

NEUROLOGICAL CARE

Module 13

I. Statement of Purpose

The purpose of this module is to prepare the nursing assistant to perform skills necessary to safely care for the neurological patient. The student will learn to recognize and report abnormal signs and symptoms to the licensed nurse.

II. Terminology

- | | |
|--|---|
| 1. Affect | 40. Hypertrophy |
| 2. Agitation | 41. Intracranial pressure (ICP) |
| 3. Alzheimer's | 42. Irrational |
| 4. Amyotrophic lateral sclerosis (ALS) | 43. Lethargy/lethargic |
| 5. Anticoagulant | 44. Level of consciousness (LOC) |
| 6. Anticonvulsant | 45. Lumbar puncture (LP) |
| 7. Analgesics | 46. Meningitis |
| 8. Anxiety | 47. Myasthenia gravis (MG) |
| 9. Aphasia | 48. Multiple sclerosis (MS) |
| 10. Aura | 49. Mental illness |
| 11. Brain attack | 50. Magnetic resonance imaging (MRI) |
| 12. Brain stem | 51. Neuro/neurologic |
| 13. Brain tumors | 52. Organic brain syndrome (OBS) |
| 14. Central nervous system (CNS) | 53. Panic |
| 15. Cerebral | 54. Paralysis |
| 16. Cerebral spinal fluid (CSF) | 55. Paranoia |
| 17. Cerebral vascular accident (CVA) | 56. Paraplegia |
| 18. Clonic | 57. Parkinson's |
| 19. Cognitive impairment | 58. Peripheral nervous system |
| 20. Coma | 59. Phobia |
| 21. Combative | 60. Post-polio syndrome |
| 22. Computed tomography (CT) | 61. Psychosis |
| 23. Concussion | 62. Quadriplegia |
| 24. Defense mechanism | 63. Regurgitate |
| 25. Delirium | 64. Rigidity |
| 26. Delusion | 65. Sedative/hypnotic |
| 27. Dementia | 66. Seizure (grand mal, petite Mal, Jacksonian) |
| 28. Depression | 67. Shingles |
| 29. Dysphagia | 68. Spastic |
| 30. Electroencephalogram (EEG) | 69. Spinal cord |
| 31. Encephalitis | 70. Stroke (CVA) |
| 32. Epilepsy | 71. Substance abuse |
| 33. Fall precautions | 72. Sundowner syndrome |
| 34. Glasgow coma scale | 73. Transient ischemic attack (TIA) |
| 35. Guillian-Barre syndrome | 74. Tremor |
| 36. Hallucination | 75. Unresponsive |
| 37. Halo vest | 76. Vertigo |
| 38. Hematoma | |
| 39. Hemiplegia | |

NEUROLOGICAL CARE

Module 13

III. Performance Standards (Objectives)

Upon completion of 4 hours of class plus assignments and 4 hours of clinical experience, the learner will be able to:

1. Define basic terminology.
2. Describe basic anatomy and physiology of the nervous system.
3. List common neurological disorders and conditions of the nervous system.
4. Explain common tests used to diagnose neurological disorders.
5. Discuss the care of the patient with neurological disorders.
6. Describe abnormal signs, symptoms or behaviors related to neurological disorders.
7. Recognize signs and symptoms of swallowing disorders and necessary precautions to follow.
8. Describe the role of the nurse assistant when caring for a patient experiencing a seizure.
9. Describe equipment commonly used in caring for patients with neurosurgery, head trauma and spinal cord injuries.

