

Summary Chart

Critical Care (Adult) Nursing Exam Development Guidelines

Structural Variables	
Exam Length and Format	Approximately 165 objective questions (e.g., multiple choice)
Question Presentation	50-60% independent questions 40-50% case-based questions
Cognitive Ability Levels of Questions	Knowledge/Comprehension: 20-30% of questions Application: 22-32% of questions Critical Thinking: 42-52% of questions
Competency Categories	Neurologic System 10-20% of questions Cardiovascular System 17-27% of questions Respiratory System 16-26% of questions Gastrointestinal System 2-12% of questions Renal System 1-11% of questions Endocrine System 3-13% of questions Immunology and Hematology Systems 3-13% of questions Musculoskeletal and Integument Systems 2-12% of questions Psychosocial 1-10% of questions
Contextual Variables	
Client Age and Gender	In the development of the critical care (adult) certification exam, questions will include only adult clients (i.e., 16 years and older). The age of the client will be determined by the presented health situations. The questions will represent both genders.
Client Culture	Questions are included that measure awareness, sensitivity and respect for different cultural values, beliefs and practices, without introducing stereotypes.
Client Health Situation	In the development of the Critical Care (Adult) Exam, the client is viewed holistically. The client health situations presented also reflect a cross-section of health situations encountered by critical care (adult) nurses.
Health-Care Environment	It is recognized that critical care (adult) nursing is practised primarily in the hospital setting. However, critical care (adult) nursing can also be practised in other settings. Therefore, for the purposes of the Critical Care (Adult) Exam, the health-care environment is specified only where it is required for clarity or in order to provide guidance to the examinee.

The Critical Care (Adult) Nursing Exam List of Competencies

Neurologic System

The critical care (adult) nurse:

- 1.1 interprets data (initial assessment or evaluating results of intervention) related to the neurologic system, including:
 - 1.1a physical assessment (e.g., level of consciousness, Glasgow Coma Scale, cranial nerve assessment, motor and sensory assessment, pupils);
 - 1.1b laboratory results (e.g., osmolality, cerebral spinal fluid [CSF], sodium, arterial blood gases [ABGs]);
 - 1.1c diagnostic results (e.g., computed tomography [CT or CAT scan], magnetic resonance imaging [MRI], electroencephalogram [EEG], angiography);
 - 1.1d intracranial waveforms and pressures (e.g., troubleshooting inaccurate results, interpreting abnormal findings);
 - 1.1e cerebral perfusion pressure (e.g., calculation); and
 - 1.1f brain death criteria.
- 1.2 recognizes actual or potential life-threatening alterations in the neurologic function, including:
 - 1.2a ineffective thermoregulation (e.g., hyperthermia, hypothermia);
 - 1.2b motor and sensory dysfunction related to neuromuscular transmission, (e.g., Guillain-Barré syndrome, spinal cord injury, myasthenia gravis, amyotrophic lateral sclerosis [ALS], polyneuropathy of critical illness);
 - 1.2c motor and sensory dysfunction related to brain injury (e.g., stroke, trauma);
 - 1.2d cerebral tissue perfusion (e.g., seizures, meningitis, stroke); and
 - 1.2e intracranial hypertension (e.g., head trauma, cerebral aneurysm, herniation).
- 1.3 selects the appropriate nursing intervention to minimize or prevent motor or sensory deficits, such as:
 - 1.3a maintaining spinal cord integrity (e.g., positioning, immobilization devices);
 - 1.3b intervening for spinal cord crises: spinal shock, neurogenic shock, autonomic dysreflexia (e.g., alleviating cause, pharmacological agent, positioning, fluids);

