Lane Community College
PTA 103L Intro to Clinical Practice 2 Lab
Assessment of Arousal and Attention

1. **Scope of Practice – Why do PTAs need this skill?**
    a. Understanding terminology associated with arousal and attention assessment will help prepare for a safe and effective treatment plan – set realistic expectations for participation, functional recovery, and discharge needs
    b. Planning for second person assist; includes coordination with nursing or rehab staff, co-Rx with OT/SLP, including family members to assist as able; creating a framework for what level of participation you can expect
    c. Recognizing when something is different and what it may mean
        i. Decline in arousal, attention, concentration are indicators of disruption of homeostasis within or across body systems
        ii. Factors that contribute: medication, motivation, infection, oxygenation, perfusion, etc.)
        iii. Check/correlate with vital signs and notify medical personnel of your observations and findings using shared terminology
    d. Understanding scales and findings on formal outcomes assessments help provide reliable and specific information regarding cognitive status and orientation
    e. Orientation and cognition is an integral part of motor learning, safety awareness, and ability to maintain strength and endurance through a home exercise program
    f. PT/PTAs *do not treat or have goals which focus on decreasing the cognitive impairment or functional limitation.* PT/PTAs must document status, observed changes, and communicate these to medical personnel for further assessment and care coordination

2. **How do we *assess* arousal (awake, sleepy, unresponsive), attention and cognition (non-verbal responses, confused, disoriented, reaction and response times)?**

    a. Use the primary senses for unresponsive/slow to respond:
        i. Sound (bells, whistles, multiple sides of bed, localizing to voice)

ii. Vision (tracking a moving object or person, orienting to speaker, eye contact)
iii. Pain (sternal rub, pinch, nail bed press, ROM to surgical extremity if cleared)
iv. Smell (noxious: ammonium salts)
v. Touch/Kinesthetic (more for patient who have impaired vision/hearing)

b. We ask orientation questions: simple, open-ended, can not be answered "yes/no" and interpret the results
   i. Avoid, "Do you……"
   ii. Examples (What, Where, Who)
   iii. Requires some verifiable knowledge of correct patient responses (medical record, family members, hospital schedule/routine); information source needs to be reliable
   iv. Impacted by individual and cultural differences (can they see/hear you? Are there multiple meanings of words that may be confusing? Do some questions presume a certain lifestyle or status?

c. Use or reference Outcome Measurement Tools when basic orientation questions suggest possible cognitive impairment

   i. Standardized tests which screen for impairments in arousal and attention
   ii. Not indicated when there is a diagnosis confirming cognitive impairment

3. What potential *barriers* are there to an accurate assessment?
   a. Individual and cultural differences
   b. Influence of family members – compromised assessment
   c. Language barriers
   d. Biases of the assessor
   e. Poorly worded orientation questions

4. How do we *measure* arousal and attention?
   1. Alert and Orientation Scales (A&O x)
      a. 1 = Name/Person
      b. 2 = Place
      c. 3 = Time (could be month, date, time of day, season)
      d. 4 = Reason for stay/intervention – Event

e. Scale is not in rank order. If there are deficits, they should be specified in the record as to which orientation categories are present (e.g., Pt is A&O x 2 (person, time)

2. Reference or administer screening tools when undiagnosed cognitive disorder is suspected
    a. Mini Mental State Examination (MMSE)
        i. Screening test for dementia
        ii. 5 categories : orientation, registration, attention and calculation, recall and language, and motor skills
        iii. Score is out of 30. Less than 24 = measureable cognitive impairment
    b. Short Portable Mental Status Questionnaire (SPMSQ)
        i. Used primarily in geriatrics
        ii. Categories: orientation, short and long term memory, practical skills and mathematical tasks
        iii. Score is out of 10. Less than 8 = measurable cognitive impairment
        iv. Can be used to quantify degree of impairment with medical personnel, residential care staff, family members for a patient who has no diagnosis of disease or condition impacting cognition
    c. PTAs should be able to recognize these tests during interdisciplinary care conferences, medical record reviews, and the literature; shall understand values which indicate degree of cognitive impairment

3. Levels of Consciousness – Refers to the CNS and its ability to receive and respond to stimulation in a progressively meaningful, complex, and interactive way
    a. Descriptions of level of arousal and attention
        i. Coma = unresponsive to all internal and external stimuli
        ii. Stupor = generalized unresponsiveness with arousal occurring with repeated stimulation
        iii. Obtundity = decreased arousal, delayed responses to stimuli, state of sleep
        iv. Delirium = disorientation, confusion, agitation
        v. Clouding of consciousness = quiet behavior, confusion, decreased attention, delayed responses
        vi. Consciousness = alert, aware, oriented, memory intact

b. How do the descriptions relate to each other? How do they differ? (unresponsive, slow to respond, slow and disorganized, intact)
c. PTs/PTAs will reference and use these descriptions to communicate qualitative cognitive status during the examination or intervention
d. Descriptions may be used in to document barriers to progress in PT, rationale behind discharge recommendations (setting, equipment, supervision, etc.)