IV. References

1. Chancellor's Office, California Community Colleges (2004). *CNA Model curriculum*. Sacramento, CA: Chancellor's Office, California Community Colleges.
2. Gerdin, J. (2004) *Health careers today* (3rd ed.) St. Louis: Mosby.
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4. Hegner, B., & Caldwell, E. (2003). *Nursing assistant: A nursing process approach* (9th ed.). Albany, NY: Delmar.
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MODULE 13 - NEUROLOGICAL CARE

Content Outline Theory Objectives	Suggested Learning Activities/Evaluation	Clinical Activities
Objective 1 Define basic terminology A. Terminology B. Clinical Application	A. Lecture/ Discuss B. Use game format from other modules to review terms C. Handout 13.1 - Nervous System Worksheet D. Written test	
Objective 2 Describe basic anatomy and physiology of the nervous system. A. Brain B. Spinal Cord C. Nerves D. Sensory Organs	A. Lecture/ Discuss B. Written test C. CNA-MC Module 13, objective 6-F, pp. 13.32 – 13.45	
Objective 3 List common neurological disorders and conditions of the nervous system. A. Head injuries: 1. Scalp 2. Skull 3. Brain 4. Concussion 5. Contusion 6. Skull fracture 7. Cerebral hematoma B. CVA 1. Left sided paralysis 2. Right sided paralysis C. Transient ischemic attack (TIA) 1. Temporary period of diminished blood flow to brain 2. May last 2-15 min or up to 24 hours	A. Lecture/ Discuss B. Case Studies C. Appendix 13.3a - Characteristics of Left-sided Paralysis D. Appendix 13.3b - Characteristics of Right-sided Paralysis E. Role play a. Have students take turns as patients pretending to be unable to move right or left side or have an altered LOC. Put patch over eye on affected side. b. Have “patient” discuss how they felt and what interventions would make it easier to function	

Content Outline Theory Objectives	Suggested Learning Activities/Evaluation	Clinical Activities
3. Symptoms similar to stroke but temporary and reversible 4. Increased risk of stroke D. Brain Tumors E. Altered states of consciousness 1. Coma 2. Dementia 3. Delirium 4. Alzheimer's disease F. Seizures/epilepsy 1. Grand mal - generalized 2. Petit mal - partial 3. Status Epilepticus G. Spinal cord injuries 1. Quadraplegia 2. Paraplegia H. Degenerative diseases 1. Myasthenia gravis (MG) 2. Multiple sclerosis (MS) 3. Guillian-Barre syndrome 4. Parkinson's disease	c. Other students can use Handout 13.6b to record observations F. Written test G. CNA-MC Module 13, objective 6(2), p. 13.34 – 13.40: Dementia H. CNA-MC Module 13 pp. 13.42-13.43: Seizures	
Objective 4 Explain common test used to diagnose neurological disorders. A. Computed tomography (C.T.) B. Magnetic Resonance Imagery (M.R.I.) C. Electroencephalogram (E.E.G.) D. Lumbar puncture (L.P.)	A. Lecture/ Discuss B. Clinical observation during transport C. Written test	Provides appropriate care while transporting patients.
Objective 5 Discuss the care of the patient with neurological disorders. A. Patients with neurological disorders are at risk for changes in body functions and long term disabilities.	A. Lecture/ Discuss B. Skills lab for positioning C. Clinical observation D. Written test E. CNA-MC Module 14, objective 8, pp.	Competently cares for patients with neurological disorders.

Content Outline Theory Objectives	Suggested Learning Activities/Evaluation	Clinical Activities
B. Signs and symptoms that must be observed carefully in the neurologic patient. 1. Vital Signs a. Changes in vital signs may be a late sign in patients who are having pressure increasing in and around the brain. b. Observe for the following changes: 1) Pulse and respiratory rate slow 2) Blood pressure and temperature rise 3) Look for hypertension, bradycardia and 4) Respiratory irregularity (Cheyne-Stokes or Kussmaul breathing are the respiratory irregularities frequently seen). 2. Change in level of responsiveness or level of consciousness a. Lethargy b. Slowing of speech and response to verbal suggestions c. Sudden change from quietness to restlessness d. Sudden change from being oriented to confusion 3. Subtle changes a. Restlessness b. Headache c. Personality change d. Speech change e. Changes in breathing pattern f. Purposeless movement g. Mental cloudiness C. Positioning restrictions 1. Head of bed (HOB) a. Keep head of bed slightly elevated or as ordered b. Rationale: If there is any inflammation or swelling in the brain, the pressure inside the	14.7 - 14.9: Inactivity F. CNA-MC Module 13, objective 6 pp. 13.38-13.39: Reality/Reminiscing Therpay G. CNA-MC Module 13 objective 6 pp: 13.42-13.43: Seizures	

