure.

Client diagnosis:

Client scheduled surgical procedure:

Instructions: Complete the following information on your assigned client undergoing a surgical procedure:

A. Background understanding

Identify the role of the following members of the interdisciplinary team for a surgical client:		
Team Member	Role	Needed for Your Client?
Anesthesia personnel		
Circulating nurse		
Interpreter		
Perioperative nurse		
Preoperative nurse		
Postoperative nurse		
Surgeon/physician		
Surgical tech/first assistant		
Other discipline		

B. Preparing to go to surgery

1. Review your client's chart. Which diagnostic tests were needed for your client?

Diagnostic Test	Needed for Your Client?		Rationale for Why Test Needed
	yes	no	
Prothrombin time (PT)			
Partial thromboplastin time (PTT)			
Bleeding time			
Hematocrit (Hct)			
Hemoglobin (Hgb)			
Red blood cells (RBC)			
Urinalysis			
Chest x-ray (CXR)			
Electrocardiogram (ECG)			
Blood urea nitrogen (BUN)			
Type and crossmatch blood			
Electrolyte panel			
Pregnancy test			
Blood glucose			

2. **Safety measures:** Which of the following safety measures were implemented for your client?

Preoperative Measure	Needed for your Client?	
	Yes	no
Bowel preparation		
Use of OTC (over-the-counter) medications		
Hold any prescribed medications		
Administer special prescribed medications		
Maintain NPO (nothing by mouth) status		
Detach removable items and indicate presence of implanted devices		
Implement skin preparation		
Implement special orders (intravenous line, nasogastric tube, etc.)		
Implement urinary preparation (Void? Indwelling catheter?)		
Implement safety protocols (side rails, preoperative checklist, surgical		

safety checklist, etc.)		
Provide preoperative teaching (turn, cough, deep breath, incentive spirometer, splinting incision, etc.)		
Documentation of nursing assessments, interventions, client responses		

3. Handoff report

- a. What was included in the handoff report to the surgical nursing staff?

- b. What was included in the handoff report to the post-anesthesia unit nursing staff?

- c. What was included in the handoff report to the postoperative unit nursing staff?

4. Postoperative assessment

What assessments were done in the first 1 to 2 hours following the client’s return to the postoperative unit?

5. Monitoring for potential complications

- 1. Describe potential intraoperative complications. Identify the nursing care associated with each potential complication.

Potential Intraoperative Complication	Description	Associated Nursing Care
Hypoxemia		
Hypothermia		
Malignant hyperthermia		
Paresthesia		
Pressure ulcers		
Hemorrhage, hypovolemia, hypovolemic shock		
Hypervolemia		

C. **Describe postoperative care.** Identify the nursing care associated with each identified factor.

Postoperative Factor	Associated Nursing Care
Respiratory: Atelectasis Pneumonia Oxygen support	

Pulmonary embolus	
Circulatory: Thrombophlebitis Hemorrhage/hypovolemic shock	
Central nervous system: Decreased level of consciousness (LOC)	
Pain and comfort	
Position and activity	
Urinary elimination	
Bowel elimination: Ileus Constipation	
Fluid and electrolyte status	
Nutritional status	
Operative site: Dressing Drains	
Specific to this client	

D. What if?

- a. Your client has a latex allergy?
- b. Your client does not understand the surgery procedure scheduled?
- c. Your client has been taking aspirin and ibuprofen daily for arthritis pain?
- d. Your client is diabetic and takes insulin daily?
- e. Your client's wound has dehiscence/evisceration?

Perioperative Care, Tissue Integrity, Infection

WHAT'S MY LINE?

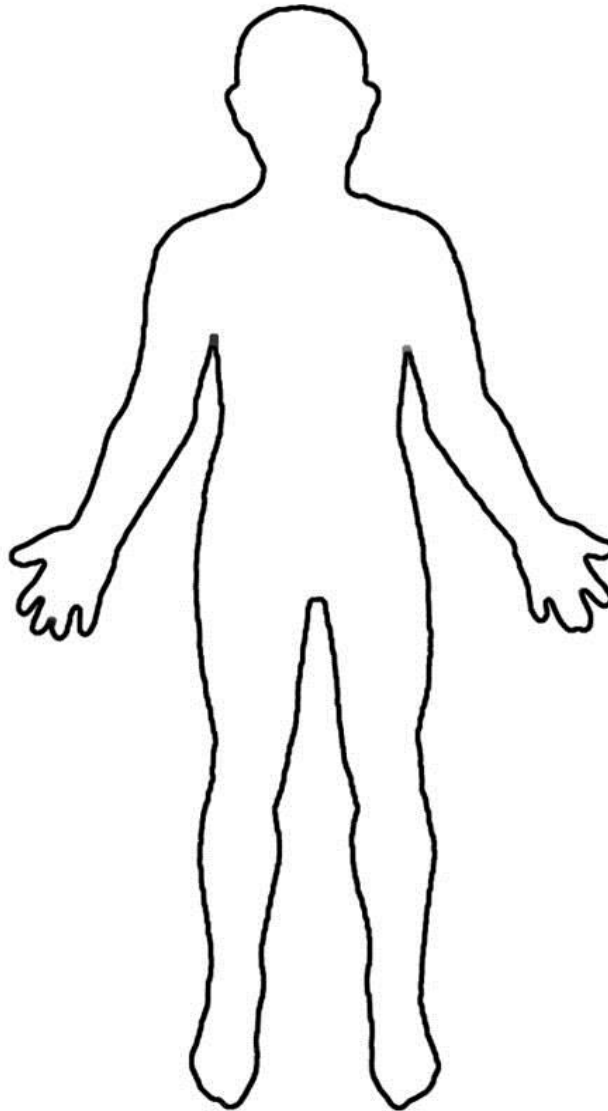
Assessment of Support Devices

Associated Concepts:

Perioperative
Integrity,

Client Diagnosis:

Instructions: (1) After client assessment, draw support lines or devices client on the body
On the grid provided, purpose, nursing care, prevention measures each line or device.



Care, Tissue
Infection

completing your
and label all
being used by your
outline below. (2)
describe the
and infection
associated with

Support Line/Device	Purpose	Nursing Considerations	Infection Prevention Measures

Week 4

OBJECTIVES:

Assess patients with uncomplicated acute and chronic alterations in immunity, infection, and inflammation.

Analyze collected data as it pertains to uncomplicated acute and chronic alterations in immunity, infection, and inflammation.

Use collected data to formulate a plan of care as it pertains to uncomplicated acute and chronic alterations in immunity, infection, and inflammation.

Implement the plan of care in uncomplicated acute and chronic alterations in immunity, infection, and inflammation.

Evaluate goals and therapeutic outcomes in uncomplicated acute and chronic alterations in immunity, infection, and inflammation.

Simulations

Theory:

Please review videos prior to class.

vSim Kenneth Bronson

Pneumonia: Severe Reaction to Antibiotic

Lab:

Objectives:

Demonstrate regulating an infusion flow rate.

Demonstrate adding medications to IV fluid containers

Demonstrate how to administer intermittent IV medications using a secondary set

Demonstrate administering intravenous medications using an IV push

SKILL 7.4: Regulating Infusion Flow Rate			
Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order and gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client and self, including raising bed to appropriate height for procedure.			

2. Closed regulating clamp on the set tubing before hanging bag.			
3. Spiked IV solution bag.			
4. Filled drip chamber to minimum 1/3 full.			
5. Primed tubing by opening regulating clamp slowly and allowing tubing to fill with IV solution.			
6. Checked that client's venipuncture site was free from signs of vein irritation or infiltration.			
7. Connected administration set tubing to established infusion site.			
8. Checked manufacturer's drip-rate calibration on administration set package.			
9. Checked physician's order for amount of fluid to be delivered per unit of time.			
10. Calculated flow rate.			
11. Noted drip chamber; counted the drops in 1 minute.(or in 15 seconds and multiplied by 4)			
12. Adjusted tubing clamp until the chamber drips the desired number of drops per minute (or 15-second increment).			

SKILL 2.42: Adding Medications to Intravenous Fluid Containers

Procedure	Performed		Comments
	Yes	No	
1. Checked medication order. Gathered MAR, medication, correct solution container, antiseptic swabs, syringe-5-10 mL, and IV additive label. Removed appropriate medication from medication drawer, shelf, or refrigerator. Checked MAR with medication label to verify correct medication and expiration date. Signed out controlled medicines following agency policy.			
2. Checked the medication label three times for safety: a. When it was taken from medication drawer b. Compared it to the MAR c. Compared it to the MAR in client's room or when ready to leave medication preparation area			
3. Performed hand hygiene. Checked MAR and client allergy			

status. Determined if specific assessment was indicated before administering medication (e.g., vital signs) and assessed client.			
4. Prepared correct amount of medication without contaminating it. Confirmed compatibility of the drugs and solutions being mixed.			
5. Drew up medication into syringe, with a filter needle if indicated, according to directions on medication insert (or PDR).			
6. Wiped injection port on IV bag with antimicrobial swab. Injected medication into bag while maintaining aseptic technique.			
7. Mixed IV solution and medication by gently agitating bag to mix thoroughly. Affixed medication label to IV bag. Prime the tubing to fully flush the IV solution through the new tubing and verify no air bubbles are present in the tubing before connecting to the IV access.			
8. Clamped IV tubing. Removed spike from current IV container and inserted in the new container with IV tubing and hang the IV. Regulated infusion rate as ordered.			
9. Discarded old container appropriately.			
10. If adding medication to existing infusion, determined IV solution in the container was sufficient for adding medication.			
11. Closed the infusion clamp and wiped medication port with disinfectant swab.			
12. Supported and stabilized the container, inserted the syringe into the port, and injected the medication.			
13. Removed the bag from the pole and gently rotated it to mix the medication and solution.			
14. Apply medication label to container.			
15. Dispose of supplies according to agency practice.			
16. Performed hand hygiene.			

SKILL 2.43: Administering Intermittent Intravenous Medications Using a Secondary Set

Procedure	Performed		Comments
	Yes	No	

<p>1. Checked medication orders. Gathered MAR, 50-250-mL infusion bag with medication, secondary administration set, antiseptic swabs, and sterile needle if system is not needleless. Removed appropriate medication from refrigerator. Checked MAR with medication label to verify correct medication and expiration date. Signed out controlled medicines following agency policy.</p>			
<p>2. Checked the medication label three times for safety:</p> <ul style="list-style-type: none"> a. When it was taken from medication drawer b. Compared it to the MAR c. Compared it to the MAR in client's room or when ready to leave medication preparation area 			
<p>3. Introduced self and verified client's identity with two identifiers. Explained procedure and how it will help. Provided privacy. Performed hand hygiene. Checked MAR and client allergy status. Determined if specific assessment was indicated before administering medication (e.g., vital signs) and assessed client.</p>			
<p>4. Prepared correct amount of medication without contaminating it. Confirmed compatibility of the drugs and solutions being mixed. <i>Note: If medication is incompatible with primary IV solution, temporarily discontinued primary infusion. Flushed client's injection port, initiated a normal saline (or other compatible) solution as the primary, then proceeded with "piggyback" into the "new" compatible primary. When completed, restarted original primary solution (use new needleless cannula to access client's injection site).</i></p>			
<p>5. Closed clamp on secondary infusion tubing, spiked medication bag and fully flushed the tubing, making sure no air was trapped in the tubing. Did not waste any medication during this process.</p>			
<p>6. Hung secondary container above level of primary infusion container. Used the extension hook to power primary infusion for piggyback setup as required.</p>			
<p>7. Attached the secondary infusion to the primary infusion in the port furthest from the client for a piggyback alignment and the port closest to the client for a tandem setup.</p>			
<p>8. Back primed the secondary tubing if primary and secondary fluids compatible.</p>			
<p>9. Programmed the IV pump for the correct infusion rate of the medication. Unclamped the secondary IV tubing and checked that solution is infusing.</p>			
<p>10. When medication infusion completed, regulated rate of primary solution.</p>			

11. Left secondary bag and tubing in place for future administration or discarded as appropriate.			
12. Performed hand hygiene.			
13. Documented medication on MAR and in client's record, including assessment findings, if indicated.			
14. Continued to assess client for desired drug action and possible side effects or adverse reactions.			