- 1.4 selects the appropriate nursing intervention to correct alterations in cerebral tissue perfusion, such as:
 - 1.4a using techniques to prevent obstruction and promote venous and cerebral spinal fluid [CSF] drainage (e.g., positioning, neck alignment, head-of-bed elevation, proper application of collars and tracheostomy ties);
 - 1.4b manipulating PaCO₂;
 - 1.4c administering pharmacologic agents (e.g., diuretics, barbiturates, analgesics, sedatives, neuromuscular blocking agents, steroids);
 - 1.4d managing invasive intracranial pressure monitoring or ventricular drainage devices (e.g., set-up, drainage, troubleshooting, positioning of device);
 - 1.4e using techniques that control intrathoracic pressures (e.g., minimizing airway stimulation, pharmacological agents, minimizing positive end-expiratory pressure (PEEP), gastric decompression);
 - 1.4f managing vasospasm (e.g., calcium channel blockers, triple therapy (hypervolemia, hypertension, hemodilution), positioning);
 - 1.4g controlling metabolic rate (e.g., invasive and non-invasive warming or cooling devices or fluids, pharmacologic agents, reduced stimulation);
 - 1.4h managing seizure activity (e.g., pharmacologic, correct hypoglycemia, correct electrolytes);
 - 1.4i preventing secondary injury (e.g., maintaining adequate oxygenation, preventing hypercarbia, fluid management, blood pressure management); and
 - 1.4j managing thrombotic stroke (e.g., thrombolytics, blood pressure control, thermoregulation, blood sugar control).

Cardiovascular System

The critical care (adult) nurse:

- 2.1 interprets data (initial assessment or evaluating results of intervention) related to the cardiovascular system, including:
 - 2.1a physical assessment (e.g., pulses, skin temperature and colour, heart sounds, lung sounds, work of breathing, jugular venous distention [JVD]);
 - 2.1b laboratory results (e.g., cardiac enzymes, complete blood count [CBC], coagulation, ABGs, electrolytes, digoxin levels);
 - 2.1c diagnostic results (e.g., continuous ST segment monitoring, transthoracic [2-D echocardiogram], transesophageal echocardiogram [TEE]);
 - 2.1d right atrial or mixed venous oxygen saturation measurements;
 - 2.1e information from technological supports (e.g., intra-aortic balloon pump [IABP] waveforms, pacemakers [sensing and capture]);

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- 2.1f pulmonary artery pressures and waveforms (e.g., right ventricular [RV], pulmonary artery pressure [PAP]);
 - 2.1g atrial pressures and waveforms (e.g., right atrial [RA], pulmonary artery wedge pressure [PAWP]);
 - 2.1h arterial pressures and waveforms (e.g., radial, femoral);
 - 2.1i hemodynamic parameters (e.g., cardiac output [CO] and index [CI], systemic vascular resistance index [SVRI], pulmonary vascular resistance index [PVRI]);
 - 2.1j Cardiac rhythm; and
 - 2.1k 12-lead ECG results: intermittent or continuous (e.g., location and recognition of ischemia, injury, infarction).
- 2.2 intervenes based on observation of manifestations of the following actual or potential life-threatening alterations in cardiac perfusion and output:
- 2.2a cardiogenic shock (e.g., myocardial infarction, cardiomyopathy, cardiac contusion, subacute endocarditis);
 - 2.2b hypovolemic shock (e.g., hemorrhage, third space loss, vasodilating drugs);
 - 2.2c acute coronary syndrome: myocardial infarction (e.g., right versus left infarction);
 - 2.2d cardiac tamponade (e.g., cardiac surgery, trauma, effusion);
 - 2.2e acute cardiac pulmonary edema (e.g., oxygen, pharmacological agents, PEEP);
 - 2.2f acute coronary syndrome: angina (e.g., stable, unstable); and
 - 2.2g hypertension (e.g., post cardiovascular surgery, pheochromocytoma, pregnancy-induced).
- 2.3 intervenes based on observation of manifestations of the following actual or potential life-threatening alterations in vascular perfusion:
- 2.3a aneurysm (e.g., aortic arch, thoracic, abdominal); and
 - 2.3b complications from arrhythmia (e.g., thrombus, low stroke volume, activity intolerance).
- 2.4 selects appropriate intervention to correct alterations in cardiovascular perfusion, such as:
- 2.4a administering vasopressors;
 - 2.4b administering vasodilators;
 - 2.4c administering thrombolytic agents;
 - 2.4d administering anticoagulants (e.g., ASA, heparin, low-molecular-weight heparin, ADP inhibitor, glycoprotein inhibitor, warfarin); and
 - 2.4e managing intra-aortic balloon pump (e.g., troubleshooting, client positioning, catheter placement, insertion site care, limb perfusion, renal perfusion).

