



Nightingale University

Cognition and Homecare



*A review of Cognition
and Speech Therapy
vs. Occupational
Therapy*



The Definition of Occupational Therapy

OT works with individuals with disease, injury or illness to help maximize patient independence in the areas of self-care, home safety/management, bathroom and wheelchair transfers, and community re-entry.

What is an ADL?

1. Activities of Daily Living: Anything involved in caring for self from wake time until bedtime.
2. Instrumental Activities of Daily Living: Activities related to independent living and include preparing meals, money management, shopping for groceries or personal items, performing light or heavy housework and using a telephone.

The Definition of Speech Pathology

1. Speech Pathology involves the treatment of speech, language, and communication disorders as well as swallowing and cognitive disorders.
2. Speech Pathologists work with individuals with disease, injury or illness affecting communication, language, cognition, swallowing, and voice.

What is our treatment approach?

Safety:

Often involves modification of the home environment and caregiver education

Rehab:

The ability to help the patient learn or relearn in order to interact with their environment. Ability to increase safety and independence in home and self care.

Cognition

1. Cognition refers to mental processing and includes orientation, memory, problem solving, reasoning, decision-making, mental flexibility attention and judgment.
2. It comes from the Latin term: “cognoscere” which means “to know”.

The Lobes of the brain and Cognition

Frontal Lobe:

1. Reasoning & Memory
2. Attention and Concentration
3. Elaboration of Thought
4. Judgment
5. Inhibition
6. Personality

The Lobes of the brain and Cognition

Parietal Lobe:

1. Integration of information to form a single concept

Occipital Lobe:

1. Visual recognition, memory and processing of visual information
(Example: what your house looks like)

Temporal Lobe:

1. Memory (information retrieval)
2. Right-visual memory
3. Left-verbal memory (words and names)
4. Short term memory
5. Categorization of objects

Frontal Lesion-Deficits

1. Reduced mental flexibility
2. Reduced problem solving/reasoning
3. Poor attention
4. Inability to concentrate
5. Memory loss-especially STM
6. Lack of inhibition-risk taking
7. Non-compliant behavior
8. Changes in personality
9. Dramatic change in social behavior
10. Depression
11. Loss of initiation
12. Inability to sequence complex movements to complete a task (example: make coffee)

Parietal Lesion- Deficits

1. Difficulty with spatial relations
2. Difficulty with Math
3. Denial of deficits
4. Reduced verbal memory
5. Right-changes in personality
6. Inability to attend to more than one object at a time

Occipital Lesion-Deficits

1. Visual hallucinations and illusions
2. Word blindness-can't understand words when seeing them

Temporal Lesion-Deficits

1. Selective auditory attention deficits
2. Difficulty organizing and categorizing
3. Impaired LTM
4. Altered personality
5. Right-decreased recall/recognizing faces
6. Left-loss of memory of verbal material (names, what words mean)
7. Right- recall of nonverbal material (music, drawings)
8. Right-problems recognizing melody
9. Pure word deafness-can't understand info presented auditorily
10. Auditory comprehension deficits

How do you know who to order? Speech or OT?

1. Speech and OT will often work at the same time with ST focusing on skill, understanding and verbalization while OT helps patient to carry over skills to everyday ADLs.
2. OT assesses each area and how it effects functioning in home and ability to care for self.
3. OT involves not the ability to verbalize but carry out tasks.

Rehab vs. Adaptive Techniques

1. The patient with rehab potential will be those with the ability to change and show improvement in cognitive skills to increase independence.
2. This patient must have a diagnosis that will show there is a potential for positive changes and not degenerative changes.
3. OT helps change the environment to help the patient function more independently and safely and/or helps caregiver assist patient with improved safety techniques. Often, OT is helping the caregiver learn how to cue patient to allow the patient to do more for themselves.
4. This also helps the caregiver by decreasing their stress and fatigue in caring for the cognitively impaired patient.

Speech and Cognition Treatment

1. The results of the cognitive assessment completed by the SLP helps determine the individual's best method or modality of learning and thinking.
2. SLP services can be helpful through direct therapeutic treatment as well as give caregiver training and education for use of compensatory techniques.

Speech and Cognitive Treatment Examples

1. Example: the right brain is more affected than the left
 2. Treatment: overt verbal rehearsal of what the patient needs to do before or during the task at hand helps them proceed with less assistance.
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1. Example: the left is more affected, word finding may be difficult.
 2. Treatment: The SLP would teach strategies for the patient to use descriptive information to give a general idea of the intentions, such as the function or the appearance or the relationship to the person.

Speech and Cognitive Treatment

1. If a patient's reading and writing skills are intact, this modality can also be incorporated when training.
2. If comprehension is a problem, it can be addressed by practicing simple comprehension tasks that gradually increase in complexity.
3. In severe cases, gestures may need to be implemented to help the person visually pay attention to the task at hand to assist with comprehension.

Speech and Treatment of Memory

1. A common sense approach applies: using schedules, writing in a calendar/ journal to recall or remember important appointments or events or daily tasks
2. Other strategies: dry erase board with a daily schedule, label cabinets and drawers
3. Establish routines such as placing glasses in the same place every day.
4. Some patients respond better to verbal reminders and some to written.
5. Some require frequent rehearsal, some respond better by using association or mnemonic strategies (example: HOME)

Referrals to OT and Speech

1. If at SOC week, call the therapist to reference need for discipline or if you question the need. By talking to the OT or ST, it will allow us to better help the family/patient.
2. Coordination notes help the OT and ST know why they are being called in for referral.
3. We will be better prepared for the evaluation to educate as needed if we are aware of the concerns to be addressed.
4. All individuals can help by reinforcing the plan of care of the OT and ST.

Diagnoses with Treatment Potential

1. CVA (within 2 years of event)
2. Parkinsonism
3. TBI

Signs and Symptoms

Visual-perception problems (ie signing handheld difficulty, running into walls, not seeing objects on floor), poor judgement, neglect, problem-solving difficulty, memory, orientation, poor reasoning, sequencing difficulty

Changes expected with Treatment

By addressing these deficits, we can expect a decrease in falls, increase in self care ability and increase endurance/strength in home, increase in independence with executive functioning skills (ie. Problem solving/reasoning).

Diagnoses that require adaptations vs. progressive

1. CVA post 1+ years, Alzheimer's Disease, Dementia
2. Presenting with lingering communication deficits, long term dysphagia, memory deficits or other long standing deficits

Signs and Symptoms

1. poor hygiene (forgets when bathed last so frequently doesn't bathe)
2. forgets to eat-weight loss,
3. sleeps most of day (dozes in chair)
4. incontinent of B & B
5. stays in one place all day
6. unaware of surroundings, time or place
7. severe STM loss.

Family Education

There is no potential for new learning for such patients. Therefore, these patients need adaptations. These patients require cues to bathe, eat, and B & B program to assist. In these situations, patients and families need support systems in place to help