SKILL 2.44: Administering Intravenous Medications Using IV Push

Procedure	Performed		Comments
	Yes	No	
1. Checked medication order. Gathered MAR, medication, sterile syringe, antiseptic swabs, clean gloves, and watch with second hand or digital readout. Removed appropriate medication from medication drawer, shelf, or refrigerator. Checked MAR with medication label to verify correct medication and expiration date. Signed out controlled medicines following agency policy.			
2. Checked the medication label three times for safety: <ul style="list-style-type: none"> a. When it was taken from medication drawer b. Compared it to the MAR c. Compared it to the MAR in client's room or when ready to leave medication preparation area 			
3. Identified self and verified client identity with two identifiers. Explained procedure and how it will help. Provided privacy. Performed hand hygiene and donned gloves. Checked MAR and client allergy status. Determined if specific assessment was indicated before administering medication (e.g., vital signs) and assessed client.			
4. Prepared correct amount of medication without contaminating it. Calculated dosage accurately and recommended delivery rate for medication.			
5. <i>If Using a Primary Infusion Line to Give Medication:</i> <ul style="list-style-type: none"> a. Assessed primary IV fluid for compatibility with ordered IV push medication. Cleaned primary tubing injection port closest to client. 			

<ul style="list-style-type: none"> b. Inserted medication syringe cannula into line port. c. Pinched primary tubing between port and infusion bag. Flushed line with NS flush if indicated. Administered medication by injecting medication slowly in calculated increments (e.g., inject 1/4 of medication over a 20-second period). Always checked literature to determine injection times for specific medication. d. After injecting small increments, un-pinched primary tubing to allow flushing of medication. Observed client for any adverse effects. e. Delivered next increment, using your watch and timing drug injection according to the drug insert instructions. <ul style="list-style-type: none"> f. Disconnected syringe when medication injection was completed. Re-flushed with NS if indicated. 			
<p><i>If Using an IV Lock to Give Medication:</i></p> <ul style="list-style-type: none"> a. Prepared two syringes of sterile normal saline (or heparin if indicated by agency policy) as flushes. b. Cleaned injection port with antiseptic swab. Inserted needle or syringe containing normal saline and aspirated for blood. c. Flushed the saline lock with the saline and removed the needle or syringe. d. Cleaned the lock's injection port and inserted syringe containing prepared medication into port. e. Injected medication at recommended rate of infusion. Used a watch to be accurate with timing. f. Removed the syringe when all medication had been administered. g. Cleaned the port and attached the second saline syringe and flushed the port. 			
6. Discarded equipment in appropriate containers.			
7. Removed gloves and performed hand hygiene.			
8. Documented medication on MAR and in client's record, including assessment findings, if indicated.			
9. Continued to assess client for desired drug action and possible side effects or adverse reactions.			

Clinical:

Infection

WHY WAS IT ORDERED?

Associated Concepts:

Infection

The purpose of this activity is to evaluate client orders, determine the relationship to the concept of infection, and discuss appropriate nursing considerations for each order.

Related Concept Learning Outcomes

1. Describe diagnostic and laboratory tests to determine the individual's infection status.
2. Compare and contrast independent and collaborative interventions for clients with infection.

Client Diagnosis:

Instructions: Search through the orders in the client's medical record and identify how each order is related to the concept of infection. Consider medications, diagnostics, and collaborative considerations. Identify nursing considerations for each order. Fill out the following table.

Order	How is the order related to infection?	Nursing considerations related to each order

Infection; Immune

PROTECTIVE DETAILS!

Part 1: Instructions: Match the following isolation precautions to the correct descriptions.

Isolation Precaution	Description
a. Standard precautions	_____ Used for known or suspected illness transmitted by particles > 5 microns
b. Droplet precautions	_____ Used for known or suspected illnesses easily transmitted by direct client contact or items in the client environment
c. Airborne precautions	_____ Used for known or suspected illness transmitted by airborne particles <5 microns
d. Contact precautions	_____ Used in the care of all hospitalized individuals regardless of diagnosis or possible infection status. Includes protection from blood and body fluids.

Part 2: Instructions: Identify the type of isolation precautions that would be implemented for each case vignette. Complete the table by identifying the PPE that would be implemented. Note that the type of isolation may be used more than once.

Case vignette	Type of Isolation Precautions	PPE Needed (or per agency protocol)
1. You are caring for a 68-year-old client admitted with a cough and fever.		
2. You are caring for a client with a confirmed diagnosis of influenza.		
3. You are caring for an 18-month-old diagnosed with otitis media.		
4. You are caring for a 57-year-old homeless client diagnosed in the emergency department with tuberculosis.		
5. You are caring for a postoperative client who is having diarrhea. Lab results show <i>Clostridium difficile</i> .		

Part 3: Instructions: Review the proper steps of applying PPE. Demonstrate correct implementation of PPE by putting on the appropriate PPE indicated for each case. Remember to apply PPE in the correct order, and remove and dispose of PPE correctly between cases.

Concepts: Infection; Immune; Tissue integrity

BREAK THE CHAIN OF INFECTION

Associated Concepts:

Infection; Immune; Tissue integrity

The purpose of this activity is to review features related to infection prevention

Related Concept learning Outcomes

1. Perform common procedures used to assess blood pressure.
2. Identify client risk factors related to blood pressure measurement.

Instructions: Complete the following:

1. Match the following components of the Chain of Infection.

Component	Description
_____ 1. Infectious agent	a. Method by which a microorganism is transferred from an infectious agent to a host
_____ 2. Reservoir	b. Microorganism that causes an infection
_____ 3. Portal of exit	c. Person at risk for infection because of inadequate defenses
_____ 4. Mode of transmission	d. Place where microorganism can survive and possibly multiply
_____ 5. Portal of entry	e. Where the microorganism enters the body
_____ 6. Susceptible host	f. Pathway that leads to exit from reservoir

2. Match the following examples of components the Chain of Infection.

Component	Description
_____ 1. Infectious agent	a. Touching, coughing, toys, insect bite
_____ 2. Reservoir	b. Garbage, sinks, toilets, linens with virus, bacteria, or fungus
_____ 3. Portal of exit	d. Chronic illness, young, elderly, immunocompromised
_____ 4. Mode of transmission	e. Skin, respiratory system, urine, feces, blood
_____ 5. Portal of entry	f. Respiratory tract, urinary tract, mucous membrane
_____ 6. Susceptible host	

3. Identify mechanisms to break the Chain of Infection.

Component	Description
_____ 1. Infectious agent	a. Immunizations up to date, follow healthy lifestyle
_____ 2. Reservoir	b. Use soap and water; use antibiotics appropriately
_____ 3. Portal of exit	c. Drainage tubes below insertion site, perineal care
_____ 4. Mode of transmission	d. Clean surfaces with correct substance, change soiled linens
_____ 5. Portal of entry	e. Maintain isolation precautions
_____ 6. Susceptible host	f. Maintain integrity of closed urinary systems, wound dressings

4. For your assigned client, identify chain of infection concerns.

5. Complete the following assessment for your assigned client:

Factors that delay healing or increase risk of wound infection	How affects healing or wound infection	Factor present in your client?	
		Yes	no
Increased age			
Edema			
Fever			
Lifestyle			
Medications			
Multiple wounds			
Nutrition			
Tissue perfusion			

6. Identify the role of body defenses protecting your client.

Defense Mechanism	Role in Your Client
Primary defenses Skin and mucous membranes Respiratory system GI system Circulatory system GU systems	
Secondary defenses Fever Inflammatory response	
Tertiary defenses Immune response Active immunity Passive immunity	

7. Identify measures from your assigned client's plan of care that relate to infection/risk for infection.

HAND HYGIENE MONITORING SURVEY

Client care area: _____ Date: _____

Initials of Monitor: _____

Observation	Time	HH before client contact				HH after client or client area contact				Gloves needed?		Gloves worn?		HH after gloves removed?		
		yes HR	yes HW	no	N/A	yes HR	yes HW	no	N/A	yes	no	yes	no	yes HR	yes HW	no
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
Total																

HH = Hand Hygiene

HR = Alcohol-based Hand Rub Hygiene

HW = Hand Wash Soap Hygiene

N/A = Not applicable

Observation = Number of observed interaction between caregiver and client

WASH IN—WASH OUT: HAND HYGIENE SUPER SLEUTH

Associated Concepts:

Infection; Immune; Health, Wellness and Illness

The purpose of this activity is to monitor compliance with hand hygiene practice. Hand hygiene refers to the cleansing of hands by using an alcohol-based hand rub or washing hands with soap and water.

Instructions: Part 1: Observe your assigned fellow student classmates. Record the observed occasions when hand hygiene (HH) is properly used during client care activities. Example of hand hygiene opportunities include before touching a client; before performing a procedure; after removing gloves; after touching the client, environment, or objects in client's area.

Part 2: Complete the following:

1. Why is hand hygiene considered to be a critical part of client care?
2. How would you summarize your completed observations?
3. Do you think that hand hygiene compliance was affected when the person knew they were being observed?

Key:

Hand hygiene (HH) before touching the client

- If HH performed with an alcohol hand rub before touching a client, place an X in the box labeled yes—HR
- If HH performed with soap and water before touching a client, place an X in the box labeled yes—HW
- If no HH before touching client, place an X in the box labeled no
- If caregiver enters room but does not touch the client so HH not necessary, place an X in the box labeled N/A

Hand hygiene (HH) after touching the client, environment, or objects

- If HH performed with an alcohol hand rub after touching client or environment, place an X in the appropriate box (yes—HR or yes—HW)
- If no HH after touching client or environment, place an X in the box labeled no
- If caregiver enters room but does not touch anything or HH not necessary, place an X in the box labeled N/A

Gloves worn

- If gloves worn before touching client or environment objects, place X in box labeled yes
- If gloves not put on in appropriate situation, place X in box labeled no
- If HH performed with an alcohol hand rub after wearing gloves, place an X in the appropriate box (yes—HR or yes—HW)

HAND HYGIENE MONITORING SURVEY

Client care area: _____ Date: _____

Initials of Monitor: _____

Observation	Time	HH before client contact				HH after client or client area contact				Gloves needed?		Gloves worn?		HH after gloves removed?		
		yes HR	yes HW	no	N/A	yes HR	yes HW	no	N/A	yes	no	yes	no	yes HR	yes HW	no
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
Total																

HH = Hand Hygiene

HR = Alcohol-based Hand Rub Hygiene

HW = Hand Wash Soap Hygiene

N/A = Not applicable

Observation = Number of observed interaction between caregiver and client

WASH IN—WASH OUT: HAND HYGIENE SUPER SLEUTH

Instructions: Part 2: Analyze the results of your observations on the HH grid. Reflect on the following:

4. Why is hand hygiene considered to be a critical part of client care?
5. What factors can impact effective hand hygiene in the practice areas?
6. How would you summarize your completed observations?
7. Do you think that hand hygiene compliance was affected when the person knew they were being observed?
8. Did any factors create a barrier to being able to properly complete hand hygiene?
9. Write a brief outline of how you would address noncompliance with appropriate hand hygiene using the following:
 - a. Fellow nurse
 - b. Unlicensed assistive personnel
 - c. Alternate discipline staff such as radiology technician or dietary aide
 - d. Healthcare provider such as a physician or nurse practitioner
 - e. Client visitor
10. How will this exercise affect your personal use of hand hygiene?

Week 5

OBJECTIVES:

Assess patients with uncomplicated acute and chronic alterations in cellular regulation.

Analyze collected data as it pertains to uncomplicated acute and chronic alterations in cellular regulation.

Use collected data to formulate a plan of care as it pertains to uncomplicated acute and chronic alterations in cellular regulation.

Implement the plan of care in uncomplicated acute and chronic alterations in cellular regulation.

Evaluate goals and therapeutic outcomes in uncomplicated acute and chronic alterations in cellular regulation.

Theory:

Please review videos prior to class.

The following activity is to be done prior to class and handed in at the start of class.

Ticket to class:

Go to the National Institutes of Health Web page for prostate cancer. Choose two of the treatment options. Take a piece of paper and fold it in half. Write down the different treatment options including a description of each. Write down the pros and cons of choosing either option and which of the two options you would choose for yourself or a loved one, explaining why you would make that choice.