- 2.5 selects appropriate interventions to correct alterations in cardiac output, such as:
 - 2.5a manipulating preload (e.g., fluid administration, pharmacologic agents);
 - 2.5b manipulating afterload (e.g., fluid administration, pharmacologic agents, intra-aortic balloon pump);
 - 2.5c manipulating contractility (e.g., fluid administration, pharmacologic agents);
 - 2.5d manipulating heart rate or rhythm (e.g., fluid administration, pharmacologic agents, electrolytes);
 - 2.5e manipulating heart rate or rhythm: transvenous pacing;
 - 2.5f manipulating heart rate or rhythm: transcutaneous pacing;
 - 2.5g manipulating heart rate or rhythm: cardioversion;
 - 2.5h manipulating heart rate or rhythm: defibrillation; and
 - 2.5i managing a cardiac arrest (e.g., ACLS protocols).
- 2.6 selects appropriate nursing intervention to manage intravascular catheters, such as:
 - 2.6a preventing or managing complications (e.g., air embolism, thrombosis, infection, occlusion, hemorrhage, placement); and
 - 2.6b removal of intravascular catheters: central venous catheters, peripheral arterial lines, femoral arterial lines (e.g., adequate hemostasis, client positioning, infection prevention).
- 2.7 selects appropriate nursing intervention to manage hemodynamic monitoring circuits, such as:
 - 2.7a managing invasive hemodynamic catheters (e.g., set-up, levelling, patency); and
 - 2.7b troubleshooting invasive hemodynamic pressures and waveforms (e.g., inaccurate results, interpreting abnormal findings).

Respiratory System

The critical care (adult) nurse:

- 3.1 interprets data (initial assessment or evaluating results of intervention) related to the respiratory system, including:
 - 3.1a physical assessment (e.g., auscultation, percussion, inspection);
 - 3.1b laboratory results (e.g., ABGs, methemoglobins, carboxyhemoglobin);
 - 3.1c diagnostic test results (e.g., chest X-rays, CT scans, bronchoscopies, pulmonary function tests);
 - 3.1d monitoring technological devices (e.g., pulse oximetry, end tidal CO₂);
 - 3.1e oxygen values (e.g., PaO₂, SaO₂, SpO₂, oxygen content, oxygen delivery);

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- 3.1f need for mechanical support (e.g., readiness to discontinue ventilation, readiness to extubate, need to increase support);
 - 3.1g ventilation information (e.g., tidal volume, minute volume, respiratory rate, airway pressures); and
 - 3.1h PaO₂: FiO₂ ratio.
- 3.2 recognizes an actual or potential life-threatening alteration of the respiratory system, including:
- 3.2a ineffective airway (e.g., asthma, epiglottitis, facial fractures, mucous plug);
 - 3.2b pleural abnormalities (e.g., tension pneumothorax, effusion, hemothorax);
 - 3.2c chest trauma (e.g., flail chest, pulmonary contusion, diaphragm rupture, rib fractures);
 - 3.2d non-cardiac pulmonary edema (e.g., acute lung injury [ALI], acute respiratory distress syndrome [ARDS]);
 - 3.2e embolism (e.g., thrombotic, fat, air, amniotic);
 - 3.2f pulmonary hypertension (e.g., primary, secondary);
 - 3.2g inhalation injuries (e.g., thermal, carbon monoxide, aspiration); and
 - 3.2h Chronic obstructive pulmonary disease (COPD) (e.g., PaCO₂ retention, air trapping).
- 3.3 selects appropriate nursing interventions to correct alterations in respiratory function, such as:
- 3.3a positioning (e.g., prone, head-of-bed elevation);
 - 3.3b managing airway (e.g., jaw thrust or chin lift, artificial airways);
 - 3.3c managing the endotracheal tube or tracheostomy (e.g., suctioning, tube placement, tracheo-bronchial toilet);
 - 3.3d managing secretions (e.g., chest percussion, vibration, postural drainage, assisted cough, rotational therapy);
 - 3.3e administering pharmacologic agents to facilitate ventilation (e.g., analgesics, reversal agents, sedatives, paralytics);
 - 3.3f administering pharmacologic agents to prevent or treat pulmonary embolism (e.g., thrombolytic agents, anticoagulants);
 - 3.3g administering pharmacologic agents to treat pulmonary hypertension and/or hypoxemia (e.g., nitric oxide, sildenafil citrate [Viagra], prostacyclin);
 - 3.3h administering pharmacologic agents to maintain airway patency (e.g., bronchodilators, steroids, anesthetic agents);
 - 3.3i troubleshooting mechanical supports (e.g., ventilator, BiPAP mask);
 - 3.3j troubleshooting chest draining units (e.g., air leaks, patency, bleeding, maintaining underwater seal);
 - 3.3k assisting with medical interventions (e.g., tracheostomy, intubation, chest tube insertion);
 - 3.3l initiating changes to oxygenation (e.g., oxygen concentration, continuous positive airway pressure [CPAP], positive end-expiratory pressure [PEEP]);

