Patient Assessment: 3

UNIT TERMINAL OBJECTIVE

3-3 At the end of this unit, the paramedic student will be able to integrate the principles of history taking and techniques of physical exam to perform a patient assessment.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-3.1 Recognize hazards/ potential hazards. (C-1)
- 3-3.2 Describe common hazards found at the scene of a trauma and a medical patient. (C-1)
- 3-3.3 Determine hazards found at the scene of a medical or trauma patient. (C-2)
- 3-3.4 Differentiate safe from unsafe scenes. (C-3)
- 3-3.5 Describe methods to making an unsafe scene safe. (C-1)
- 3-3.6 Discuss common mechanisms of injury/ nature of illness. (C-1)
- 3-3.7 Predict patterns of injury based on mechanism of injury. (C-2)
- 3-3.8 Discuss the reason for identifying the total number of patients at the scene. (C-1)
- 3-3.9 Organize the management of a scene following size-up. (C-3)
- 3-3.10 Explain the reasons for identifying the need for additional help or assistance. (C-1)
- 3-3.11 Summarize the reasons for forming a general impression of the patient. (C-1)
- 3-3.12 Discuss methods of assessing mental status. (C-1)
- 3-3.13 Categorize levels of consciousness in the adult, infant and child. (C-3)
- 3-3.14 Differentiate between assessing the altered mental status in the adult, child and infant patient. (C-3)
- 3-3.15 Discuss methods of assessing the airway in the adult, child and infant patient. (C-1)
- 3-3.16 State reasons for management of the cervical spine once the patient has been determined to be a trauma patient. (C-1)
- 3-3.17 Analyze a scene to determine if spinal precautions are required. (C-3)
- 3-3.18 Describe methods used for assessing if a patient is breathing. (C-1)
- 3-3.19 Differentiate between a patient with adequate and inadequate minute ventilation. (C-3)
- 3-3.20 Distinguish between methods of assessing breathing in the adult, child and infant patient. (C-3)
- 3-3.21 Compare the methods of providing airway care to the adult, child and infant patient. (C-3)
- 3-3.22 Describe the methods used to locate and assess a pulse. (C-1)
- 3-3.23 Differentiate between locating and assessing a pulse in an adult, child and infant patient. (C-3)
- 3-3.24 Discuss the need for assessing the patient for external bleeding. (C-1)
- 3-3.25 Describe normal and abnormal findings when assessing skin color. (C-1)
- 3-3.26 Describe normal and abnormal findings when assessing skin temperature. (C-1)
- 3-3.27 Describe normal and abnormal findings when assessing skin condition. (C-1)
- 3-3.28 Explain the reason for prioritizing a patient for care and transport. (C-1)
- 3-3.29 Identify patients who require expeditious transport. (C-3)
- 3-3.30 Describe the evaluation of patient's perfusion status based on findings in the initial assessment. (C-1)
- 3-3.31 Describe orthostatic vital signs and evaluate their usefulness in assessing a patient in shock. (C-1)
- 3-3.32 Apply the techniques of physical examination to the medical patient. (C-1)
- 3-3.33 Differentiate between the assessment that is performed for a patient who is unresponsive or has an altered mental status and other medical patients requiring assessment. (C-3)
- 3-3.34 Discuss the reasons for reconsidering the mechanism of injury. (C-1)
- 3-3.35 State the reasons for performing a rapid trauma assessment. (C-1)
- 3-3.36 Recite examples and explain why patients should receive a rapid trauma assessment. (C-1)
- 3-3.37 Apply the techniques of physical examination to the trauma patient. (C-1)
- 3-3.38 Describe the areas included in the rapid trauma assessment and discuss what should be evaluated. (C-1)
- 3-3.39 Differentiate cases when the rapid assessment may be altered in order to provide patient care. (C-3)
- 3-3.40 Discuss the reason for performing a focused history and physical exam. (C-1)
- 3-3.41 Describe when and why a detailed physical examination is necessary. (C-1)
- 3-3.42 Discuss the components of the detailed physical exam in relation to the techniques of examination. (C-1)