Access the Web site: www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001418

Lab:

Objectives:

Demonstrate maintaining continuous bladder irrigation

Demonstrate applying a fecal ostomy pouch.

SKILL 6.18: Maintaining Continuous Bladder Irrigation			
Procedure	Performed		Comments
	Yes	No	
1. Checked physician's orders and client care plan.			
2. Performed hand hygiene and donned clean gloves. Provided comfort and safety for client..			
3. Identified self and verified client's identity.			

4. Explained procedure to client and provided privacy.			
5. Assessed client for presence of triple lumen indwelling catheter and drainage bag. Performed hand hygiene and donned clean gloves. Provided comfort and safety for client.			
6. Removed protective covering from spike on tubing, and inserted spike into insertion port of solution container. Used aseptic technique.			
7. Hung irrigating solution container on IV pole and primed tubing. Height of pole is usually 60 to 90 cm (24–36 in.) above bladder. a. Removed protective cover from end of tubing using aseptic technique. b. Opened roller clamp, and allowed irrigating solution to run through tubing until all air is expelled.			
8. Connected tubing to catheter irrigating (indwell) lumen using aseptic technique.			
9. Checked for patency of catheter; ensured there is an absence of clots or foreign bodies that may obstruct catheter.			
10. Adjusted drip rate of irrigating solution by adjusting the clamp on the tubing to increase or decrease based on urine outflow color.			
11. Checked for bladder distention or abdominal pain; noted urine color.			
12. Removed and discarded gloves. Performed hand hygiene and donned new clean gloves.			
13. Monitored urine output at least every hour to observe patency of system.			
14. Emptied drainage bag as needed. Subtracted amount of irrigant infused from total output to obtain urine output, and record in patient I&O.			
15. Maintained catheter traction if secured to thigh.			
16. Removed gloves and performed hand hygiene.			

Clinical:

Concept maps on different cancers and treatments.

Week 6

OBJECTIVES:

Assess patients with uncomplicated acute and chronic alterations in metabolism.

Analyze collected data as it pertains to uncomplicated acute and chronic alterations in metabolism.

Use collected data to formulate a plan of care as it pertains to uncomplicated acute and chronic alterations in metabolism.

Implement the plan of care in uncomplicated acute and chronic alterations in metabolism.

Evaluate goals and therapeutic outcomes in uncomplicated acute and chronic alterations in metabolism.

Theory:

Please review videos prior to class.

vSim Skyler Hansen Diabetes: hypoglycemia

Lab:

Objectives:

Describe how to use a sliding scale.

Demonstrate how to mix medications using one syringe.

SKILL 2.23: Mixing Medications Using One Syringe

Procedure	Performed		Comments
	Yes	No	
1. Checked medication orders. Gathered MAR, medications,			

antiseptic swabs, and appropriate syringe and needle for injection. Performed hand hygiene.			
---	--	--	--

2. Checked MAR with medication labels to verify correct medication. Selected appropriate injection site.			
3. Followed the three checks for administering medications. Read the medication labels: a. When it was taken from medication drawer b. Compared it to the MAR c. Compared it to the MAR in client's room or when ready to leave medication preparation area.			
4. Prepared the medication ampule or vial for drug withdrawal. a. Rotated vials to mix the solution as needed b. Inspected solution for clarity unless normally cloudy c. Cleaned tops of the vials with antiseptic swabs.			
5. Withdrew the medications without contaminating them.			
<i>Mixing Medications from Two Vials</i>			
1. Drew up a volume of air in syringe equal to volume of medications to be withdrawn from both vials A and B.			
2. Injected a volume of air equal to volume of medication to be withdrawn into vial A. Withdrew from vial A and injected remaining air into vial B.			
3. Withdrew required amount of medication from vial B.			
4. Used newly attached sterile needle and withdrew required medication amount from vial A. The syringe now contains a mixture of medications from vials A and B.			
Variation: Mixing Insulins			
1. Followed steps for combining medications in one syringe using two vials. Rotated cloudy NPH insulin in palms of hands to mix solution.			
2. Injected air in NPH insulin vial first, then injected air in regular insulin vial. Withdrew solution from regular insulin vial first, then withdrew solution from NPH insulin vial.			
3. Withdrew only the ordered amount from each vial and did not create air bubbles in the syringe.			
4. If withdrew excess insulin from either vial, discarded the syringe and began the procedure again.			
5. Followed protocol for administration of medications by subcutaneous injection.			

Clinical:

MY DIET IS SPECIAL

Associated Concepts:

Nutrition; Digestion; Health, Wellness and Illness

The purpose of this activity is to review therapeutic diet options.

Related Concept Learning Outcomes

1. Identify common therapeutic diets to meet nutritional needs of a client.
2. Identify a plan to meet the nutritional needs for the individual.

Instructions: Review a variety of potential special diets by completing the following grids:

Match the following special diets to their therapeutic purpose and example food choices				
Description	Example			
<u> 2 </u>	<u> h </u>	NPO	1. Maintains acceptable serum glucose levels	a. Clear broth, apple juice
<u> </u>	<u> </u>	Clear liquid	2. Restricted oral food and fluid intake	b. Avoid high-glycemic foods such as pasta, bread
<u> </u>	<u> </u>	Full liquid	3. Needed for clients with high metabolism needs such as wounds, mania	c. Mashed potatoes, ground meat
<u> </u>	<u> </u>	Soft	4. Lowers cholesterol or triglycerides	d. Add protein powders to soups
<u> </u>	<u> </u>	Pureed	5. Foods processed in a blender but can be scooped and mounded on a plate	e. Salt-free seasonings, fresh fruits and vegetables
<u> </u>	<u> </u>	Regular	6. Any food as tolerated by client	f. Any food, encourage foods to facilitate healing
<u> </u>	<u> </u>	Antigen avoidance	7. Foods that avoid allergies or intolerance	g. Yogurt, pudding
<u> </u>	<u> </u>	Calorie restricted	8. Prescribed for clients with fluid retention	h. Remove water pitcher, perform oral care
<u> </u>	<u> </u>	American Diabetes Association diet	9. Provides for hydration and simple carbohydrates	i. Foods free of gluten, lactose, peanuts or other trigger foods
<u> </u>	<u> </u>	High calorie–high protein	10. Reduced number of calories, such as 1,800 calories	j. Limit meats and dairy products
<u> </u>	<u> </u>	High fiber	11. Increases indigestible waste	k. Limit lean meats, eggs, fried foods, mayonnaise
				l. Raw vegetables, whole grain bread

___	___		through large intestines	m. Avoids nuts and seeds, high fiber foods n. Skim milk, baked foods o. Smoothie, food-processed meat
___	___	Low fat	12. Chopped, shredded, easily chewed and digested foods	
___	___	Low residue	13. Liquids you can see through, opaque fluids, foods that are liquid at room temperature	
___	___	Sodium restricted	14. Foods have reduced fiber and cellulose to decrease GI mucosal irritation	
___	___	Protein restricted	15. Used to limit need to metabolize protein	

Match the following client conditions to the appropriate therapeutic diet	
___ NPO	a. Undiagnosed abdominal pain
___ Clear liquid	b. Newly diagnosed diabetic
___ Full liquid	c. Immediate postoperative period
___ Soft	d. Heart failure
___ Pureed	e. Coronary artery disease
___ Regular	f. Burns over 40% of the body
___ Antigen avoidance	g. Undiagnosed abdominal pain
___ Calorie restricted	h. Ill-fitting dentures
___ American Diabetes Association diet	i. Annual physical exam for healthy adult
___ High calorie–high protein	j. Celiac disease
___ High fiber	k. Mouth sores from chemotherapy treatment
___ Low fat	l. BMI of 37
___ Low residue	m. Cirrhosis
___ Sodium restricted	n. Constipation, diverticulosis
___ Protein restricted	o. Second uncomplicated postoperative day
	p. Crohn disease

1. What diet is currently prescribed for your assigned client?
2. From a nutritional and medical standpoint, why is this diet prescribed for the client?
3. Based on your client’s prescribed diet, obtain a diet menu for your client (from dietary department). Create a 2-day diet plan for your client, meeting special diet needs and calorie amount needed to maintain their current weight. Include appropriate amount of fluid intake.

Nutrition; Digestion; Health, Wellness and Illness

NUTRITION—DIETS

Associated Concepts:

Nutrition; Digestion; Health, Wellness and Illness

The purpose of this activity is to review therapeutic diet needs for an assigned client and complete nutrition education for a client.

Related Concept learning Outcomes

1. Identify commonly occurring alterations in nutrition and their related therapies.
2. Describe the common assessment and diagnostic procedures to determine the individual's nutritional status.
3. Identify a plan to meet the nutritional needs for the individual.

Instructions: Review assessment data related to the nutritional status of your assigned client. Complete the following:

1. Client age group _____
2. Underlying medical diagnosis (es) _____

3. Your assessment findings related to nutritional status:
 - a. Vital signs:
 - b. Height/weight:
 - c. Cardiac/respiratory:
 - d. GI system:
 - e. Musculoskeletal:
4. Review of client diagnostics related to nutritional status:

Diagnostic Test	Normal Range	Client Value	Relationship to Nutritional Status
Height			
Weight			
BMI calculation			

RBC count			
Hgb			
Hct			
Serum glucose			
Serum albumin			
Total protein			
Cholesterol			
Other:			
Diet intake amount			

5. What diet is currently prescribed for the client?
6. What is the goal diet for this client at discharge (or long-term)?
7. What risk factors for impaired nutritional status does this client have?
8. In partnership with your client, create a goal to meet identified nutritional needs with any barriers reviewed. Include any special diet considerations or calorie requirements.

Create an educational plan for your assigned client, present the material, and evaluate the experience. Education may include agency brochures, link to Web games for children, review of MyPlate materials for appropriate age group, consultation with dietitian for specialty diet preferences such as vegetarian, student-created menu or information, and so forth.

Week 7

OBJECTIVES:

Assess patients with uncomplicated acute and chronic alterations in digestion and elimination.

Analyze collected data as it pertains to uncomplicated acute and chronic alterations in digestion and elimination.

Use collected data to formulate a plan of care as it pertains to uncomplicated acute and chronic alterations in digestion and elimination.

Implement the plan of care in uncomplicated acute and chronic alterations in digestion and elimination.

Evaluate goals and therapeutic outcomes in uncomplicated acute and chronic alterations in digestion and elimination.

Theory:

Please review videos prior to class.

Lab:

Objectives:

Demonstrate inserting a rectal tube.

Demonstrate administering an enema.

Demonstrate performing urinary catheterization.

Demonstrate performing catheter care and removal.

Demonstrate providing suprapubic catheter care.

Demonstrate performing ostomy care and obtaining a specimen.

SKILL 6.23: Inserting a Rectal Tube			
Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order. Gathered equipment. Introduced self and verified client's identity. Provided privacy, explained procedure and how results would be used. Performed hand hygiene. Provided comfort and safety for client.			
2. Placed client on left side in a recumbent position and			

draped.			
3. Placed bed protector under client.			
4. Donned gloves.			
5. Lubricated the proximal end of the rectal tube with water-soluble lubricant.			
6. Gently separated buttocks, and asked client to take in a deep breath and let it out slowly. Gently inserted the tube into the client's rectum, past the external and internal anal sphincters 5 to 10 cm (2–4 inches) in adults, 2.5 to 4 cm (1–3 inches) in children.			
7. With adults, gently taped the tube in place, using hypoallergenic paper tape. With children, held the tube in place manually.			
10. Removed and discarded gloves. Performed hand hygiene.			

SKILL 6.25: Administering an Enema

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's order. Gathered equipment. Introduced self and verified client's identity. Provided privacy, explained procedure and how results would be used. Performed hand hygiene. Provided comfort and safety for client.			
2. Large Volume: Filled water container with 750–1000 mL of lukewarm solution, 105°–110°F. Small Volume: Obtained prepackaged enema solution.			
3. Lubricated about 5 cm (2 inches) of the tip of tubing with generous amount of water-soluble lubricant.			
4. Allowed solution to run through tubing until air was removed. Clamped tube.			
5. Hung container on IV pole next to bed.			
6. Raised bed to HIGH position, and lowered side rails on side working on.			