Content Outline Theory Objectives	Suggested Learning Activities/Evaluation	Clinical Activities
skull and brain is increased as the patient lies flat. Elevating the head of the bed slightly helps to increase venous drainage and prevent additional pressure being placed on the structures inside the skull. 2. Body alignment - Keep head in alignment with the body, avoid neck flexion and extreme hip flexion. - Rationale: These positions can impair blood flow and increase intracranial pressure. D. Reality Orientation E. Skin care F. ADLs: Assist with ADLs as appropriate (i.e., a comatose patient will need total care) G. Mobility/movement - Provide ROM - Logroll the spinal surgery patient - Support dependent extremities H. Communication - Aphasia - Fluent - Non-fluent - Global - Considerations - Ask yes or no questions - Avoid treating or speaking like a child - Do not correct speech - Use gestures/charts - Be sensitive to behavior changes/feelings - Angry - Sad - Embarrassed - Frustrated I. Seizure precautions- See objective 8 J. Bowels and bladder		

Content Outline Theory Objectives	Suggested Learning Activities/Evaluation	Clinical Activities
1. Incontinence 2. Urine retention K. Restrictions of noise & light 1. Quiet environment 2. No bright lights L. Airway risks 1. Maintain clear airway 2. Oral suctioning 3. Positioning 4. Feeding/swallowing precautions		
Objective 6 Describe abnormal signs, symptoms or behaviors related to neurological disorders. A. Abnormal vital signs: 1. ↑BP ↓BP 2. ↑T ↓T 3. ↑RR ↓RR 4. ↓P B. Neurological signs regarding impaired mental status 1. Inability to follow commands 2. Changes in behavior/mood (including irrational thought process) 3. Decreased level of consciousness/unresponsive 4. Disoriented to time, place, person, purpose 5. Inability to: a. Communicate b. Perform ADLs c. Move extremities d. See, hear e. Swallow C. Uncontrolled body movements D. Decreased reaction to pain or stimuli E. Decreased or loss of sensation/feeling F. Dizziness	A. Lecture/ Discuss role of nurse assistant in reporting abnormal findings B. Case studies C. Clinical observation D. Handout 13.6a - Neurological Flowsheet E. Handout 13.6b - Reporting Neurological Signs F. Written test	Observes for and reports abnormal signs and symptoms when caring for neurological patients.

Content Outline Theory Objectives	Suggested Learning Activities/Evaluation	Clinical Activities
G. Vomiting		
Objective 7 Recognize signs and symptoms of swallowing disorders and necessary precautions to follow. A. Signs and symptoms of swallowing disorders (dysphagia): 1. Coughing when trying to eat 2. Choking on food or fluids 3. Drooling 4. Spilling food from mouth 5. "Pocketing" food in the cheeks when eating 6. Wet or moist sounding voice during or after eating 7. Increased congestion in the chest 8. Multiple swallows per bite 9. Extra effort/difficulty chewing or swallowing 10. Fatigue or shortness of breath when eating 11. Elevated temperature 30 minutes to an hour after eating 12. Frequent pneumonia B. Precautions 1. Create a peaceful, low-pressure eating environment. 2. Approach patient calmly. 3. Limit visitors during mealtime. 4. Correctly position patient sitting upright in firm chair. 5. Place towel under chin. 6. Have patient concentrate on swallowing. 7. Do not rush patient. 8. Check that foods are not too hot or cold. 9. Have patient take small bites. 10. Caution with liquids (may need thickener). 11. Have patient swallow twice after each bite. 12. Keep patient's head forward during swallowing and	A. Lecture/ Discuss B. Skills lab C. Case studies D. Clinical observation E. Written test	Observes for swallowing problems and follows precautions when caring for patient with neurological problems.

