

Covenant School of Nursing
LVN-RN Course Learning Guide

Topic: Advanced Medical-Surg for Exam AMS A and B (see exam blueprint)

Learning Goals/Outcomes

Upon completion of this lesson, you will be able to:

- Interpret arterial blood gas (ABG) values and implement nursing interventions accordingly.
- Identify characteristics of respiratory failure, pneumonia, COPD, and tuberculosis and identify nursing interventions for each.
- Describe nursing care interventions used to promote oxygenation.
- Implement and describe care and comfort for the mechanically ventilated patient.
- Prioritize nursing interventions in the management of the physiologic and psychosocial needs of the burn patient.
- Recognize signs and symptoms of acute coronary syndrome, myocardial infarction, congestive failure, cardiogenic shock, and aortic aneurysm and provide effective nursing care.
- Interpret and assess abnormal conduction of the heart and intervene appropriately.
- Differentiate between types of pacemaker settings and their use.
- Prioritize and implement primary nursing interventions for the clinical manifestations of Disseminated Intravascular Coagulopathy and Heparin Induced Thrombocytopenia and analyze lab values of these patients.
- Describe the pathophysiology, risk factors, clinical manifestations, pharmacologic treatments, and nursing plans of care for patients with deep vein thrombosis and peripheral vascular disease.
- Recognize signs & symptoms and implement primary care strategies for the manifestations of hypovolemic, distributive (sepsis and anaphylaxis), and obstructive (Tamponade) shock and anaphylaxis.
- Compare and contrast the etiology, clinical manifestations, collaborative care, pharmacologic treatment, and nursing management of patients with seizure disorder, cerebral vascular accident, and Alzheimer's disease.
- Assess, recognize signs & symptoms, and Intervene for the patient experiencing increased intracranial pressure, intracranial bleed, & traumatic brain injury.
- Recognize signs & symptoms of neurogenic shock/autonomic dysreflexia and intervene appropriately.
- Provide nursing care for patients with spinal cord injury.
- Recognize and implement care strategies for patients with liver dysfunction.

Pre-Class Preparation

Required:

- See HESI & Other Assignments Sheet for resources related to ABG, EKG, TBI, Burns
- Reading: Saunders Comprehensive Review for the NCLEX-RN Examination.
 - ABG interpretation and causes, Respiratory (Respiratory Failure, Pneumonia, COPD, Bronchitis, Emphysema, and tuberculosis), Mechanical Ventilation, Aortic aneurysm, arterial line, blood transfusion, Burns, Cardiac Tamponade, Cardiogenic shock, Care of the Cardiac Cath patient, Care of the MI patient, Acute coronary syndrome, Angina, Coronary artery disease, Heart failure, Myocardial infarction, Peripheral vascular disease (arterial & venous), Chest tube management, Code management - roles of the team, Coronary artery bypass graft surgery, Disseminated intravascular coagulation (DIC), EKG, Heparin-induced thrombocytopenia (HIT), Intracranial bleed, Pacemakers, Preload & afterload, Spinal cord injury, Traumatic brain injury, Epilepsy, Seizures, Stroke, Alzheimer's, Venous thromboembolism (VTE).

Additional Resources:

- <https://www.youtube.com/watch?v=cybqmtsqqvGs> (Understanding Shock – detailed but good) 27 minutes [Shock Stages Nursing NCLEX: Initial, Compensatory, Progressive, Refractory - YouTube](https://www.youtube.com/watch?v=cybqmtsqqvGs)
- <https://www.youtube.com/watch?v=6Zd6IEC-eKs> (Anatomy of the Brain)
- https://youtu.be/_Gx20yWZeHQ?si=OyQs6_TlhRdcB_Sz (Traumatic Brain Injury – Bek's Battle)
- <https://www.youtube.com/watch?v=YI66VLKCKso> (Intracranial pressure)
- <https://www.youtube.com/watch?v=fyYT8wozccw> (Cerebral Perfusion Pressure)
- https://youtu.be/UDqqad50gcE?si=F0xeGxVVU_34urJ5 Nursing Care Plan for a Spinal Cord Injury)
- <https://www.youtube.com/watch?v=zxpb1-okVig> (Anatomy of the Spinal Cord and How it Works)

- https://youtu.be/_G-d8gKlOW?si=cn5gc7jkvuoWq3uT (Ascending and Descending Spinal Cord Tracts Made Easy)

Videos Retrieved 10/2023 / Videos updated 10/2023 EM

Learning Activities

Classroom Activities:

- Lecture
- Discussion
- Case scenarios

Laboratory/Clinical:

- Advanced Medical Surgical SIM in the laboratory setting

Online:

Evaluation Methods

- Discussion
- Case studies
- Collaborative learning
- HESI Module Completion
- Exam

Texas DECs	QSEN Competencies
Knowledge II.A.1.a; 2a, b.,3; II.B.2, 4, 5, 6, 7, 8, 11, 12; II.C, 3, 4b, 5, 6, 7, 8; II.D. 1a, 1b, 1c, 3b, 4c,5a; II.E, 1a, 1b, 2, 4a,4b, 5, 6b, 12, 13; II.F, 2; II.G, 2a, 2b, 3a, 3b IV.C, 1, 3, 5, 8, Clinical Judgments and Behaviors I.A.1, 2, 3a, 3b, B.2.a, 2.b, 3.a, 3.b, 3.c, 4.a, 4.b, 5.a, 5.c, 6.a, 6.b, 6.c; II.A, 1, 2.a, 2.b, 3, 4; II.B, 1, 2, 3.a, 3.b, 4, 5, 6, 7, 8, 9, II.C.1, 2, 3.a, 4, 5, 6, 7; II.D.1, 2.a, 2.c, 2.d, 3.a, 3.b,3.c; II.E.1, 2.a, 2.b, 2.c, 3.b, 4, 5.a, 6.a, 6.c, 6.d, 9, 10, 11, 12.b; II.F.1.a, 1.b, 1.c, 2.a, 2.b,5.a, 5.b; II.G.1,2a, 2b, 3, 4, 5a, 5b, 6, 7; II.H.6; III.A., 2, 3, 4, 5a; III.B.1, 2, 3.a, 3.b, 3.c, 4, 5, 8, 9; III.C.2.a, 2.b, III.D.1, 2, 3; III.E.1, 3; III.F.1; IV.A.1, IV.B.1.a, 2; IV.C.1.a, 2.b; IV.D.1.b, 3.b, IV.E.1.b, 1.c, 2.b, 2.c, 4;	Patient Center Care, Evidence Based Practice, Safety
IM Student Learning Outcomes	NCLEX Test Plan
1/1-2,1/5,3/1-3,3/5-7,4/1-4/8,7/1-8	MOC (continuity of care, establishing priorities);S&IC (home safety);HP&P (health promotion/disease prevention, health screening, high risk behaviors, lifestyle choices, self-care, techniques of physical assessment); Psych int. (stress management, therapeutic communication); BC&C (nutrition); RRP (diag. tests, lab values, potential alt. in body systems, potential for complications of diag. test/treatments/procedures, system specific assessments; Phys. Adaption (alterations in body systems, hemodynamics, illness management)
Concepts	Faculty
Acid-Base, Clinical Judgement, Cellular Regulation, Clotting, Comfort, Diversity, Elimination, Fluid & Electrolytes, Gas Exchange, Immunity, Metabolism, Nutrition, Perfusion, Sensory/Perception, Tissue Integrity, Coping, Clinical Judgement, Patient Education, Evidence-based practice, Patient-centered Care	D. Kilpatrick MSN, RN, CNE, CCRN-K E. McWilliams MSN, RN
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