7. Donned gloves.			
8. Placed bed protector under client.			
9. Placed bedpan within easy reach, or placed commode chair near bed.			
10. Assisted client to a left lateral position, with right leg acutely flexed.			
11. Draped client with bath blanket.			
12. Gently spread buttocks, instructed client to take a slow breath, and inserted tubing 7 to 10 cm (3–4 in.)			
13. If resistance was encountered at the internal sphincter, asked the client to take a deep breath, then ran a small amount of solution through the tube. Did <i>not</i> force tube or solution entry. If resistance persists, ended the procedure and reported the resistance to the primary care provider and nurse in charge.			
14. Raised the solution container to a maximum height of 45 cm (18 in.) above rectum when giving a high enema and 30 cm (12 in.) when giving a low enema.			
15. Opened regulating clamp and allowed solution to flow slowly.			
16. Lowered solution container or momentarily clamped tubing if client experienced cramping, was unable to retain solution, or exhibited anxiety. Resumed infusion of solution at a slower rate after a few minutes.			
17. After instilling the solution, gently removed the tubing. Kept pressure on container while removing from rectum. Large Volume: Instructed client to hold solution for 30 minutes or as long as tolerated. Small Volume: Instructed client to hold solution 5–10 minutes.			
18. If using a plastic commercial container, roll it up as the fluid is instilled.			
19. When client felt desire to defecate or all solution had been instilled, closed the clamp and removed the enema tube from the anus. Encouraged client to retain the enema.			
20. Placed client on bedpan, elevated head of bed so that client could assume a sitting position on bedpan, or assisted to commode.			

21. Removed gloves, and performed hand hygiene.			
22. Provided privacy until client had expelled total volume of instilled solution. Instructed client not to dispose of feces because nurse needs to observe it.			
23. Donned clean gloves before removing bedpan, or assisted client to bed.			
24. Removed bedpan when client was ready, and took specimen if ordered. Emptied, cleaned, and replaced bedpan in proper storage area.			
25. Assisted client with perineal care, and helped client to assume a comfortable position.			
26. Removed gloves and performed hand hygiene.			

SKILL 6.15: Performing Urinary Catheterization			
Procedure	Performed		Comments
	Yes	No	
1. Gathered equipment. Introduced self, verified client's identity, explained procedure, why it is necessary, and how the client can help. Provided privacy. Performed hand hygiene and donned clean gloves. Provided comfort and safety for client and self. Adjusted bed to working height.			
2. Assisted client as needed to perform routine perineal care to cleanse the meatus from gross contamination. Removed gloves and performed hand hygiene. Donned new pair of clean gloves.			
3. Placed client in appropriate position and draped all areas except perineum. Female: supine with knees flexed, feet about 2 feet apart, and hips slightly externally rotated. Male: supine, thighs slightly abducted or apart			
4. Established adequate lighting. Stood on client's right if nurse was right-handed and on left if nurse was left-handed.			
5. If using a collecting bag and it was not contained in catheterization kit, opened drainage package and placed end of tubing within reach.			
6. Opened the catheterization kit.			
7. Placed a waterproof drape under the buttocks (female) or penis (male) without contaminating the center of the drape.			
8. Removed gloves. Performed hand hygiene. Applied sterile			

gloves.			
9. Organized the remaining supplies on sterile field: a. Saturated cleansing balls with antiseptic solution. b. Opened lubricant package. c. Removed specimen container and placed it nearby with lid loosely on top. d. Attached the prefilled syringe to the indwelling catheter inflation hub and tested the balloon. e. Lubricated the catheter 2.5 to 5 cm (1 to 2 in.) for females, 15 to 17.5 cm (6 to 7 in.) for males and placed it with the drainage end inside the collection container.			
10. Cleansed the meatus. a. For women: Spread the labia with non-dominant hand to visualize meatus. Did not allow the labia to close over cleaned meatus. Cleansed in anteroposterior direction using one cleansing ball for each wipe downward. Cleansed from lateral to center with last wipe over the meatus. b. For men: Grasped penis just below glans with non-dominant hand. Retracted foreskin if necessary. Cleansed in circular motion from meatus around glans to the base. Used a new ball each time for three more wipes.			
11. Inserted the catheter. a. Grasped catheter firmly 5 to 7.5 cm (2 to 3 in.) from tip. Asked client to take a slow deep breath and inserted catheter as client exhaled. b. If catheter became contaminated by touching labia on the female, foreskin on the male, or any other body part before entering the meatus, performed catheterization with a new sterile catheter. c. Advanced catheter 5 cm (2 in.) farther after urine begins to flow through it.			
12. Held catheter with non-dominant hand.			
13. For an indwelling catheter, inflated retention balloon with designated volume. a. Without releasing catheter, held inflation valve between two fingers of non-dominant hand while attaching syringe and inflating with dominant hand. b. Pulled gently on catheter until resistance was felt.			
14. Collected a urine specimen if needed.			
15. Allowed straight catheter to continue draining into urine receptacle.			

16. Examined and measured urine. Check agency policy for further instructions if more than 750 mL - 1,000 mL of urine drained from the bladder at one time.			
17. Removed straight catheter when urine flow stopped. For an indwelling catheter: a. Secured indwelling catheter leaving enough slack for usual movement to client's thigh. b. Secured collecting tubing to bed linens and hung bag below bladder level.			
18. Wiped the perineal area of any remaining antiseptic or lubricant. Replaced foreskin if retracted earlier. Returned client to comfortable position. Instructed client on positioning and moving with catheter in place.			
19. Discarded all used supplies in appropriate receptacles.			
20. Removed and discarded gloves. Performed hand hygiene.			

SKILL 6.16: Performing Catheter Care and Removal

Procedure	Performed		Comments
	Yes	No	
<i>Providing Catheter Care</i>			
1. Introduced self, verified client identity, explained procedure, and provided privacy. Performed hand hygiene and donned clean gloves. Provided comfort and safety for client.			
2. Placed client in supine position. Obtained a sterile urine specimen if ordered or recommended by agency protocol. Exposed perineal area to visualize the meatus easily.			
3. Cleansed urinary meatus with washcloth, soap and water.			
4. Dried area with towel.			
5. Removed and discarded gloves. Performed hand hygiene.			
6. Documented procedure, assessment data, and client's response in client's record.			
<i>Emptying a Collection Bag</i>			
1. Applied clean gloves. Obtained measuring container.			

2. Placed paper towel on floor below bag.			
3. Without touching the end, removed drainage tube from protective housing and pointed tube into container. Released clamp.			
4. After bag emptied completely, cleansed end of tube according to facility policy. Replaced it in protective housing.			
5. Noted volume and characteristics of urine. Emptied container into toilet if urine did not need to be saved.			
6. Rinsed container and returned it to storage.			
7. Removed and discarded gloves. Performed hand hygiene.			
<i>Removing a Retention Catheter</i>			
1. Placed a towel or receptacle between the client's legs. Removed stat lock or other securing device attaching catheter to client. Performed hand hygiene and donned clean gloves.			
2. Inserted syringe into balloon port of catheter. Did not cut port with scissors.			
3. Withdrew fluid from balloon (usually 10 mL water in balloon). Did not pull catheter while balloon was inflated.			
4. Pulled gently on catheter to ensure balloon was deflated before attempting to remove.			
5. If resistance was not met, slowly withdrew catheter, observed it for intactness.			
6. Disconnected urine drainage bag from bed frame.			
7. Washed and dried the perineal area.			
8. Emptied drainage bag into graduated container and measure.			
9. Disposed of used supplies.			
10. Positioned client for comfort.			
11. Removed and discarded gloves and performed hand hygiene.			

SKILL 6.19: Providing Suprapubic Catheter Care

Procedure	Performed		Comments
	Yes	No	
1. Checked physician's orders. Gathered equipment. Introduced self and verified client's identity. Provided privacy, explained procedure and how results would be used. Performed hand hygiene and donned clean gloves. Provided comfort and safety for client and self, raised bed to working height.			
2. Observed catheter for patency.			
3. Maintained a closed drainage system. Did not open system to irrigate or obtain urine sample.			
4. Observed for signs of urinary tract infection (color, odor, presence of sediment).			
5. Removed old dressing and discarded gloves. Performed hand hygiene.			
6. Opened sterile supplies. Donned sterile gloves. Cleaned around suprapubic catheter and dried area. Applied new sterile dressing.			

SKILL 6.20: Performing Urinary Ostomy Care

Procedure	Performed		Comments
	Yes	No	
1. Gathered equipment. Introduced self and verified client's identity. Provided privacy, explained procedure and how results would be used. Performed hand hygiene and observed other appropriate infection control procedures. Provided comfort and safety for client.			
2. Assisted the client to a comfortable sitting or lying position in bed or a sitting or standing position in the bathroom.			
3. Emptied and removed the ostomy appliance. <ul style="list-style-type: none"> a. Applied clean gloves. b. Emptied pouch through bottom opening into a bedpan or graduated cylinder. c. Peeled bag off slowly while holding client's skin taut. d. Placed gauze pads over stoma; changed as needed. 			
4. Cleaned and dried the peristomal skin and stoma. <ul style="list-style-type: none"> a. Used warm water, mild soap, and damp gauze, or 			

<p>washcloth and towel to clean skin and stoma. Checked agency practice on use of soap.</p> <p>b. Dried area thoroughly by patting with towel.</p>			
<p>5. Assessed the stoma and peristomal skin.</p> <p>a. Inspected stoma for color, size, shape, and bleeding.</p> <p>b. Inspected peristomal skin for redness, ulceration, or irritation.</p>			
<p>6. Prepared and applied the new pouch.</p> <p>a. Used guide to measure size of stoma.</p> <p>b. On backing of skin barrier, traced a circle the same size as the stomal opening.</p> <p>c. Cut out traced stoma pattern to make opening in skin barrier.</p> <p>d. Removed backing to expose sticky adhesive side of ostomy appliance.</p> <p>e. Applied peristomal skin barrier to faceplate or around stoma.</p> <p>f. Centered faceplate over stoma and gently pressed onto client's skin, smoothing any wrinkles or bubbles. Held in place for about 30 seconds.</p> <p>g. Removed air from the pouch.</p> <p>h. Closed pouch by turning the stop cock to secure it in the closed position.</p> <p>i. Discarded all used supplies in appropriate receptacles.</p> <p>j. Removed and discarded gloves. Performed hand hygiene.</p>			

SKILL 6.4: Obtaining a Urine Specimen from an Ileal Conduit

Procedure	Performed		Comments
	Yes	No	
1. Checked physician orders. Gathered equipment. Introduced self and verified client's identity. Explained procedure to client. Provided privacy. Performed hand hygiene and donned clean gloves. Provided comfort and safety for client.			
2. Covered client's chest with bath blanket and position top covers over lower abdomen. Placed towels around stoma.			
3. Opened sterile packages.			

4. Removed pouch or snapped pouch off wafer flange. <i>Note:</i> Did not use pouch contents to obtain urine specimen. Removed gloves. Performed hand hygiene.			
5. Donned sterile gloves and placed sterile drape over stoma			
6. Removed lid from specimen container, and placed end of catheter into container. Applied lubricant to catheter.			
7. Used forceps to pick up cotton ball and prepped stoma with solution and rinsed with sterile saline or water.			
8. Inserted tip of catheter into stoma approximately 4 cm (1.5 inches).			
9. When urine specimen was obtained (usually not more than 5–25 mL), removed catheter. If no urine obtained, have client drink water.			
10. Returned lid to specimen container and applied label.			
11. If wafer removed, washed and dried peristomal area.			
12. Replaced pouch, or applied new pouch.			
13. Removed bath blanket and towels and replaced top covers.			
14. Removed gloves and performed hand hygiene.			

Clinical:

Elimination

THE PROCESS OF ELIMINATION

Associated Concepts:

Elimination

The purpose of this activity is to identify actual or potential elimination alterations related to a client’s medical diagnosis and analyze the presence of client signs and symptoms related to the alteration in elimination.

Related Concept Learning Outcomes

1. Identify commonly occurring alterations in elimination and their related therapies.

2. Examine the relationship between elimination and other concepts/systems.

Part 1 Instructions: Search the clinical unit for 10 clients with different diagnoses. Identify the clients' risk factors for alterations in elimination based on their medical diagnosis only. Include both urine and bowel elimination alterations. Fill in the table below.