- 3.3m initiating changes to manipulate minute ventilation (e.g., assist control [AC], synchronized intermittent mandatory ventilation [SIMV], tidal volume);
 - 3.3n initiating changes to adjust pressure support ventilation (PSV); and
 - 3.3o initiating changes to manipulate pressure controlled ventilation (PCV) or high-frequency ventilation.
- 3.4 selects appropriate nursing interventions to promote return to spontaneous ventilation (e.g., adequate nutrition, pain management, promoting rest).
- 3.5 selects appropriate nursing interventions to promote safe use of neuromuscular blocking agents (e.g., monitoring, preventing complications, pain and anxiety management).

Gastrointestinal System

The critical care (adult) nurse:

- 4.1 interprets data (initial assessment or evaluating results of intervention) related to the gastrointestinal function, including:
 - 4.1a physical assessment (e.g., inspection, auscultation, percussion, palpation); and
 - 4.1b laboratory results (e.g., liver profile, blood sugar, amylase, proteins, electrolytes).
- 4.2 recognizes actual or potential life-threatening alterations to the gastrointestinal system, including:
 - 4.2a ischemic disorders (e.g., infarcted bowel, hepatic failure, cirrhosis, abdominal compartment syndrome);
 - 4.2b inflammatory disorder (e.g., peritonitis, pancreatitis, hepatitis);
 - 4.2c mechanical disorders (e.g., esophageal rupture, perforated bowel, ileus);
 - 4.2d hemorrhagic disorders (e.g., upper and lower gastrointestinal bleeding, splenic injuries, hepatic injuries); and
 - 4.2e complications of enteral or parenteral feeding (e.g., sinusitis, diarrhea, aspiration, constipation, hyperglycemia, refeeding syndrome).
- 4.3 selects the appropriate nursing intervention to manage the client poisoned with drugs (e.g., antidepressants, ASA, acetaminophen, toxic alcohols, narcotics, cocaine).
- 4.4 selects the appropriate nursing interventions to correct alterations in gastrointestinal functions such as:
 - 4.4a promoting early and safe enteral feeding (e.g., client positioning to prevent aspiration, tube placement, small bowel feeding tube placement);
 - 4.4b promoting early and safe parenteral feeding (e.g., indications, lipid therapy, glucose concentration, selection of access site);
 - 4.4c administering pharmacologic agents (e.g., histamine antagonist, proton pump inhibitors, motility enhancers, charcoal, poison antidote);

- 4.4d controlling gastric bleeding (e.g., pharmacologic agents, gastric tubes);
- 4.4e managing pancreatitis (e.g., hypocalcemia, ARDS, systemic inflammatory response syndrome [SIRS], blood sugar disorders, hemorrhage, pain); and
- 4.4f managing hepatic failure (e.g., encephalopathy, coagulopathy, hypoglycemia, ascites).

Renal System

The critical care (adult) nurse:

- 5.1 interprets data (initial assessment or evaluating results of intervention) related to the renal system including:
 - 5.1a physical assessment (e.g., edema, urine, right atrial pressure or pulmonary artery wedge pressure, fluid balance); and
 - 5.1b laboratory results (e.g., electrolytes, urine electrolytes, urea, creatinine, urinalysis, serum and urine osmolality, drug levels).
- 5.2 recognizes effects of nephrotoxic agents or delayed clearance (e.g., diuretics, vasopressors, antibiotics, radiographic dyes).
- 5.3 recognizes potential life-threatening alterations in renal function (e.g., prerenal, intrarenal, postrenal).
- 5.4 selects appropriate nursing interventions to correct electrolyte and acid-base imbalances (e.g., potassium, magnesium, calcium, sodium, phosphate, metabolic acidosis or alkalosis).
- 5.5 selects appropriate interventions to optimize renal function, such as:
 - 5.5a optimizing cardiac output (e.g., fluid administration, inotropes);
 - 5.5b administering pharmacological agents (e.g., diuretics, sodium bicarbonate, N-acetylcysteine); and
 - 5.5c maintaining and troubleshooting invasive interventions: continuous renal replacement therapies (CRRT).