Content Outline Theory Objectives	Suggested Learning Activities/Evaluation	Clinical Activities
chin mid-line (head not turned). 13. Alternate solids and liquids (begin with liquids if patient's mouth very dry). 14. Report any difficulty with feeding and the amount the patient ate. C. Signs and symptoms of choking (emergency) 1. Partial: wheezing or gurgling, difficulty breathing, coughing. 2. Complete obstruction: clutching of throat, inability to speak – call for help and perform Heimlich maneuver. D. Resource personnel: speech therapist, occupational therapist, licensed nurse		
Objective 8 Describe the role of the nurse assistant when caring for a patient experiencing a seizure. A. Identify activity that precedes seizure (many patients will have an <i>aura</i> that precedes seizures and can notify nursing personnel). 1. Aura – a particular sensation that immediately precedes the symptoms of a seizure. Some examples are a peculiar taste or smell, ringing in the ears, dizziness, visual disturbances or numbness in part of the body. B. Prevent injury to patient 1. Stay with patient (never leave patient alone). 2. Call for help immediately (according to facility policy – know emergency numbers for your facility). 3. Assist patient to lie down (if in a chair, gently lower patient to the floor). 4. Clear away equipment or objects that may cause injury. 5. Never attempt to restrain the patient who is having	A. Lecture/ Discuss B. Role play C. Clinical observation D. Written test E. CNA-MC Module 13, Objective 6 pp. 13.13	Correctly cares for patient experiencing a seizure.

Content Outline Theory Objectives	Suggested Learning Activities/Evaluation	Clinical Activities
a seizure. 6. Do not attempt to put anything in patient's mouth. 7. Support head with pillow to prevent patient's head from striking hard surface of floor. 8. Cover side rails with pads, if patient in bed. 9. Observe seizure activity carefully and give detailed report to licensed nurse, including time seizure began and ended, what part of body involved and type of spasm activity (mild tremors, severe shaking, etc). 10. Patient may be incontinent during seizure; be prepared to give incontinent care after seizure 11. Monitor patient after seizure, as there is usually a period of confusion, lethargy and possibly apnea (absence of breathing). C. Maintain airway by: 1. Head tilt-chin lift method 2. Loosen patient's clothing around neck and chest 3. Turn patient's head to side to drain secretions, if possible (may not be able to move patient's head during seizure) 4. Monitor patient's respiratory rate and depth 5. Have suction equipment at the bedside for licensed personnel D. After seizure is finished, position the patient on his or her side. E. Stages of a seizure 1. Aura – a peculiar sensation immediately preceding the onset of a seizure that may take the form of abdominal, visual or hearing disturbances. 2. Prodroma – early clinical signs such as malaise (sick feeling), headache, a sense of depression, that may occur hours to a few days before the onset of a seizure. 3. Tonic phase – a state of muscle in which there is		

Content Outline Theory Objectives	Suggested Learning Activities/Evaluation	Clinical Activities
excessive muscle tone, a stiffening of arms and legs. 4. Clonic phase – a state of alternating contraction and relaxation of muscles. 5. Postictal state – the time period immediately following the cessation of seizure activity (often a time of confusion and lethargy).		
Objective 9 Describe equipment commonly used in caring for patients with neurosurgery, head trauma, and spinal cord injuries. A. Specialty beds 1. Stryker frame a. Used for cervical traction, spinal fusion and laminectomy b. Used to maintain immobilization and provide for turning c. Only used in specialty units and requires special training to use d. Not used often anymore 2. Circ-o-lectric® bed a. Turns vertically to help patient become accustomed to upright position b. Allows for immobilization and turning c. Used only in specialty units and rehabilitation facilities d. Requires special training to use 3. Low air loss beds (kinair, flexicair, mediscus, biodyne, therapulse and others) a. Many air-filled cushions; each may be filled to a different firmness b. Pressure reduction c. Temperature controlled d. May be drying on patient's skin; monitor skin condition and report to RN.	A. Lecture/ Discuss B. Skills lab C. Clinical observation D. Appendix 13.9 Equipment for Neurological Patients E. Written test	Correctly uses equipment associated with neurosurgery patient.