Client Diagnosis	Risk Factors for Alterations in Elimination
Example: Total Hip Arthroplasty	Decreased mobility and use of narcotics may cause constipation and decrease bladder function. Immobility can also cause urinary stasis, urinary infections and renal calculi.

Part 2 Instructions: Identify all present signs and symptoms of alterations of elimination of *five* clients. You may need to search through client medical records, interview the client’s nurse, or perform a physical assessment on the client to find the information. Fill out the third column on the table below.

Client Diagnosis	Risk Factors for Alterations in Elimination	Present Sign and Symptoms of Alteration in Elimination
Example: Total Hip Arthroplasty	Decreased mobility and use of narcotics may cause constipation and bladder function. Immobility can also cause urinary tract infections and renal calculi.	Client has hypoactive bowel sounds and has not had a bowel movement since surgery 2 days ago.

Week 8

OBJECTIVES:

Assess patients with uncomplicated acute and chronic alterations in mobility.

Analyze collected data as it pertains to uncomplicated acute and chronic alterations in mobility.

Use collected data to formulate a plan of care as it pertains to uncomplicated acute and chronic alterations in mobility.

Implement the plan of care in uncomplicated acute and chronic alterations in mobility.

Evaluate goals and therapeutic outcomes in uncomplicated acute and chronic alterations in mobility.

Theory:

Please view videos prior to class.

Lab:

Objectives:

Demonstrate assisting a client using crutches.

Describe a client using traction and the implications for its use.

Please be prepared to demonstrate all prior skills learned in NRS 125 so far.

Mixing medications using one syringe
Administering metered dose inhaler medications
Administering dry powder inhaled medications
Administering nebulized medications
Adding medications to IV fluid containers
Administering intermittent IV medications using a secondary set
Administering intravenous medications using IV push
Performing urinary catheterization
Performing catheter care and removal
Maintaining continuous bladder irrigation
Providing suprapubic catheter care
Performing urinary ostomy care and obtaining specimen
Inserting a rectal tube
Administering an enema
Applying a fecal ostomy pouch
Monitoring intake and output
Regulating infusion flow rate
Assisting a client to use crutches
Flushing and maintaining a nasogastric tube/gastric lavage
Removing a nasogastric tube
Obtaining nose and throat specimens

Using an incentive spirometer
Pursed lip breathing
Oropharyngeal, nasopharyngeal and nasotracheal suctioning
Suctioning the client with a tracheostomy or endotracheal tube
Providing tracheostomy care
Applying anti-embolism stockings (TED stockings)
Applying sequential compression devices (SCD)
Cleaning a sutured wound and changing a dressing on a wound with a drain
Changing a dressing for a venous ulcer
Maintaining closed wound drainage (Jackson-Pratt drain)
Donning sterile gown and gloves
Pouring from a sterile container
Changing a dry sterile dressing

SKILL 11.14: Assisting a Client to Use Crutches			
Procedure	Performed		Comments
	Yes	No	
1. Gathered equipment and supplies. Introduced self, explained what procedure was to be done and why. Performed hand hygiene, following infection control measures, and verified client's identity. Provided privacy. Provided comfort and safety for client.			
2. Ensured crutches were proper length.			
3. Assisted client to assume tripod position. <ul style="list-style-type: none"> a. Asked client to stand and place tips of the crutches 15 cm (6 in.) in front of the feet and out laterally about 15 cm (6 in.). b. Ensured feet were slightly apart. c. Ensured erect posture. d. Stood behind client on affected side. e. Placed belt on unsteady client. 			
4. Taught appropriate crutch gait.			
Variation: Four-Point Alternate Gait			
1. Asked client to: <ul style="list-style-type: none"> a. Move the right crutch ahead. b. Move left foot forward to level of crutch. c. Move left crutch forward. 			

d. Move right foot forward.			
Variation: Three-Point Gait			
1. Asked client to: a. Move both crutches and weak leg forward. b. Move stronger leg forward.			
Variation: Two-Point Alternate Gait			
1. Asked client to: a. Move left crutch and right foot forward together. b. Move right crutch and left foot ahead together.			
Variation: Swing-to Gait			
1. Asked client to: a. Move both crutches ahead together. b. Lift body weight by arms and swing to crutches.			
Variation: Swing-Through Gait			
1. Asked client to: a. Move both crutches forward together. b. Lift body weight by arms and swing beyond crutches.			
Variation: Getting Into Chair			
1. Ensured chair had armrests and was against wall. 2. Instructed client to: a. Stand with back of unaffected leg against chair. b. Transfer crutches on affected side, hold crutches by hand bar, grasp arm of chair on unaffected side. c. Lean forward, flex knees and hips, lower onto chair.			
Variation: Getting Out of Chair			
1. Instructed client to: a. Move to edge of chair and place unaffected leg slightly under chair. b. Grasp crutches by hand bar with hand on affected side, and grasp the arm of the chair with the hand on the unaffected side. c. Push down on crutches and armrests while elevating out of chair. d. Assume tripod position.			
2. Taught client to go up and down stairs.			
Variation: Going Up Stairs			
1. Stood behind client slightly on affected side.			
2. Asked the client to: a. Assume tripod position b. Transfer body weight to crutches and move unaffected leg up one step. c. Transfer body weight to unaffected leg, move crutches and affected leg up one stair.			

Variation: Going Down Stairs			
1. Stood one step below client on affected side.			
2. Asked client to: <ul style="list-style-type: none"> a. Assume tripod position. b. Shift body weight to unaffected leg, move crutches and affected leg down one stair. c. Transfer body weight to crutches, move unaffected leg down one stair: <p><i>OR:</i></p> <ul style="list-style-type: none"> a. Hold both crutches in outside hand and use handrail for support. b. Move as in steps b and c. 			

Clinical:

WHO'S UNDER PRESSURE?

Assess the skin of an immobile patient.

Associated Concepts:

Tissue Integrity, Managing Care

The purpose of this activity is to perform a tissue pressure risk assessment using the Braden scale, identify current nursing and/or collaborative interventions related to each component of the Braden scale, identify additional nursing and/or collaborative interventions, and delegate interventions to unlicensed assistive personnel.

Related Concept Learning Outcomes

1. Identify risk factors and prevention measures associated with pressure ulcers.
2. Summarize therapies used by interdisciplinary teams in the collaborative care of an individual with pressure ulcers.
3. Plan evidence-based care for an individual with pressure ulcers and his or her family in collaboration with other members of the healthcare team.

Client Diagnosis:

Part 1 Instructions: Perform a tissue pressure risk assessment using the following Braden scale on your assigned client.

BRADEN SCALE FOR PREDICTING PRESSURE SORE RISK		Date of Assessment
Patient's Name _____	Evaluator's Name _____	
<p>SENSORY PERCEPTION Ability to respond meaningfully to pressure-related discomfort</p>	<p>1. Completely Limited: Unresponsive (does not moan, frown, or grab) to painful stimuli. Cannot communicate discomfort even by moaning or restlessness. OR limited ability to feel pain over most of body surface.</p> <p>2. Very Limited: Responds only to painful stimuli. Cannot communicate discomfort even by moaning or restlessness. OR has a sensory impairment which limits the ability to feel pain or discomfort over 1/2 of body.</p> <p>3. Slightly Limited: Responds to verbal commands but cannot always communicate discomfort or needs to be turned. OR has sensory impairment which limits ability to feel pain or discomfort in 1/1 or 2 extremities.</p> <p>4. No Impairment: Responds to verbal commands. Has no sensory deficit which would limit ability to be turned via a pain or discomfort.</p>	
<p>MOISTURE Degree to which skin is exposed to moisture</p>	<p>1. Constantly Moist: Skin is kept moist almost constantly by perspiration, urine, etc. Or moisture is dried every time patient is moved or turned.</p> <p>2. Moist: Skin is often but not always moist. Urine must be changed at least once a shift.</p> <p>3. Occasionally Moist: Skin is occasionally moist, requiring an extra linen change approximately once a day.</p> <p>4. Rarely Moist: Skin is usually dry; linen requires changing only at routine intervals.</p>	
<p>ACTIVITY Degree of physical activity</p>	<p>1. Bedfast: Confined to bed.</p> <p>2. Chairfast: Ability to walk severely limited or nonexistent. Cannot bear own weight and/or must be assisted into chair or wheelchair.</p> <p>3. Walks Occasionally: Walks occasionally during day but for very short distances, with or without assistance. Spends majority of each shift in bed or chair.</p> <p>4. Walks Frequently: Walks outside the room at least twice a day and inside room at least once every 2 hours during waking hours.</p>	
<p>MOBILITY Ability to change and control body position</p>	<p>1. Completely Inmobile: Does not make even slight changes in body or extremity position without assistance.</p> <p>2. Very Limited: Makes occasional slight changes in body or extremity position but unable to make frequent or significant changes independently.</p> <p>3. Slightly Limited: Makes frequent though slight changes in body or extremity position independently.</p> <p>4. No Limitations: Makes frequent frequent changes in position without assistance.</p>	
<p>NUTRITION Usual food intake relative to usual food intake</p>	<p>1. Very Poor: Never eats a complete meal. Rarely eats more than 1/2 of any food offered. Eats 2 servings or less of solid (meat or dairy products) per day. Takes fluids poorly. Does not take a liquid dietary supplement. OR is NPO and/or maintained on clear liquids or IV's for more than 5 days.</p> <p>2. Probably Inadequate: Rarely eats a complete meal and generally eats only about 1/2 of any food offered. Proteins in liquid diet are only 3 servings of meat or dairy products per day. Occasionally will take a dietary supplement. OR receives less than optimum amount of liquid diet or tube feeding.</p> <p>3. Adequate: Eats over half of most meals. Eats a total of 4 servings of protein (meat, dairy products) each day. Occasionally will refuse a meal, but will usually take a supplement if offered. OR is on a tube feeding or TPN regimen, which probably meets most of nutritional needs.</p> <p>4. Excellent: Eats most of every meal. Never refuses a meal. Usually eats a total of 4 or more servings of meat and dairy products. Occasionally eats between meals. Does not require supplementation.</p>	
<p>FRICTION AND SHEAR</p>	<p>1. Problem: Requires moderate to maximum assistance in moving. Complete sliding without sliding against sheets is necessary. Frequently slides down in bed or chair, requiring frequent repositioning with maximum assistance. Sheeting, contours, or agitation leads to a moist constant friction.</p> <p>2. Potential Problem: Moves freely or requires minimum assistance. During a move skin probably slides to some extent against sheets, chair, restraints, or other devices. Maintains relatively good position in chair or bed most of the time but occasionally slides down.</p> <p>3. No Apparent Problem: Moves in bed and chair independently and has sufficient muscle strength to lift him completely during moves. Maintains good position in bed or chair at all times.</p>	
Total Score		_____

Part 2 Instructions: For each section of the Braden scale, identify nursing or any collaborative interventions being implemented currently on your assigned client and any additional nursing and/or collaborative interventions to maintain tissue integrity. For each intervention, determine if the intervention can be delegated to a UAP (unlicensed assistive personnel).

Braden Scale Component	Current Nursing and/or Collaborative Interventions	Suggested Additional Nursing and/or Collaborative Interventions	UAP Delegation
Sensory Perception			
Moisture			
Activity			
Mobility			
Nutrition			
Friction and Shear			

Week 9

OBJECTIVES:

Assess patients with uncomplicated acute and chronic alterations in sensory perception, cognition, and intracranial regulation.

Analyze collected data as it pertains to uncomplicated acute and chronic alterations in sensory perception, cognition, and intracranial regulation.

Use collected data to formulate a plan of care as it pertains to uncomplicated acute and chronic alterations in sensory perception, cognition, and intracranial regulation.

Implement the plan of care in uncomplicated acute and chronic alterations in sensory perception, cognition, and intracranial regulation.

Evaluate goals and therapeutic outcomes in uncomplicated acute and chronic alterations in sensory perception, cognition, and intracranial regulation.

Theory:

Please view videos prior to class.

