

Course Competency

RET 2275 RESPIRATORY CARE THEORY 2

Course Description

Emphasis on pressure breathing modalities, chest physiotherapy, and incentive devices. Prerequisite: RET 2274; Corequisite: RET 2275L. (2 hr. lecture)

Course Competency	Learning Outcomes
<p>Competency 1: The student will describe BVM resuscitators and how to properly use and evaluate these devices by:</p>	<ol style="list-style-type: none"> 1. Communication 2. Critical thinking 3. Information Literacy 4. Ethical Issues
<ol style="list-style-type: none"> 1. Identifying the major parts of any BVM resuscitator. 2. Identifying types of BVM resuscitators and how each differs. 3. Discussing the indications, hazards, and contraindications for using BVM resuscitators on patients. 4. Comparing and contrasting the self-inflating to the non-inflating type bag and identify clinical uses requiring each. 5. Explaining the FiO₂ attainable with each type unit and how it should be monitored. 6. Identifying the desirable characteristics of a BVM resuscitator. 7. Explaining manual ventilation technique and procedure 8. Demonstrating CPR concept proficiency 	
<p>Competency 2: The student will identify artificial airways and describing safe use by:</p>	<ol style="list-style-type: none"> 1. Communication 2. Numbers / Data 3. Critical thinking 4. Information Literacy 5. Ethical Issues
<ol style="list-style-type: none"> 1. Identifying the major groups of artificial 	

<p>airways.</p> <ol style="list-style-type: none"> 2. Describing the indications and hazards of using each group. 3. Identifying the steps a therapist must take in properly assessing the patient, establishing and discontinuing each type of airway, and determining patency and proper placement of the tube. 4. Describing the proper steps in maintaining safe airways. 5. Comparing proper and improper placement of each type tube. 6. Discussing the material used in the construction of airways. 7. Explaining the ideal characteristics of a tube and a mask. 	
<p>Competency 3: The student will describe the proper technique used for oral and tracheal aspiration by:</p>	<ol style="list-style-type: none"> 1. Communication 2. Numbers / Data 3. Critical thinking 4. Information Literacy
<ol style="list-style-type: none"> 1. Listing and explaining all pieces of equipment needed to aspirate the patient's airway. 2. Describing how the equipment is assembled. 3. Explaining how the patient is observed and assessed. 4. Identifying indications and contraindications for tracheal aspiration. 5. Comparing and contrasting open systems and closed systems for tracheal aspiration. 6. Describing precautions that should be taken before, during, and after the aspiration procedure. 7. Listing and defending procedure steps to be followed when aspirating. 8. Describing how the procedure is charted. 9. Explaining the clinical applications of tracheal aspiration in patient care and select techniques appropriate to given clinical settings. 	

<p>Competency 4: The student will describe the concepts of Sustained Maximal Inspiration (SMI) and Lung Expansion Therapy by:</p>	<ol style="list-style-type: none"> 1. Communication 2. Numbers / Data 3. Critical thinking 4. Information Literacy
<ol style="list-style-type: none"> 1. Identifying specific clinical indications for Sustained Maximal Inspiration (SMI), Incentive Spirometry (IS), & CPAP Therapy. 2. Explaining the goals of (IS) Therapy/ Lung Expansion therapy 3. Evaluating the administration of Lung Expansion therapy seen in a demonstration. 4. Explaining how to administer a Lung Expansion treatment. 5. Identifying various types of Lung Expansion equipment, explaining how they operate. 6. Evaluating therapeutic outcome of Lung Expansion therapy. 7. Identifying appropriate data that should be recorded during and after Lung Expansion therapy. 8. Identifying key components of all the IPPB devices 9. Correctly connecting the tubing to all the IPPB devices. 10. Performing an equipment check to determine correct machine function prior to therapy utilization. 11. Determining what machine adjustments or operational situations: alter volume delivered to the patient alter deliverable oxygen concentration prevent device cycling into exhalation 12. Determining what effect lung compliance and airway resistance changes have on delivered tidal volume 	
<p>Competency 5: The student will describe chest physiotherapy as a respiratory care therapeutic procedure by:</p>	<ol style="list-style-type: none"> 1. Communication 2. Numbers / Data 3. Critical thinking 4. Information Literacy

1. Reviewing the terms and definitions associated with chest physiotherapy
2. Reviewing proper use of patient transportation equipment and patient positioning.
3. Identifying and describe the function of equipment available to assist in chest physiotherapy.
4. Identifying all lung segments and the postural drainage positions appropriate for each lung segment.
5. Describing the indications, hazards, and contraindications when performing chest physiotherapy.
6. Identifying the clinical situations that would require modification of chest physiotherapy and how the modifications should be made appropriate to each situation.
7. Identifying what should be observed and/or monitored in a patient during administration of therapy.
8. Explaining what to chart after therapy has been administered.
9. Identifying, comparing and contrasting airway clearance devices such as high-frequency chest wall oscillation, vibratory PEP, intrapulmonary percussive ventilation, & insufflation/exsufflation devices. Assemble and troubleshoot associated equipment
10. Explaining diaphragmatic breathing and who might benefit from it.
11. Reviewing the steps of a cough. Explain methods that can assist the patient in performing a more effective cough.
12. Selecting equipment and procedures currently used in chest physiotherapy appropriate to clinical situations in pediatric and adult patients
13. Comparing and contrasting the procedures and equipment for optimum patient success.
14. Comparing and contrasting percussion with vibration.
15. Identifying clinical situations that indicate use of chest physiotherapy.

16. Discussing the current status of the various techniques of chest physiotherapy in the context of evidence	
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