Content Outline Theory Objectives	Suggested Learning Activities/Evaluation	Clinical Activities
e. Can be deflated for CPR f. Require special linen g. Some rotate from side to side and pulsate to stimulate circulation and mobilize respiratory secretions 4. Air-fluidized beds (Clinitron, Skytron, Fluidair, Smi 5000) a. Air forced through tiny ceramic beads b. Allows no pressure on body surfaces c. Not used for spinal cord injury patients – too soft for spinal alignment d. Monitor patient for dehydration because of drying effect of air flow. e. Use special linen. f. In-service needed for techniques to position and transfer patient g. Patient does not turn as much; may have build-up of respiratory secretions 5. Rotation bed (Keane Mobility, RotoRest, Tilt and Turn Paragon) a. Moves patient from side to side about every 7 minutes b. Traction may be attached c. Patient may experience motion sickness d. Mobilizes respiratory secretions, stimulates gastrointestinal activity, stimulates circulation and prevents excessive pressure on skin e. Special training needed to use bed B. Skull tongs 1. Surgically implanted into the skull bones 2. With break-in skin barrier, infection is possible. 3. Traction applied to immobilize the cervical spine 4. Head of bed may be raised for counter traction 5. Pin care precautions a. Special training is required for pin care – may		

Content Outline Theory Objectives	Suggested Learning Activities/Evaluation	Clinical Activities
be part of nurse assistant duties in some facilities b. Keep pin sites dry when bathing patient c. Slight oozing is possible at sites; wear gloves when bathing patient d. Observe for signs of infection or drainage at the sites each time care is given and every 2 hours when turning patient e. Observe for loose pins and report to RN immediately 6. Signs of infection include redness, heat, drainage, odor, pain, or fever. These signs and symptoms should be reported immediately to the licensed nurse. C. Halo brace 1. External immobilization device (vest) worn by patient 2. Used after spine stabilized by surgery or after short time of healing 3. Usually worn for 8 to 12 weeks 4. Physical and occupational therapy can be initiated earlier to aid recovery 5. Never lift or reposition a patient by grasping the metal struts on the halo brace 6. Lined with sheepskin that must be cleaned – vest removed and sheepskin changed by specially trained RN 7. Inspect skin under brace and sheepskin frequently – with special training may use blow dryer set on low to dry skin under brace 8. Keep skin dry under brace and sheepskin – special care must be taken when bathing patient D. Intracranial drain or pressure monitor 1. Used to monitor pressure in the brain (intracranial pressure – ICP)		

Content Outline Theory Objectives	Suggested Learning Activities/Evaluation	Clinical Activities
2. Only in ICU or specialty units 3. Caution must be taken not to dislodge catheter when giving care. 4. Head of bed usually elevated 5. Never change the position of the bed unless directed to do so by RN. 6. Dressing over site must be kept dry – be very careful when bathing patient. 7. Notify nurse of any loose connections. 8. Fluid balance important as fluid retention can increase ICP. 9. Accurate I & O and urine output 10. Observe patient for signs and symptoms of meningitis (fever, chills, neck rigidity, increasing or persistent headache). 11. Observe patient for any change in mentation, increasing lethargy, sleepiness, confusion or change in respiratory pattern.		