CASE STUDY: Acute CVA (cerebrovascular accident)/stroke

N.T., a 79-year old woman, arrives at the emergency room with expressive aphasia, left facial droop, left-sided hemiparesis, and mild dysphagia. Her husband states that when she awoke that morning at 0600, she stayed in bed, complaining of a mild headache over the right temple and feeling slightly weak. He went and got coffee, then thinking it was unusual for her to have those complaints, went back to check on her. He found she was having some trouble saying words and had developed a left-sided facial droop. When he helped her up from the bedside, he noticed weakness in her left hand and leg and brought her to the emergency department. Her past medical history includes paroxysmal atrial fibrillation (PAF), hypertension (HTN), and hyperlipidemia. A recent cardiac stress test had normal findings, and her blood pressure (BP) has been well controlled. N.T. is currently taking flecainide (Tambocor), hormone replacement therapy (HRT), amlodipine (Norvasc), aspirin, simvastatin (Zocor), and Lisinopril (Zestril). The physician suspects N.T. has experienced an acute CVA.

- 1) What role do diagnostic tests play in evaluating N.T. for a suspected CVA?
- 2) Explain how knowing the type of CVA is an important factor in planning care?
- 3) Which factor in N.T.'s history is most likely contributor to her having experienced a CVA?

Case Study Progress:

After a noncontrast CT scan, N.T. is diagnosed with a thrombolytic CVA. The physician writes the following orders on her chart:

Physician Orders

IV 0.9% NaCl at 75 mL/hr
Activase (tPA) per protocol
Stat CBC, PT/INR, CPK isoenzymes
Neurologic assessment every hour
Obtain patient's weight
Vital signs every hour
Oxygen at 2L nasal cannula (NC)
NPO until swallowing evaluation

4) Which interventions can you delegate to the unlicensed assistive personnel (UAP)? Select all that apply.

- a) Obtaining N.T.'s weight
- b) Assisting N.T. in repositioning every 2 hours
- c) Initiating oxygen therapy by nasal cannula
- d) Performing N.T.'s neurologic checks every hour
- e) Obtaining a manual BP per protocol

5) What is the purpose of monitoring the CK isoenzyme levels?

6) Complete the National Institutes of Health Stroke Scale (NIHSS) scores for each of N.T.'s symptoms.

Symptom	Score
Alert Knows month and age Able to follow commands Extraocular movements (EOMs) intact No visual loss Partial left facial paralysis Left leg no movement Left arm no movement No ataxia Sensation intact Moderate aphasia Neglect of left side	
TOTAL SCORE	

7) Based on your scoring, what level of CVA did N.T. experience?

8) During the first 23 hours after receipt of Activase (tPA), the primary concern is controlling N.T.'s:

- a) Cardiac rhythm
- b) BP
- c) Glucose level
- d) Oxygen saturation

9) While assessing N.T., you note the following findings. Which one is unrelated to the CVA?

- a) Headache
- b) Lethargy
- c) Lumbar pain
- d) Blurred vision

10) Why was N.T. placed on clopidogrel (Plavix) post-CVA?

11) Is there any benefit to continuing simvastatin (Zocor) after her CVA?

12) As you walk into the nurses' station, the charge nurse is coordinating the swallowing evaluation, including a modified barium swallow study and referral for a speech –language pathologist. Give the rationale for these orders.

Lab:

Please be prepared to demonstrate all prior skills learned in NRS 125 so far.

Mixing medications using one syringe
Administering metered dose inhaler medications
Administering dry powder inhaled medications
Administering nebulized medications
Adding medications to IV fluid containers
Administering intermittent IV medications using a secondary set
Administering intravenous medications using IV push

Performing urinary catheterization
Performing catheter care and removal
Maintaining continuous bladder irrigation
Providing suprapubic catheter care
Performing urinary ostomy care and obtaining specimen
Inserting a rectal tube
Administering an enema
Applying a fecal ostomy pouch
Monitoring intake and output
Regulating infusion flow rate
Assisting a client to use crutches
Flushing and maintaining a nasogastric tube/gastric lavage
Removing a nasogastric tube
Obtaining nose and throat specimens
Using an incentive spirometer
Pursed lip breathing
Oropharyngeal, nasopharyngeal and nasotracheal suctioning
Suctioning the client with a tracheostomy or endotracheal tube
Providing tracheostomy care
Applying anti-embolism stockings (TED stockings)
Applying sequential compression devices (SCD)
Cleaning a sutured wound and changing a dressing on a wound with a drain
Changing a dressing for a venous ulcer
Maintaining closed wound drainage (Jackson-Pratt drain)
Donning sterile gown and gloves
Pouring from a sterile container
Changing a dry sterile dressing

Clinical: Perform Glasgow Coma Scale on patient.

TABLE 38-2		
Glasgow Coma Scale		
BEHAVIOR	RESPONSE	SCORE
Eye opening response	Spontaneously	4
	To speech	3
	To pain	2
	No response	1
Best verbal response	Oriented to time, place, and person	5
	Confused	4
	Inappropriate words	3
	Incomprehensible sounds	2
	No response	1
Best motor response	Obeys commands	6
	Moves to localized pain	5
	Flexion withdrawal from pain	4
	Abnormal flexion (decorticate)	3
	Abnormal extension (decerebrate)	2
	No response	1
Total score:	<i>Best response</i>	15
	<i>Comatose client</i>	8 or less
	<i>Totally unresponsive</i>	3



Activity:

In groups of 3 to 5, discuss assessment techniques to determine the extent of neurologic deficits in a client experiencing a stroke in evolution. Create a list of symptoms that can be used to identify whether a client is experiencing a stroke in evolution.

Week 10

OBJECTIVES:

Assess patients as it relates to reproductive health.

Analyze collected data as it pertains to reproductive health.

Use collected data to formulate a plan of care as it pertains to reproductive health.

Implement the plan of care in reproductive health.

Evaluate goals and therapeutic outcomes as it relates to reproductive health.

Theory:

Please view videos prior to class.

CASE STUDY #1

Melanie is a 30 year old married White female (MWF). She went to her family doctor after she had experienced two months of nausea and vomiting. She had been on birth control pills for two years and was certain that she could not be pregnant. A pregnancy test was performed and it was positive. Melanie had often skipped periods when taking the pill and did not consider three months without a period unusual.

She has been pregnant three times before. The first and second pregnancy resulted in elected first trimester abortions. The other pregnancy was three years ago, when she experienced a preterm birth at 28 weeks; the infant died shortly after birth. That was very a very traumatic experience for her, and she doesn't remember much of the experience.

Melanie has been married for ten years but is presently living apart from her husband. He is unemployed, and offers no financial support. She presently works 50 hours per week in a minimum wage position, and states is "behind in paying her rent". She tells you she hasn't spoken to him for a while and does not know what to do about informing him about the pregnancy.

Melanie is 5'8", 110lbs. Her VS are 98, 100, 20, 106/60, Pulse Ox 100%.

1. What other assessments can be performed to determine pregnancy? (5)
2. What is Melanie's GTPAL? (10)
3. It is determined that Melanie is 15 weeks gestation. Before continuing with a physical assessment, what are 6 areas of risk that you will assess further? (30)
4. What are 3 issues that need to be explored further in Melanie's' psychological assessment? (30)
5. When would you expect Melanie to experience quickening? Why? (5)
6. Are her VS within a range that is expected for her at this time in her pregnancy? Why or why not? (5)

What are 3 specific nutritional issues might you expect with Mel?

Case Study #2

Luz is a 20 year old **G30020** who presents to the emergency room in labor. She came to this country three months ago from Guatemala and speaks little English. Through an interpreter you obtain the following information:

- She has had no antepartum care. She does not have a job.
- She lives with her sister, brother in law, their three children, and two uncles in a small apartment.

- She states that her sister told her she will have the baby in “2 weeks”.
- She says she is having a lot of abdominal pain. She says she eats very little, but that is “normal” for her.

List four areas of priority that you will further assess on Luz related to the information you have obtained. (20)

1.

2.

3.

4.

Luz is found to be 5’3” and 110 lbs. Further questioning reveals the date of her last menstrual period, which puts her at 38.5 weeks. Vagina exam: 4cms dilated and 90% effaced, -3 station. Membranes intact.

What stage and phase of labor is she in? (5)

What other testing is needed to confirm her EDB? (5)

What other information can be obtained from the vaginal exam to further assess her condition? (15)

1.

2.

3.

Fetal Heart rate monitoring is started. FHR is 158, marked variability with no decelerations or accelerations. Contractions are every 3-4 minutes, moderate in strength, lasting 50-60 seconds. Any concerns? (10)

Luz continues to labor and is frightened and crying. She said her sister was coming to be with her but has not arrived. List two interventions you would implement at this time. (10)

Luz's contractions are **now 2 every minute**, strong, lasting 70-90 seconds. You notice that the FHR decreases sharply to 90 at the peak of the contraction, returning quickly to a baseline of 140 as soon as the contraction is over. What is your priority intervention at this time? (10)

Luz is now 10 cms, 100% effaced -3 station. Membranes intact. Should an AROM be performed? Why or why not? (5)

As Luz continues to labor, her membranes rupture spontaneously. What nursing assessments would the nurse include in her care after the membranes ruptured? (10)

After pushing for 1 hour, Luz delivers a 4 lb. 14 oz. female with Apgar scores of 7 in one minute and 9 in five minutes. What is the significance of this infant's weight? (10)

Lab:

- 1. J.P. is a 34 y/o who has four children, three born preterm and one born at term. She experienced spontaneous abortions at 8 and 10 weeks. She delivered a stillborn at 23 weeks gestation. What is her GTPAL?
- 2. M.L. is a 22 y/o who is 12 weeks pregnant. She experienced one spontaneous abortion at 8 weeks. What is her GTPAL?

- 3. P.L. is 36 years old. She comes in for an antepartum check-up. She has three children and home that were born at term, which includes a set of twins. What will her GTPAL be after delivery?
- 4. D.S. recently delivered a living 3lb. 2 oz. male at 37.5 weeks after experiencing pre-eclampsia and type 1 diabetes. She has three children at home born at full term. She also has another child at home born at 32 weeks. What is her GTPAL?
- 5. S.C is attending her first antepartum visit. Her LMP was June 5. What is her EDB? She has a three year old at home born at 35 weeks. What is her GTPAL?
- 6. P.K. is 22 weeks pregnant. She delivered two full term infants who are 10 and 6. She experienced a spontaneous abortion at 6 weeks. What is her GTPAL?
- 7. Z.C. is a 28y/o woman who is 36 weeks pregnant and in early labor. What is her GTPAL?
- 8. D.S. is a 37 y/o who experience spontaneous abortions at 12 and 14 weeks. She has triplets at home who were born at 33 weeks. What is her GTPAL?

Case study:

Jenny Apple is a G1P0000 and is scheduled for her first obstetric exam.

Identify three areas of focus in this exam.

During her exam, the nurse practitioner measures Jenny's fundal height. How is this measured?

What information does fundal height provide about the pregnancy?

Jenny asks when the baby's heartbeat will be heard. When is the fetal heartbeat usually detected?

What is the purpose of Naegle's rule? How is it calculated?

Jenny's last normal menstrual period started on March 22. What is her EDB?

Identify factors that you would consider part of your initial psychological assessment of an antepartal family?

Jenny is complaining of morning sickness and urinary frequency. What recommendations would you make to her?

SKILL 2.35: Administering Vaginal Medications

Procedure	Performed		Comments
	Yes	No	
1. Checked medication order. Gathered MAR, clean gloves, lubricant for a suppository, correct medication, towel, and clean perineal pad. Removed appropriate medication from medication drawer, shelf, or refrigerator. Checked MAR with medication label to verify correct medication and expiration date. Signed out controlled medicines following agency policy.			
2. Checked the medication label three times for safety: <ol style="list-style-type: none"> a. When it was taken from medication drawer b. Compared it to the MAR c. Compared it to the MAR in client's room or when ready to leave medication preparation area 			
3. Prepared correct amount of medication without contaminating it.			
4. Introduced self and verified client's identity with two identifiers. Provided privacy, explained procedure and how results would be used. Gathered equipment. Performed hand hygiene and donned gloves. Checked MAR and client allergy status. Determined if specific assessment was indicated before administering medication (e.g., vital signs) and assessed client.			
5. If necessary, calculated medication dosage.			
6. Asked the client to void. Assisted client to a back-lying position with knees flexed and hips rotated laterally. Draped the client appropriately so that only the perineal area was exposed.			
7. Unwrapped suppository and put it on opened wrapper <i>OR</i> filled applicator with prescribed cream, jelly, or foam.			
8. Inspected vaginal orifice, noted any odor or discharge from vagina, and asked about any vaginal discomfort. Provided perineal care to remove microorganisms.			
9. Administered the vaginal suppository, cream, foam, jelly, or irrigation.			