Endocrine System

The critical care (adult) nurse:

- 6.1 interprets data (initial assessment or evaluating results of intervention) related to the endocrine system, including laboratory tests (e.g., blood sugar, ABGs, hormone levels, osmolality, electrolytes, urine ketones).
- 6.2 recognizes actual or potential life-threatening alterations in endocrine function, such as:
 - 6.2a antidiuretic hormone (e.g., diabetes insipidus, syndrome of inappropriate antidiuretic hormone [SIADH]);
 - 6.2b diabetes (e.g., ketoacidosis [DKA], hyperglycemic hyperosmolar non-ketotic coma);
 - 6.2c adrenal insufficiency (e.g., primary, secondary, associated with sepsis); and
 - 6.2d thyroid disorders (e.g., hyperthyroidism, hypothyroidism).

- 6.3 selects appropriate nursing interventions to correct alterations in endocrine function, such as:
 - 6.3a administering pharmacologic agents (e.g. insulin, steroids, dextrose, antidiuretic hormone);
 - 6.3b managing complications (e.g., fluid management, temperature regulation, electrolyte replacement);
 - 6.3c managing hyperglycemia or hypoglycemia (e.g., intensive insulin therapy, therapy complications); and
 - 6.3d maintaining optimal organ function in the organ donor (e.g., triple hormone therapy [antidiuretic hormone, thyroid hormone, steroids], fluid management, hemodynamic management, protective lung ventilation).

Immunology and Hematology Systems

The critical care (adult) nurse:

- 7.1 interprets data (initial assessment or evaluating results of intervention) related to the immunologic and hematologic systems, including:
 - 7.1a laboratory results related to hematology (e.g., CBC: erythrocytes, hemoglobin, hematocrit; coagulation profile: INR, aPTT, platelet count, fibrinogen, heparin antibody); and
 - 7.1b laboratory results related to immunology and inflammation (e.g., CBC: leukocytes, neutrophils, lymphocytes, bands; immunoglobulins: IgG, IgM; cultures: bacterial, viral, and fungal; C-reactive protein).
- 7.2 recognizes potential risks for infection (e.g., immunosuppression, invasive vascular devices, indwelling drainage devices, malnutrition, intubation, hyperglycemia, skin breakdown).
- 7.3 recognizes inflammation and infection (e.g., SIRS, sepsis, severe sepsis, septic shock).
- 7.4 recognizes the potential life-threatening alterations in the hematologic functions, such as:
 - 7.4a thrombocytopenia (e.g., heparin-related, drug-induced, sepsis, idiopathic thrombocytopenia purpura [ITP], vascular lines); and
 - 7.4b deep vein thrombosis (DVT) (e.g., identifying at-risk clients, manifestations, diagnostic studies).
- 7.5 selects appropriate interventions to prevent alterations in the immunologic system, such as:
 - 7.5a infections (e.g., aseptic technique, adequate nutrition, minimizing exposure to organisms); and
 - 7.5b ventilator-associated pneumonia (VAP) (e.g., head-of-bed elevation, mouth care, spontaneous breathing trials, early enteral feeding).
- 7.6 selects appropriate interventions to correct life-threatening alterations in the immunologic system, such as:
 - 7.6a managing sepsis syndrome (e.g., fluids, vasopressors, vasopressin, steroids, anti-infectives, right atrial oxygen saturation monitoring); and
 - 7.6b administration of activated protein C for sepsis (e.g., indications, contraindications, adverse effects, monitoring).

- 7.7 selects appropriate interventions to prevent or correct alterations in the hematologic system such as:
 - 7.7a venous thrombotic disorders: deep vein thrombosis (DVT), pulmonary thromboembolism, vascular access associated thrombosis (e.g., pharmacological agents, shock management, positioning, mechanical compression devices, mobilization, replacement of coagulation factors);
 - 7.7b arterial thrombotic disorders: cerebral thromboembolism, peripheral arterial thrombosis (e.g., pharmacological agents, shock management, mobilization, replacement of coagulation factors, rhythm management);
 - 7.7c disseminated intravascular coagulation (DIC); and
 - 7.7d hemorrhagic disorders (e.g., blood conservation, replacement of red blood cells, replacement of coagulation factors, early detection of blood loss, blood pressure control, pharmacological agents).
- 7.8 gathers data on infection control risks to clients and staff and takes all the necessary preventive measures to protect against exposure.

Musculoskeletal and Integumentary Systems

The critical care (adult nurse):

- 8.1 interprets data (initial assessment or evaluating results of intervention) related to the musculoskeletal and integumentary systems, including:
 - 8.1a physical assessment (e.g., skin integrity, range of motion, circulation, skin temperature, sensation, risk-measurement scale);
 - 8.1b laboratory results (e.g., creatine kinase [CK], ABGs, electrolytes, CBC, myoglobin); and
 - 8.1c diagnostic test results (e.g., X-rays, compartment pressure, CT scan).
- 8.2 recognizes actual or potential life-threatening alterations of the musculoskeletal and integumentary systems, such as:
 - 8.2a compartment syndrome (e.g., abdominal, limb);
 - 8.2b burns (e.g., thermal, chemical, radiation, electrical);
 - 8.2c wounds (e.g., postoperative wounds, post trauma wounds, decubitus ulcers, necrotizing fasciitis); and
 - 8.2d multiple trauma (e.g., basal skull fracture, ongoing blood loss, subcutaneous emphysema, myocardial contusion, rhabdomyolysis).
- 8.3 selects the appropriate nursing interventions to correct alterations of the musculoskeletal and integumentary systems, such as:
 - 8.3a administering pharmacologic agents (e.g., dantrolene, antibiotics, analgesics); and
 - 8.3b managing rhabdomyolysis (e.g., fluid, pharmacological agents, monitoring CK or myoglobin).

- 8.4 selects appropriate nursing interventions to prevent complications related to immobility (e.g., range of motion, positioning, therapeutic surfaces, coughing, deep breathing, wound care, splinting, mobilization).
- 8.5 selects appropriate nursing interventions in the management of complex wounds (e.g., vacuum-assisted wound drainage, packing, burn dressing, pharmacological agents).

Psychosocial

Communicating with the client

The critical care (adult) nurse:

- 9.1 Interprets data (initial assessment or evaluating results of intervention) related to each client's psychosocial needs, including:
 - 9.1a client's experience of the health crisis (e.g., coping skills, hopelessness, powerlessness, grief, loss); and
 - 9.1b client's response to the health-care system (e.g., current and past experiences).
- 9.2 selects appropriate interventions to facilitate optimal communication, such as:
 - 9.2a providing opportunities for the client to make choices about his or her care (e.g., end-of-life decisions, advanced directives, transplantation, plan of care); and
 - 9.2b providing alternative methods of communication (e.g., use of Passy-Muir valve, communication board, cuff deflation).

Communicating with the family

The critical care (adult) nurse:

- 9.3 interprets data (initial assessment or evaluating results of intervention) related to family needs (e.g., assurance, information, proximity, comfort, support, coping strategies).
- 9.4 selects appropriate interventions to facilitate optimal family processes such as facilitating communication between the client and family given the existing physical, psychological and environmental barriers (e.g., crisis intervention, involving the family in direct client care, facilitating the execution of advanced directives, supporting family's decision about organ donation).

Promoting comfort

The critical care (adult) nurse:

- 9.5 interprets assessment data (initial assessment or evaluating results of intervention) related to discomfort (e.g., pain, anxiety, delirium).

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- 9.6 selects appropriate interventions to promote comfort, such as:
 - 9.6a implementing non-pharmacologic methods of managing discomfort (e.g., communication, appropriate use of touch, noise control, music therapy, visualization, relaxation technique, use of personal mementos, positioning, family involvement);
 - 9.6b administration of analgesia to manage pain as guided by pain assessment methods: responsive client: location, precipitating factors, quality, radiation/referral, severity, duration, alleviating factor; non-responsive client: vital sign changes, grimacing (e.g., intermittent analgesia, continuous analgesia, regional blocks, epidural, client-controlled analgesia [PCA]); and
 - 9.6c administration of sedatives (e.g., using sedation scoring scales, managing anxiety, facilitating ventilation, preparing for procedures).
- 9.7 selects appropriate interventions to prevent or minimize delirium (e.g., manipulation of the environment, promoting sleep, pharmacological agents).

Promotes safety

The critical care (adult) nurse):

- 9.8 selects the appropriate method for promoting client safety (e.g., minimal restraint use).

BIBLIOGRAPHY

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Bibliography

Note: All references are important but bolded references were chosen by members of the Critical Care (Adult) Examination Committee as “key references” for nurses preparing for the critical care (adult) nursing certification examination.

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