SAMPLE TEST QUESTIONS

Directions: Circle the best answer

1. If you suspect a patient is choking on food you should:
 - a. Call for help
 - b. Stay with the patient
 - c. Perform the Heimlich maneuver
 - d. All of the above
2. When a patient is having a seizure, you should:
 - a. Put a washcloth in the mouth to prevent biting tongue
 - b. Restrain arms and legs to prevent injury
 - c. Clear away equipment or objects that may cause injury
 - d. Turn patient on stomach
3. Which of the following is a sign that the patient's mental status may have changed?
 - a. No longer able to communicate
 - b. No longer able to help with turning
 - c. No longer able to follow directions
 - d. All of the above
4. It is important to keep the head of the bed flat when caring for a patient with a head injury.
 - a. True
 - b. False
5. Persons with Parkinson's disease generally have
 - a. Pain
 - b. Rigidity
 - c. Spasticity
 - d. Hearing impairment
6. A patient who has had a stroke on the left side of the brain is likely to
 - a. Have left hemiplegia
 - b. Become impulsive
 - c. Have aphasia
 - d. Have no personality changes
7. A patient who has had a stroke on the right side of the brain is likely to
 - a. Have left hemiplegia
 - b. Have aphasia
 - c. Have twitching
 - d. Have hearing loss on the right side

Directions: Mark "True" or "False" in the blanks below.

8. _____ The autonomic nervous system is under voluntary control
9. _____ Spinal nerves consist of pairs of motor and sensory nerves
10. _____ A person who has a spinal cord injury at the C-5 level could still walk.
11. _____ Encephalitis is a disorder of the nervous system that occurs when more cerebrospinal fluid is produced than is absorbed.

SAMPLE TEST QUESTIONS - KEY

1. If you suspect a patient is choking on food you should:
 - a. Call for help
 - b. Stay with the patient
 - c. Perform the Heimlich maneuver
 - d. **All of the above**
2. When a patient is having a seizure, you should:
 - a. Put a washcloth in the mouth to prevent biting tongue
 - b. Restrain arms and legs to prevent injury
 - c. **Clear away equipment or objects that may cause injury**
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3. Which of the following is a sign that the patient's mental status may have changed?
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 - a. **Have left hemiplegia**
 - b. Have aphasia
 - c. Have twitching
 - d. Have hearing loss on the right side

True or False

8. F The autonomic nervous system is under voluntary control
9. T Spinal nerves consist of pairs of motor and sensory nerves
10. F A person who has a spinal cord injury at the C-5 level could still walk.
11. F Encephalitis is a disorder of the nervous system that occurs when more cerebrospinal fluid is produced than is absorbed.

NERVOUS SYSTEM WORKSHEET

Matching: Match the definitions on the right to the blank on the left.

- | | |
|--|---|
| 1. _____ Contusion | a. Transient disturbances of brain function |
| 2. _____ Subdural hematoma | b. Measures electrical activity of the brain |
| 3. _____ Amyotrophic lateral sclerosis (ALS) | c. Blood collection between the dura mater and the arachnoid layer of the brain |
| 4. _____ Epilepsy | d. Characterized by demyelination of the nerves of the central nervous system |
| 5. _____ Intracranial | e. Chemical messenger |
| 6. _____ Neurotransmitter | f. Within the cranium |
| 7. _____ Multiple sclerosis (M.S.) | g. Destructive disease of the motor neurons |
| 8. _____ EEG | h. Physical bruising of the brain |

NERVOUS SYSTEM WORKSHEET ANSWER KEY

Matching

- | | |
|---|---|
| 1. <u>h</u> Contusion | a. Transient disturbances of brain function |
| 2. <u>c</u> Subdural hematoma | b. Measures electrical activity of the brain |
| 3. <u>g</u> Amyotrophic lateral sclerosis (ALS) | c. Blood collection between the dura mater and the arachnoid layer of the brain |
| 4. <u>a</u> Epilepsy | d. Characterized by demyelination of the nerves of the central nervous system |
| 5. <u>f</u> Intracranial | e. Chemical messenger |
| 6. <u>e</u> Neurotransmitter | f. Within the cranium |
| 7. <u>d</u> Multiple sclerosis (M.S.) | g. Destructive disease of the motor neurons |
| 8. <u>b</u> EEG | h. Physical bruising of the brain |

CHARACTERISTICS OF LEFT-SIDED PARALYSIS

A. Description

1. Left sided paralysis is usually the result of right-brain injury (i.e., R. C.V.A.).
2. The most visible sign of damage is paralysis or weakness of the left side of the body.