<p>10. <i>Suppository:</i></p> <ul style="list-style-type: none"> a. Lubricated the rounded (smooth) end of the suppository. b. Lubricated gloved index finger. c. Exposed vaginal orifice by separating labia with non-dominant hand. d. Inserted suppository about 8 to 10 cm along posterior wall of vagina. e. Asked client to remain lying in supine position for 5 to 10 minutes following insertion. <p><i>Vaginal Cream, Jelly, or Foam</i></p> <ul style="list-style-type: none"> a. Gently inserted applicator about 5 cm. b. Slowly pushed plunger until applicator was empty. c. Removed applicator and placed it on towel. d. Discarded applicator if disposable or cleaned it according to manufacturer's directions. e. Asked client to remain lying in supine position for 5 to 10 minutes following insertion. <p><i>Irrigation</i></p> <ul style="list-style-type: none"> a. Placed client on bedpan. b. Clamped tubing. Held irrigating container about 30 cm above vagina. c. Ran fluid through tubing and nozzle into bedpan. d. Inserted nozzle carefully into vagina. Directed nozzle toward sacrum. e. Inserted nozzle 7 to 10 cm, started flow, and rotated nozzle several times. f. Used all irrigating solution. g. Removed nozzle from vagina and assisted client to a sitting position on bedpan. 			
<p>11. Ensured client comfort.</p> <ul style="list-style-type: none"> a. Dried perineum area with tissues as required. b. Applied clean perineal pad if there was excessive drainage. c. Removed and discarded gloves. Performed hand hygiene. 			

Please be prepared to demonstrate all prior skills learned in NRS 125 so far.

Mixing medications using one syringe
Administering metered dose inhaler medications
Administering dry powder inhaled medications
Administering nebulized medications
Adding medications to IV fluid containers
Administering intermittent IV medications using a secondary set
Administering intravenous medications using IV push
Performing urinary catheterization
Performing catheter care and removal
Maintaining continuous bladder irrigation
Providing suprapubic catheter care
Performing urinary ostomy care and obtaining specimen
Inserting a rectal tube
Administering an enema
Applying a fecal ostomy pouch
Monitoring intake and output
Regulating infusion flow rate
Assisting a client to use crutches
Flushing and maintaining a nasogastric tube/gastric lavage
Removing a nasogastric tube
Obtaining nose and throat specimens
Using an incentive spirometer
Pursed lip breathing
Oropharyngeal, nasopharyngeal and nasotracheal suctioning
Suctioning the client with a tracheostomy or endotracheal tube
Providing tracheostomy care
Applying anti-embolism stockings (TED stockings)
Applying sequential compression devices (SCD)
Cleaning a sutured wound and changing a dressing on a wound with a drain
Changing a dressing for a venous ulcer
Maintaining closed wound drainage (Jackson-Pratt drain)
Donning sterile gown and gloves
Pouring from a sterile container
Changing a dry sterile dressing

Clinical:

Focused assessments

Week 11

OBJECTIVES:

Assess patients as it relates to reproductive health.

Analyze collected data as it pertains to reproductive health.

Use collected data to formulate a plan of care as it pertains to reproductive health.

Implement the plan of care in reproductive health.

Evaluate goals and therapeutic outcomes as it relates to reproductive health.

Theory:

Please view videos prior to class.

Large Group

Lead a discussion about the expected changes that result from pregnancy (specifically during the first 6–8 weeks) and the physiological events that must occur to maintain the pregnancy.

Activities: Pregnancy-Induced Hypertension

Large Group

Discuss strategies for a client who delivered a preterm infant through cesarean birth because of eclampsia. Include possible postpartum depression and separation from infant.

Lab:

Demonstrate skills learned in NRS 112 and NRS 125.

Clinical:

Focused assessment.

Week 12

OBJECTIVES:

Assess patients as it relates to reproductive health.

Analyze collected data as it pertains to reproductive health.

Use collected data to formulate a plan of care as it pertains to reproductive health.

Implement the plan of care in reproductive health.

Evaluate goals and therapeutic outcomes as it relates to reproductive health.

Theory:

Please view videos prior to class.

Lab:

Demonstrate measuring a newborn's head, chest, and abdomen.

Demonstrate skills learned in NRS 112 and NRS 125.

SKILL 1.5: Measuring the Newborn's Head, Chest, and Abdomen

Procedure	Performed		Comments
	Yes	No	
1. Gathered a disposable paper measuring tape with centimeter and millimeter markings. Introduced self and verified client's identity. Provided privacy, explained procedure to parents, and how results would be used. Performed hand hygiene. Provided comfort and safety for newborn.			
2. For head measurement, removed any hat, braids, or barrettes the infant is wearing. For chest measurement, removed all clothing from the chest, and for abdomen measurement, removed all clothing from the abdomen.			
3. Wrapped measuring tape around the head at the supraorbital prominence above the eyebrows, above the ears, and around the occipital prominence for head circumference, around the chest, just under the axilla and at the nipple line for chest circumference, and around the abdomen at the level of the umbilicus for abdomen circumference. Repeated the measurement to confirm the reading.			
4. If measurement had to be taken at another level of the abdomen, marked location with ink so future measurements would be comparable.			
5. Performed hand hygiene.			
6. Compared results to previous measurements to determine any changes.			
7. Documented measurement to nearest 0.5 cm or ¼ inch in client's record.			

Clinical:

Please complete this when you are on the clinical unit with newborns. Not all students will be on the newborn unit during this week.

Newborn Assessment

VS

Color

Skin

Feeding Method

Head—Molding, Fontanelles

Capillary Refill

Breath Sounds

Palpate Clavicles

Abdomen—Shape and Bowel sounds

Cry

Reflexes--Sucking, Swallowing, Moro, Rooting

Cord Condition

Circumcision

Pain Assessment

Latch, Breast, Bottle Feeding

Voiding

Meconium

ID Tags, Hugs Tag

Week 13

OBJECTIVES:

Assess patients as it relates to reproductive health.

Analyze collected data as it pertains to reproductive health.

Use collected data to formulate a plan of care as it pertains to reproductive health.

Implement the plan of care in reproductive health.

Evaluate goals and therapeutic outcomes as it relates to reproductive health.

Theory:

Please review videos prior to class.

Lab:

Demonstrate prior skills learned in NRS 112 and NRS 125.

CASE STUDY DIABETES

TG is in her second pregnancy. She is morbidly obese. Her first child weighed 9lb 11oz. Her midwife performs a 1 hour glucose tolerance test and finds an elevated glucose level. What would be the next intervention? Depending on the results of this intervention, what would be the diagnosis and how would TG be managed? (10)

LR is Insulin Dependent Diabetes Mellitus (IDDM) and a primigravida who has been on insulin for two years. Describe 3 interventions included in her plan of care for the last 6 weeks of pregnancy. (15)

Following birth, LR's newborn is at greatest risk for developing _____. Why? (5)

Identify three complications that can affect an IDDM pregnancy. Explain your answers. (25)

Identify 3 fetal complications that may occur during pregnancy, birth and after birth of an infant of Gestational Diabetic mother? Explain your answers (25)

List four (4) tests and the reasons why they would be performed to assess fetal status in a pregnant woman with diabetes. (20)

PREVENTING MAGNESIUM TOXICITY IN OBSTETRICS

From the October 20, 2005 issue

Problem: Practitioners who work in obstetrical units may feel comfortable administering IV magnesium sulfate, which is used to treat preterm labor and preeclampsia. Yet, many errors have been reported with this medication, some fatal. In our February 12, 1997, and June 30, 1999 newsletters, we described errors in which obstetrical patients suffered respiratory arrest after receiving overdoses of magnesium sulfate. Most of these errors were due to unfamiliarity with safe dosage ranges and signs of toxicity, inadequate patient monitoring, pump programming errors, and mix-ups between magnesium sulfate and oxytocin.

More recently, a detailed account of errors with this drug was published (Simpson KR, Knox GE. Obstetrical accidents involving intravenous magnesium sulfate. *Am Jour of Maternal Child Nurs.* 2004;29: 161-71). In the span of a few years, the authors, who are involved in ongoing review of obstetrical accidents in the US, accumulated 52 reports of accidental overdoses of magnesium sulfate. In the article, they described 12 cases in detail, revealing common precipitating events. Examples from the article follow:

- A nurse accidentally restarted an infusion of magnesium sulfate instead of beginning a new infusion of oxytocin after a mother had delivered her baby. The magnesium sulfate infusion had been administered during preterm labor, but it remained connected at the Y-site to the patient although it had been discontinued and was no longer infusing. The oxytocin solution was connected to the patient, but the magnesium sulfate solution was actually started by mistake. The mother was found unresponsive and remains in a persistent vegetative state.
 - Before transfer, a nurse accidentally replaced a mother's depleted Lactated Ringers solution with an unlabeled liter bag of magnesium sulfate prepared by another nurse for a different patient. The mother had preeclampsia, so she had an existing magnesium sulfate solution infusing when the second solution was hung. After transfer to the busy, understaffed postpartum unit, the patient was later found in respiratory arrest and developed anoxic encephalopathy.
 - Due to fluid restrictions, a physician gave a verbal order for a double-strength solution of magnesium sulfate to be administered at 2 g/hour. The nurse forgot to transcribe the verbal order and did not re-label the single-strength bag to which she had added additional magnesium sulfate. The change-of-shift report was hurried due to an emergency Cesarean section. The oncoming nurse subsequently increased the rate of infusion because she was unaware the patient was receiving a double-strength solution. The patient developed signs of magnesium toxicity, but the error was discovered before further harm resulted.
 - A nurse prepared a bag of magnesium sulfate (40 g/L) and began an infusion at 200 mL/hour to deliver a 4 g bolus dose (100 mL) over 30 minutes. After remaining with the patient for 20 minutes, the nurse was suddenly called away for an urgent problem. She returned 25 minutes later to find the patient had received a 6 g loading dose. The patient was flushed and nauseated, with shallow respirations and unable to move her extremities. Concerned about toxicity, the physician ordered a test of the solution, which revealed a concentration of 80 g/L. The nurse had misread the vial labels and added too much magnesium sulfate to the IV bag. The patient actually received a 12 g loading dose but subsequently recovered without permanent harm.
 - A nurse retrieved two bags of Lactated Ringers from unit stock and added 40 g of magnesium sulfate to one bag. After administering a 6 g bolus dose, she started the infusion at 3 g/hour and hung a maintenance solution of Lactated Ringers at 300 mL/hour. Several hours later, the patient reported feeling flushed and nauseated. The nurse told her these symptoms were expected. A short time later, the nurse observed the patient sleeping. Later, family members found the patient breathless and pulseless. Resuscitation efforts were unsuccessful. Analysis of the solutions revealed that the maintenance solution (300 mL/hour) contained 40 g of magnesium sulfate, and the bag labeled as magnesium sulfate contained only Lactated Ringers. The admixture label had been placed on the wrong bag of Lactated Ringers.
- Simpson and Knox noted that patient transfers to units with lower staffing levels and chaotic environments with changing nursing assignments were the most common factors among seven errors that resulted in death.

Safe Practice Recommendation: To reduce the risk of harm when administering magnesium sulfate to obstetrical patients, consider the following:

Premixed solutions. Nurses should not have to mix magnesium sulfate solutions. Instead, use a standard concentration of commercially available premixed solutions for bolus doses and maintenance infusions. Simpson and Knox also suggest using 20 g/500 mL premixed solutions (not 40 g/L) to reduce harm in the event of a free flow incident. Avoid using nonstandard

concentrations, and administer bolus doses using separate premixed piggybacks, not from the maintenance infusion.