- 3-3.43 State the areas of the body that are evaluated during the detailed physical exam. (C-1)
- 3-3.44 Explain what additional care should be provided while performing the detailed physical exam. (C-1)
- 3-3.45 Distinguish between the detailed physical exam that is performed on a trauma patient and that of the medical patient. (C-3)
- 3-3.46 Differentiate patients requiring a detailed physical exam from those who do not. (C-3)
- 3-3.47 Discuss the reasons for repeating the initial assessment as part of the on-going assessment. (C-1)
- 3-3.48 Describe the components of the on-going assessment. (C-1)
- 3-3.49 Describe trending of assessment components. (C-1)
- 3-3.50 Discuss medical identification devices/ systems. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-3.51 Explain the rationale for crew members to evaluate scene safety prior to entering. (A-2)
- 3-3.52 Serve as a model for others explaining how patient situations affect your evaluation of mechanism of injury or illness. (A-3)
- 3-3.53 Explain the importance of forming a general impression of the patient. (A-1)
- 3-3.54 Explain the value of performing an initial assessment. (A-2)
- 3-3.55 Demonstrate a caring attitude when performing an initial assessment. (A-3)
- 3-3.56 Attend to the feelings that patients with medical conditions might be experiencing. (A-1)
- 3-3.57 Value the need for maintaining a professional caring attitude when performing a focused history and physical examination. (A-3)
- 3-3.58 Explain the rationale for the feelings that these patients might be experiencing. (A-3)
- 3-3.59 Demonstrate a caring attitude when performing a detailed physical examination. (A-3)
- 3-3.60 Explain the value of performing an on-going assessment. (A-2)
- 3-3.61 Recognize and respect the feelings that patients might experience during assessment. (A-1)
- 3-3.62 Explain the value of trending assessment components to other health professionals who assume care of the patient. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-3.63 Observe various scenarios and identify potential hazards. (P-1)
- 3-3.64 Demonstrate the scene-size-up. (P-2)
- 3-3.65 Demonstrate the techniques for assessing mental status. (P-2)
- 3-3.66 Demonstrate the techniques for assessing the airway. (P-2)
- 3-3.67 Demonstrate the techniques for assessing if the patient is breathing. (P-2)
- 3-3.68 Demonstrate the techniques for assessing if the patient has a pulse. (P-2)
- 3-3.69 Demonstrate the techniques for assessing the patient for external bleeding. (P-2)
- 3-3.70 Demonstrate the techniques for assessing the patient's skin color, temperature, and condition, (P-2)
- 3-3.71 Demonstrate the ability to prioritize patients. (P-2)
- 3-3.72 Using the techniques of examination, demonstrate the assessment of a medical patient. (P-2)
- 3-3.73 Demonstrate the patient care skills that should be used to assist with a patient who is responsive with no known history. (P-2)
- 3-3.74 Demonstrate the patient care skills that should be used to assist with a patient who is unresponsive or has an altered mental status. (P-2)
- 3-3.75 Perform a rapid medical assessment. (P-2)
- 3-3.76 Perform a focused history and physical exam of the medical patient. (P-2)
- 3-3.77 Using the techniques of physical examination, demonstrate the assessment of a trauma patient. (P-2)
- 3-3.78 Demonstrate the rapid trauma assessment used to assess a patient based on mechanism of injury. (P-2)
- 3-3.79 Perform a focused history and physical exam on a non-critically injured patient. (P-2)

- 3-3.80 Perform a focused history and physical exam on a patient with life-threatening injuries. (P-2) 3-3.81 Perform a detailed physical examination. (P-2)
- 3-3.82 Demonstrate the skills involved in performing the on-going assessment. (P-2)

Patient Assessment: 3

DECLARATIVE

- I. Scene size-up/ assessment
 - A. Body substance isolation review
 - 1. Eye protection if necessary
 - 2. Gloves if necessary
 - Gown if necessary
 - 4. Mask if necessary
 - B. Scene safety
 - 1. Definition an assessment to assure the well-being of the paramedic
 - 2. Personal protection Is it safe to approach the patient?
 - a. Crash/ rescue scenes
 - b. Toxic substances low oxygen areas
 - c. Crime scenes potential for violence
 - d. Unstable surfaces slope, ice, water
 - 3. Protection of the patient environmental considerations
 - 4. Protection of bystanders if necessary, help the bystander avoid becoming a patient
 - 5. Do not enter unsafe scenes
 - 6. Scenes may be dangerous even if they appear to be safe
 - C. Definition an assessment of the scene and surroundings that will provide valuable information to the paramedic
 - D. Mechanism of injury/ nature of illness
 - 1. Medical
 - Nature of illness determine from the patient, family or bystanders why EMS was activated
 - b. Determine the total number of patients
 - c. If there are more patients than the responding unit can effectively handle, initiate a mass casualty plan
 - (1) Obtain additional help prior to contact with patients: law enforcement, fire, rescue, ALS, utilities
 - (2) Paramedic is less likely to call for help if involved in patient care
 - (3) Begin triage
 - 2. Trauma
 - a. Mechanism of injury determine from the patient, family or bystanders and inspection of the scene the mechanism of injury
 - b. Determine the total number of patients
 - c. If there are more patients than the responding unit can effectively handle, initiate a mass casualty plan
 - (1) Obtain additional help prior to contact with patients
 - (2) Paramedic is less likely to call for help when involved in patient care
 - (3) Begin triage
 - (4) If the responding crew can manage the situation, consider spinal precautions and continue care
- II. Initial assessment
 - A. General impression of the patient
 - 1. The general impression is formed to determine priority of care and is based on the paramedic's immediate assessment of the environment and the patient's chief complaint
 - 2. Determine if ill, i.e., medical or injured (trauma)
 - a. If injured, identify mechanism of injury
 - b. If ill, identify nature of illness

- - 3. Age
 - 4. Sex
 - 5. Race
 - B. Assess the patient and determine if the patient has a life threatening condition
 - 1. If a life threatening condition is found, treat immediately
 - 2. Assess nature of illness or mechanism of injury
 - C. Assess patient's mental status (maintain spinal immobilization if needed)
 - 1. Levels of mental status (AVPU)
 - a. Alert
 - b. Responds to verbal stimuli
 - c. Responds to painful stimuli
 - d. <u>Unresponsive</u> no gag or cough
 - D. Assess the patient's airway status
 - 1. Patent
 - 2. Obstructed
 - a. Suction
 - b. Position
 - c. Airway adjuncts
 - d. Invasive techniques
 - (1) ETI
 - (2) Multi-lumen airways
 - (3) Trans tracheal
 - E. Assess the patient's breathing
 - 1. Adequate
 - 2. Inadequate
 - F. Assess the patient's circulation
 - 1. Assess the patient's pulse
 - 2. Assess if major bleeding is present if bleeding is present, control bleeding
 - 3. Assess the patient's perfusion by evaluating skin color, temperature and condition
 - G. Identify priority patients
 - Consider
 - a. Poor general impression
 - b. Unresponsive patients no gag or cough
 - c. Responsive, not following commands
 - d. Difficulty breathing
 - e. Shock (hypoperfusion)
 - f. Complicated childbirth
 - g. Chest pain with BP <100 systolic
 - h. Uncontrolled bleeding
 - i. Severe pain anywhere
 - j. Multiple injuries
 - 2. Expedite transport of the patient
 - H. Proceed to the appropriate focused history and physical examination
- III. Focused history and physical exam medical patients
 - A. Responsive medical patients
 - 1. Assess patient history
 - a. Chief complaint
 - b. History of present illness
 - (1) Attributes of a symptom
 - (a) Location

i) Where is itii) Does it radiate

- (b) Quality
 -) What is it like
- (c) Quantity or severity
 - i) How bad is it
- (d) Timing
 - i) When did it start
 - ii) How long does it last
- (e) The setting in which it occurs
 - i) Emotional response
 - ii) Environmental factors
- (f) Factors that make it better or worse
- (g) Associated manifestations
- c. Past medical history
- d. Current health status
- 2. Perform physical examination
 - a. Utilize the techniques of physical examination to
 - (1) Assess the head as necessary
 - (2) Assess the neck as necessary
 - (3) Assess the chest as necessary
 - (4) Assess the abdomen as necessary
 - (5) Assess the pelvis as necessary
 - (6) Assess the extremities as necessary
 - (7) Assess the posterior body as necessary
- 3. Assess baseline vital signs
 - (1) Consider orthostatic vital signs
- 4. Provide emergency medical care based on signs and symptoms in consultation with medical direction
- B. Unresponsive medical patients
 - 1. Perform rapid assessment
 - 2. Utilize the techniques of patient assessment
 - a. Position patient to protect airway
 - b. Assess the head
 - c. Assess the neck
 - d. Assess the chest
 - e. Assess the abdomen
 - f. Assess the pelvis
 - g. Assess the extremities
 - n. Assess the posterior aspect of the body
 - 3. Assess baseline vital signs
 - 4. Obtain patient history from bystander, family, friends, and/ or medical identification devices/ services
 - a. Chief complaint
 - b. History of present illness
 - c. Past medical history
 - d. Current health status
- IV. Focused history and physical exam trauma patients
 - A. Re-consider mechanism of injury
 - 1. Helps to identify priority patients

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- 2. Helps to guide the assessment
- 3. Significant mechanism of injury
 - a. Ejection from vehicle
 - b. Death in same passenger compartment
 - c. Falls > 20 feet
 - d. Roll-over of vehicle
 - e. High-speed vehicle collision
 - f. Vehicle-pedestrian collision
 - g. Motorcycle crash
 - h. Unresponsive or altered mental status
 - i. Penetrations of the head, chest, or abdomen
 - j. Hidden injuries
 - (1) Seat belts
 - (a) If buckled, may have produced injuries
 - (b) If patient had seat belt on, it does not mean they do not have injuries
 - (2) Airbags
 - (a) May not be effective without seat belt
 - (b) Patient can hit wheel after deflation
 - (c) Lift the deployed airbag and look at the steering wheel for deformation
 - "Lift and look" under the bag after the patient has been removed
 - ii) Any visible deformation of the steering wheel should be regarded as an indicator of potentially serious internal injury, and appropriate action should be taken
 - iii) Child safety seats
 - a) Injury patterns with airbags
 - b) Proper use in vehicles with airbags
- 4. Additional infant and child considerations
 - a. Falls >10 feet
 - b. Bicycle collision
 - c. Vehicle in medium speed collision
- B. Perform rapid trauma physical examination on patients with significant mechanism of injury to determine life-threatening injuries
 - 1. In the responsive patient, symptoms should be sought before and during the trauma assessment
 - 2. Continue spinal stabilization
 - 3. Reconsider transport decision
 - 4. Assess mental status
 - 5. As you inspect and palpate, look and feel for injuries or signs of injury
 - 6. Examination
 - a. Assess the head, inspect and palpate for injuries or signs of injury
 - b. Assess the neck, inspect and palpate for injuries or signs of injury
 - c. Apply cervical spinal immobilization collar (CSIC) (may use information from the head injury unit at this time)
 - d. Assess the chest
 - e. Assess the abdomen, inspect and palpate for injuries or signs of injury
 - f. Assess the pelvis, inspect and palpate for injuries or signs of injury
 - g. Assess all four extremities, inspect and palpate for injuries or signs of injury
 - h. Roll patient with spinal precautions and assess posterior body, inspect and

palpate, examining for injuries or signs of injury

- i. Look for medical identification devices
- j. Assess baseline vital signs
- k. Assess patient history
 - (1) Chief complaint
 - (2) History of present illness
 - (3) Past medical history
 - (4) Current health status
- C. For patients with no significant mechanism of injury, e.g., cut finger
 - Perform focused history and physical exam of injuries based on the techniques of examination
 - 2. The focused assessment is performed on the specific injury site
 - 3. Assess baseline vital signs
 - Assess patient history
 - a. Chief complaint
 - b. History of present illness
 - c. Past medical history
 - d. Current health status

V. Detailed physical exam

- A. Patient and injury specific, e.g., cut finger would not require the detailed physical exam
- B. Perform a detailed physical examination on the patient to gather additional information
- C. General approach
 - Assess patient history
 - a. Chief complaint
 - b. History of present illness
 - c. Past medical history
 - d. Current health status
 - 2. Examine the patient systematically
 - 3. Place special emphasis on areas suggested by the present illness and chief complaint
 - 4. Keep in mind that most patients view a physical exam with apprehension and anxiety they feel vulnerable and exposed
- D. Overview of the detailed physical exam
 - 1. Mental status
 - a. Appearance and behavior
 - b. Posture and motor behavior
 - c. Speech and language
 - d. Mood
 - e. Thought and perceptions
 - f. Assess thought content
 - g. Assess perceptions
 - h. Assess insight and judgement
 - i. Memory and attention
 - j. Assess remote memory (i.e. birthdays)
 - k. Assess recent memory (i.e. events of the day)
 - Assess new learning ability
 - 2. General survey
 - 1. Level of consciousness
 - 2. Signs of distress
 - 3. Apparent state of health

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- 4. Skin color and obvious lesions
- 5. Height and build
- 6. Sexual development
- 7. Weight
- 8. Posture, gait and motor activity
- 9. Dress, grooming and personal hygiene
- 10. Odors of breath or body
- 11. Facial expression
- 1. Skin
- 2. Head
- 3. Eyes
- 4. Ears
- 5. Nose and sinuses
- 6. Mouth and pharynx
- 7. Neck
- 8. Thorax and lungs
- 9. Cardiovascular system
- 10. Abdomen
- 11. Genitalia
- 12. Anus and rectum
- 13. Peripheral vascular system
- 14. Musculoskeletal system
- 15. Nervous system
- E. Recording examination findings
- F. Assess baseline vital signs

VI. On-going assessment

- A. Repeat initial assessment
 - For a stable patient, repeat and record every 15 minutes
 - 2. For an unstable patient, repeat and record at a minimum every 5 minutes
 - 3. Reassess mental status
 - 4. Reassess airway
 - 5. Monitor breathing for rate and quality
 - 6. Reassess circulation
 - 7. Re-establish patient priorities
- B. Reassess and record vital signs
- C. Repeat focused assessment regarding patient complaint or injuries
- D. Assess interventions
 - 1. Assess response to management
 - 2. Maintain or modify management plan