B. Common characteristics of people with left-side paralysis are as follows:

1. Facial droop
2. Pocket food because of the inability to feel the left side of the face.
3. Seldom have speech problems
4. Loss of ability to judge distance, size, position, rate of movement, form and relation of parts as wholes.
5. Difficulty steering wheelchair
6. May confuse the inside and outside of their clothes, or right from left, or misperceive how far away an object is.
7. Difficulty reading a newspaper or adding a column of figures because they lose their place on the paper.
8. Severe balance problems
 - a) Problem with sitting and standing
 - b) May lean to the left
 - c) May feel like they are being pushed over when assisted to sit or stand erect.
9. May not recognize their own arm or leg as parts of their own body. They may perceive someone is in bed with them.
10. May ignore anyone who is speaking to them from their impaired side.
11. Left-sided neglect/denial
 - a) No left sided visual field
 - b) May eat only what is on one side of the plate.
 - c) Become easily lost or confused when traveling.
 1. They may have no idea where they have been when they are wheeled down and back up an unfamiliar corridor
 2. They have seen one side of the corridor going and one side coming; so to them it seems as if they have traveled two different corridors.
12. Poor motor planning skills and problem-solving abilities
 - a) Poor judgment about their level of skill and a tendency to overestimate their abilities
 - b) Impulsiveness and rapid movement as compared with slow and cautious people with right-side paralysis
 - c) Difficulty understanding the visual cues they receive from the environment
 - d) Problems with short retention span, new learning and generalization of problems.

C. Interventions

1. Modify environment to compensate for deficits.
 - a) Furniture and personal items may have to be moved so that they are on the unaffected side of the bed or wheelchair.
 - b) The person's place at the dining table should be arranged so that he or she receives food items from the unimpaired side. Guests should be invited to sit on the unimpaired side.
 - c) Beds should be placed so the unimpaired sides of the individuals are such that they can respond to the activities going on in the room.
2. Reminders of landmarks when traveling
 - a) Point out landmarks on both sides of the corridor when traveling to a destination and give frequent reminders of the destination.
 - b) Do not expect the person to find their way back alone.
3. Provide encouragement and support
 - a) Active listening
 - b) Encourage verbalization
4. Be aware of potential safety issues.

CHARACTERISTICS OF RIGHT-SIDED PARALYSIS

Description

Right-sided paralysis is usually the result of an injury to the left side of the brain (i.e., L. C.V.A.).

People with right-side paralysis are likely to have difficulty with speech and language (aphasia). They particularly have difficulty speaking (non-fluent or expressive aphasia).

Common characteristic

1. Preference for more habitual ways of doing things
2. A tendency to be slow, cautious and organized when approaching unfamiliar problems
3. Ability to speak and understand but not to read, write or do arithmetic
4. Short retention spans and limited attention spans
5. Good judgment about the level of skill
6. Marked difficulty with new as opposed to old learning
7. A tendency to pocket food in one cheek
8. Good motor planning skills and problem-solving skills
9. Sitting and standing balance problems
10. Inability to generalize information in order to solve a problem
11. Loss of right visual field (homonymous hemianopsia)
12. Memory difficulties associated with language
13. Impairment of swallowing (dysphagia) or the gag reflex
14. Good visual spatial skills not impaired by vision field cut

Neurological Flowsheet

Nurse's Signature and Initials																			
										Patient's Name Plate									
GLASSGOW COMA SCALE	EYES OPEN	Date																C = Eyes Closed By Swelling	
		TIME																	
		Spontaneously	4																
		To Command	3																
		To Pain	2																
		No Response	1																
	BEST MOTOR RESPONSE	Obeys commands	6															Record Best Arm Response to Painful Stimuli for 1 Thru 4	
		Localizes pain	5																
		Flexion- Withdrawal	4																
		Flexion- Decorticate	3																
		Extension- Decerebrate	2																
		No Response	1																
	BEST VERBAL RESPONSE	Oriented	5															T = Endotracheal Tube or Tracheostomy A = Aphasia	
		Confused	4																
		Inappropriate Words	3																
		Incomprehensible Sounds	2																
		No Response	1																
TOTAL SCORE																			
PUPILS	Size		R														B = Brisk S = Sluggish N = No Reaction C = Closed by Swelling		
	Reaction																		
	Size		L																
	Reaction																		
MOVEMENT	Limb Movement Scale		RA													Grade Limb Movement Spontaneous or to Command. Do Not Rate Reflex Movement			
	0- No Response		RL																
	1- Flicker of Trace of Contraction		LA																
	2- Active Movement with Gravity Eliminated		LL																
	3- Active Movement Against Gravity																		
VITALS	4- Active Movement Against Gravity & Resistance																		
	Blood Pressure																		
	Pulse																		
	Blood Pressure																		
	Respiratory Rate																		
	ICP																		
	Blood Pressure																		
	Nurse's Initial																		

REPORTING NEUROLOGICAL SIGNS

Equipment and supplies

Penlight

Directions

1. Work in pairs for this activity.
 - a. One person acts as subject and the other as examiner throughout the activity.
 - b. The roles may then be reversed.
2. Record the information on a piece of paper as it is observed. Use three columns.
 - a. Label columns: "Right," "Left" and "Comments"
 - b. Label rows:
 1. Responsiveness
 2. Orientation
 3. Facial
 4. Hands
 5. Feet
3. Observe the subject to determine the level or responsiveness. Level of responsiveness may be described in one of the following terms:
 - a. **Alert:** aware of surrounding and environmental stimuli; responds to verbal stimulus such as talking
 - b. **Lethargic:** may be made aware of environmental stimuli with assistance; responds to loud verbal stimuli or touch
 - c. **Stuporous:** does not respond to environmental stimuli; may be roused with return to sleepwalk state quickly; responds to touch and pain stimuli
 - d. **Comatose:** does not respond to any stimuli
4. Determine the orientation of the subject by asking questions that assess awareness of person, place and time. Questions should require more than a "yes" or "no" answer to determine if the answer is appropriate. For example:
 - a. "Tell me your name please" asks for orientation of person. If a visitor is present, ask the patient her/his name.
 - b. "What day of the week is it?" asks for orientation to time. This question may be difficult for someone who has been hospitalized for awhile. Knowing the year or the name of the current president would be acceptable in this and some other circumstances.
 - c. "Tell me the name of this facility" asks for orientation to place. Knowing the city or similar information would be acceptable in these and some other situations.
 - d. Normal orientation is "oriented X 3" or to all three areas of inquiry. If the subject cannot answer or gives incorrect responses, the correct information should be given to the subject to prevent anxiety and help her/him to become oriented.

5. Facial

- a. Instruct the subject to stick out the tongue as far as possible.
- b. The tongue should extend in a symmetrical manner on both sides.

6. Hands

- a. Instruct the subject to grip and squeeze the index and middle finger of both of the examiner's hands as hard as possible until asked to stop.
- b. The grips of the subject should be equal and strong.

7. Feet

- a. Subject should be lying down or sitting with the legs extended.
- b. The examiner places one arm across the soles of the subject's feet and instructs the subject to push as hard as possible with both feet.
- c. The push response of the subject's feet should be equal and strong.

EQUIPMENT FOR NEUROLOGICAL PATIENTS

EQUIPMENT:

1. Specialty beds (if available)
2. Cervical collar
3. Halo vest
4. Skull tongs

CRITERIA:

1. Demonstrates correct positioning for neck stability (C-spine precautions).
2. Demonstrates how to log roll a patient.
3. Demonstrates transfer techniques/positioning for paraplegic/quadruplegic and stroke patients.
4. Role plays how to manage a patient having a seizure.