Label lines. Label the IV tubing near the IV pump. When infusions are started or the rate is adjusted, trace the tubing by hand from the IV bag, to the pump, and then to the patient for verification.

Protocols. Establish dosing and administration protocols and standard order sets for magnesium sulfate. Simpson and Knox also suggest standardizing the unit of measure used to prescribe magnesium sulfate (e.g., g, mEq) and to report lab values (e.g., mg/dL, mEq/L, mmol/L). Always require administration via an infusion pump, preferably a smart pump with operational dose range alerts. If the drug is discontinued, immediately remove the infusion bag and tubing from the patient's access site, pump, and IV pole to prevent later accidental infusion, and dispose of the bag properly.

Double checks. Require an independent double check of the drug, concentration, infusion rate, pump settings, line attachment, and patient before administering IV magnesium sulfate. Point-of-care bar code systems can also be used to verify the drug, strength, and patient. When transferring patients, Simpson and Knox suggest having the receiving and transferring nurse verify the drug, concentration, line attachment, and pump settings at the bedside via comparison to the original order.

Monitoring. Frequently monitor patients' vital signs, oxygen saturation, deep tendon reflexes, and level of consciousness (also fetal heart rates and maternal uterine activity if the drug is used for preterm labor). Assess patients for signs of toxicity (e.g., visual changes, somnolence, flushing, muscle paralysis, loss of patellar reflexes) or pulmonary edema and notify the physician if observed. When giving a bolus, remain at the bedside to monitor the patient continuously. Simpson and Knox suggest subsequent assessment intervals of 15 minutes for the first hour, 30 minutes for the second hour, and then hourly.

Assessing toxicity. If concerned about toxicity, lab testing may be needed. However, Simpson and Knox caution that toxic levels vary among people, so a clinical assessment is as important as serum magnesium levels. Teach patients and families the signs of toxicity to report.

Staffing ratios. Ensure that staffing patterns allow time for proper monitoring on antepartum and postpartum units.

Emergency preparedness. Establish standard procedures to respond to emergencies caused by overdoses. Simpson and Knox suggest stocking calcium gluconate on the unit with directions for use during respiratory depression.

Clinical:

Focused assessment

Week 14

OBJECTIVES:

Assess patients as it relates to reproductive health.

Analyze collected data as it pertains to reproductive health.

Use collected data to formulate a plan of care as it pertains to reproductive health.

Implement the plan of care in reproductive health.

Evaluate goals and therapeutic outcomes as it relates to reproductive health.

Theory:

PRE TERM LABOR & NEWBORN ASSESSMENT

A 42 year old woman in the 32nd week of pregnancy is admitted to the birthing unit assessment area because she is experiencing contractions. She is a G4 TPAL 0220. Her cervix is dilated 1-2 cm; uterine contractions are occurring every 5-10 minutes. She says, "I can feel the contractions but they are not painful. Electronic fetal heart rate monitoring, IV Magnesium sulfate, and bedrest are ordered. Betamethasone is also ordered and is to be given IM immediately and repeated in 12 hours.

What risk factors does this woman present with regarding preterm labor? (10)

What assessments would the nurse in the triage (assessment area) include in her care? (10)

What other symptoms of preterm labor are important for the nurse to assess? (10)

Describe the significance of three (3) diagnostic predictors of preterm labor and their significance. (15)

What are three conditions present in the pregnant woman where the HCP would not attempt to stop labor? Give rationales for your answers. (15)

In general, how would this woman's care be different if she were 21 weeks gestation? (10)

Case Study--Newborn Assessment

Write 2 nursing interventions to help achieve the following goals for the infant: (15)

1. Respiratory Adaption:
2. Safety, including prevention of infection
3. Thermoregulation

The parents ask you to explain the purpose of the eye ointment and vitamin K. How would you describe the reason for the reason for their administrations in laymen's terms? (5)

Name three findings the newborn assessment that may be cause for concern. Give rationales. (10)

Lab: Demonstrate prior skills learned in NRS 112 and NRS 125.

NCLEX BINGO

GESTATIONAL DIABETES	PLACENTAL ABRUPTION	LOW SOCIOECONOMIC DRUG, ALCOHOL ABUSE STDS	BABINSKI	DECREASED PLACENTAL PERFUSION
FHR 186	FETAL ANOMALIES	IUGR	4CMS, 80%, -1	O2 10 LITERS BY MASK
INCREASED CARDIAC OUTPUT	TRANSIENT TACYPNEA OF THE NEWBORN	FREE	UNSTABLE TEMPERATURE	MAGNESIUM SULFATE
CORTISOL, HpL	KERNICTERUS	G10000	LIVER DAMAGE, HIGH RISK OF HEMORRHAGE	OLIGURIA
LOW HEMOGLOBIN	NON STRESS TEST	CONVULSIONS	DVT	VARIABILITY

HYPOGLYCEMIA

SEPSIS

Lethargy-----→

Jitteriness-----→

Poor Feeding----→

Tachypnea-----→

COLD STRESS

CNS

WITHDRAWAL

QUIZ

1. The nurse obtains a heart rate of 148 beats per minute (BPM) on a two hour old newborn. The nurse will interpret this rate as being:
 - A. Too slow
 - B. Fast, reassess
 - C. Dangerously fast
 - D. An expected rate
2. True or False: Newborns (Full term) should have full range of motion; when the extremities are extended they should return to their flexed position.
 - A. True
 - B. False
3. Following amniotomy (artificial rupture of membranes), the first action the nurse would complete is:
 - A. Listen to the fetal heart rate
 - B. Determine the amount of amniotic fluid
 - C. Change the under pad on the bed
 - D. Prepare the mother for delivery
4. True or False: Initial respirations in the newborn are triggered by physical, tactile, sensory, and chemical factors.
 - A. True
 - B. False

5. A woman is admitted to the hospital with severe preeclampsia. Which of the following interventions would be needed to prevent complications?
 - A. Test urine and blood for glucose
 - B. Prepare the patient for a caesarean delivery
 - C. Administer magnesium sulfate IV
 - D. Prepare her for an ultrasound to rule out molar pregnancy

6. A woman is in her third trimester of pregnancy. She is 17 years old, African-American, and has a history of Hypertension and Diabetes Mellitus in her family. This data indicates that she is at risk for:
 - A. Placenta previa
 - B. Preeclampsia
 - C. Rh incompatibility
 - D. No specific antepartum/intrapartum complication

7. A client is hospitalized on the antepartum unit with premature rupture of membranes at 35 weeks gestation. Which of the following orders would the nurse *question* for this client?
 - A. Bedrest with bathroom privileges
 - B. Diet as tolerated
 - C. External fetal monitor
 - D. Temperature once a day

8. Caesarean Birth would be appropriate for a woman who has:
 - A. Fear of a vaginal delivery
 - B. Celebrity status
 - C. Low pain threshold
 - D. A malpresentation

9. Hormones released by the placenta during the second half of pregnancy can have an effect on:
 - A. Hemorrhage
 - B. Insulin dependent diabetics
 - C. Post dates
 - D. Preeclampsia

10. The nurse who is teaching new parents will include what intervention in how to prevent heat loss in their newborn?
- A. Keep in a radiant warmer
 - B. Keep the room temperature at 90 degrees F.
 - C. Placing the baby skin to skin
 - D. Wrapping the baby in three blankets and utilize mittens and socks

Clinical:

Focused assessment

Week 15

OBJECTIVES:

Assess patients as it relates to reproductive health.

Analyze collected data as it pertains to reproductive health.

Use collected data to formulate a plan of care as it pertains to reproductive health.

Implement the plan of care in reproductive health.

Evaluate goals and therapeutic outcomes as it relates to reproductive health.

Theory:

Activities: Erectile Dysfunction

Large Group

Play one or more of the current advertisements from pharmaceutical companies producing medications to treat ED. Ask students what message these ads are trying to convey, what mistaken impression men with ED may receive, and how to address the client who presents in the provider's office requesting a prescription without any prior diagnostic testing.

Large Group

Brainstorm with the class areas of caring interventions and potential nursing diagnoses appropriate for the client with ED over the life span.

Activities: Family Planning

Large Group

Discuss different religions, cultures that may have reservations about these types of reproductive technology.

- Intrauterine insemination (IUI)
- IVF
- Gamete intrafallopian transfer (GIFT)/zygote intrafallopian transfer (ZIFT).

Activities: Menopause

Large Group

Discuss with the class personal experiences with menopause (with family members, clients, etc.) and relate to nursing diagnoses.

Large Group

Lead a discussion with students with the goal of helping them to realize that not all menopausal clients experience acute or severe symptoms, and some have very few symptoms.

Activities: Menstrual Dysfunction

Large Group

Lead an open discussion about the alterations in sexuality that may occur with PMS and dysfunctional uterine bleeding (DUB). This is often a difficult topic to discuss as a student, and the open discussion will assist them as nurses.

Activities: Responsible Sexual Behavior

Large Group

Ask students to spend some time researching the frequency of occurrence of sexual violence in your community. What types of sexual violence do they discover are occurring within the community? Are acts of brutality, such as when a man who is spurned by a woman throws acid on her face to get even, considered sexual violence? What is the nurse's responsibility and what can the nurse do to reduce the occurrence of sexual violence?

Large Group

Use one of the small-group presentations on sexually transmitted diseases to stimulate discussion about counseling clients. See the following Web site for more information:

<http://www.nlm.nih.gov/medlineplus/tutorials/sexuallytransmitteddiseases/htm/index.htm>

Lab:

SKILL 17.3: Assessing for Abuse			
Procedure	Performed		Comments
	Yes	No	
1. Introduced self, explained what was to be done and why. Performed hand hygiene following infection control measures and verified client's identity. Provided privacy. Provided comfort and safety for client and self.			
2. Assessed client for indications of neglect: failure to provide adequate food, clothing, medical assistance, or assistance with ADLs. Checked body for signs of cleanliness. Determined if emotional abuse was present. Asked about threats, intimidation, or isolation.			
3. Identified if financial abuse has occurred, such as misuse of finances or property.			
4. Assessed for signs of physical abuse: signs of restraining; hitting, biting, burning; black and blue marks on trunk, abdomen, buttocks, upper thighs; scars, and abrasions. Bilateral bruises or parallel injuries may indicate forceful restraining; shaking may cause parallel injuries of upper arms. Sexual abuse may cause edema, bruising, or tearing in the genital or anal area. Accidental injuries affect knees, back of hands, forehead, and elbows.			
5. Assessed for signs of malnourishment or dehydration.			
6. Checked skin for pressure ulcers.			
7. Assessed for signs of sprains, dislocations, or fractures from pulling or pushing the client.			
8. Asked about visits to the hospital ED. Asked why client sought medical care, how much time elapsed between injury and visit to ED.			
9. Assessed for signs of emotional abuse. Observed if client was fearful of strangers, became quiet when caregiver entered room, refused to answer if caregiver was present or craved attention and socialization.			

Please be prepared to demonstrate all prior skills learned in NRS 125 so far.

Mixing medications using one syringe
Administering metered dose inhaler medications
Administering dry powder inhaled medications
Administering nebulized medications
Adding medications to IV fluid containers
Administering intermittent IV medications using a secondary set
Administering intravenous medications using IV push
Performing urinary catheterization
Performing catheter care and removal
Maintaining continuous bladder irrigation
Providing suprapubic catheter care
Performing urinary ostomy care and obtaining specimen
Inserting a rectal tube
Administering an enema
Applying a fecal ostomy pouch
Monitoring intake and output
Regulating infusion flow rate
Assisting a client to use crutches
Flushing and maintaining a nasogastric tube/gastric lavage
Removing a nasogastric tube
Obtaining nose and throat specimens
Using an incentive spirometer
Pursed lip breathing
Oropharyngeal, nasopharyngeal and nasotracheal suctioning
Suctioning the client with a tracheostomy or endotracheal tube
Providing tracheostomy care
Applying anti-embolism stockings (TED stockings)
Applying sequential compression devices (SCD)
Cleaning a sutured wound and changing a dressing on a wound with a drain

Changing a dressing for a venous ulcer
Maintaining closed wound drainage (Jackson-Pratt drain)
Donning sterile gown and gloves
Pouring from a sterile container
Changing a dry sterile dressing

Clinical: