

# Assessing and Enhancing Communication with Geriatric Patients

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**“No, I can’t put your face there...but  
it’s really a good one.**

**Really? How nice... but some days  
I don’t remember my own face”**

- AK (88 year old resident of a assisted living facility)

## Communication involves:

- **Hearing**
  - Acuity and discrimination
- **Speech**
  - Respiration, phonation (voice), articulation, resonance, prosody (intonation, speaking rate, pause)
- **Language**
  - Verbal expression, auditory comprehension, reading, writing, gestures, body language
- **Cognition**
  - Attention
  - Memory
  - Problem solving
  - Executive functioning

## Primary medical conditions affecting communication in elderly

- Stroke (CVA)
- Degenerative diseases
  - Parkinson’s disease
  - Amyotrophic Lateral Sclerosis (ALS)
- Traumatic Brain Injury (TBI)
  - Falls (kitchen, bathroom, public places)
- Brain Tumors
- Laryngectomy
- Dementia
  - Alzheimer’s disease (AD)

## Other conditions affecting communication abilities:

- Depression
- Reduced stimulation & social interaction
- Unfamiliar environment
- Medications
- Impaired hearing and visual abilities
- Dentures (lost or not fitting)
- Other physical conditions
  - Pain & fatigue

## Neurogenic Communication Disorders

- Motor Speech Disorders
  - Dysarthria
  - Apraxia of Speech
- Aphasia
- Cognitive-Linguistic impairments (TBI)
- Right hemisphere syndrome
- Dementia
  
- Dysphagia (swallowing disorders)

## Dementia

- Several types (based on etiology)
- Progressive degeneration of mental functions
- Diagnosis:
  - Impaired STM, LTM
  - AND at least one: Impaired abstract thinking, personality change, judgment, constructional abilities, language, praxis, visual recognition
    - [Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994)]
- Criteria:
  - Insidious onset, acquired, persistent (not delirium), affects mental function, severity to impact employment and social functioning

## Dementia types

- Cortical
  - Alzheimer's disease
  - Pick's disease (Frontal lobe dementia)
  - Primary Progressive Aphasia (semantic dementia)
- Subcortical
  - Parkinson's disease
  - Huntington's disease
  - Progressive Supranuclear Palsy
  - HIV Encephalopathy
- Mixed/other
  - Vascular dementia
  - Lewy Body Dementia
  - Hydrocephalus
  - Creutzfeldt-Jakob disease

## Alzheimer's disease (AD)

- Specific type of dementia
- DSM-IV
  - gradual onset and progression of cognitive deficits
  - not attributed to other central nervous system conditions
- Medical
  - Neurofibrillary tangles- extraneous protein filaments
  - Neuritic plaques- extracellular, granular deposits
  - Neuronal atrophy, synaptic dysfunction
- Primary impact on memory
  - Language skills relatively intact (early stages)
  - Reduced ability to remember WHAT they want to say or what others have said to them

## Attention

- Focused
  - Alert to stimuli
- Sustained
  - Focused attention over time interval
- Selective
  - Choosing relevant stimuli; figure-ground
- Alternating
  - Switching between two or more stimuli
- Divided & dual tasks
  - Monitoring (and responding to) two or more stimuli

### Distraction

Competing auditory and/or visual stimuli

## Memory: Primary types

- Working memory (WM)
- Short-term memory (STM)
- Long-term memory (LTM)

## Working Memory (WM)

- Working memory
  - Immediate processing environmental stimuli
  - Also includes info recalled from LTM
  - Involves attention
  - This phase of memory doesn't last long

## Long Term Memory

1. Declarative (Facts)
  - Concepts (semantic)
    - frontal lobe
  - Events (episodic)
    - cortical sensory association areas (auditory & visual)
  - Words (lexical)
    - temporal lobe (hippocampus)
2. Procedural
  - memory for motor tasks
  - basal ganglia & motor cortex

## Assessment in AD

- Medical diagnosis
- Behavioral
  - Mini-Mental State Examination (MMSE; Folstein et al., 1975)
  - Global Deterioration Scale (GDS; Reisberg, et al., 1982)
  - Arizona Battery for Communication Disorders of Dementia (ABCD; Bayles & Tomoeda, 1993)
  - Functional Linguistic Communication Inventory (FLCI; Bayles & Tomoeda, 1994)
  - FAS Verbal Fluency Test (Borkowski et al., 1967)

## Early signs

- Increased difficulty with job
- Episodes of confusion
- Difficulty handling personal affairs
- Personality & mood changes
- Depression
- Difficulty following directions
- Memory loss

## Types of Intervention

- Recognize that AD is progressive condition
- Medical intervention
  - pharmacology- affects symptoms, not progression (Cognex, Aricept, others)
- Behavioral
  - Impaired vs. spared functions
    - emphasis on abilities that are intact (spared)
  - Compensatory
  - Environmental manipulations

## Role of SLP

- Speech-Language Pathologists
  - involved in evaluation, establishing communication program, short-term intervention, training caregivers, consultation, & periodic assessment

### Functional Maintenance Programs

- Program for individuals with chronic conditions who receive limited intervention by skilled professionals
- Caregivers, rehab techs, etc

## Progression of memory difficulties

- Episodic memory (recent events)
  - - early impairments
- Working memory
  - - noticeable changes in attention span & planning
- Semantic memory
  - - spared longer
  - - well rehearsed (learned) memories
  - - stronger associations; greater representation in brain
- Procedural memory
  - - maintained longest

## How to maximize communication:

1. Reduce demands on episodic memory
2. Support working memory
3. Modify physical, social, and conversational environment to evoke positive fact memory, emotions, and actions

## Reduce demands on episodic memory

- Use **recognition** memory instead of **recall** memory
  - -easier to recognize than recall (especially if provided choices)
- Provide choices for responses
  - “What did you do last night?”
    - question is too open ended; requires recall
  - “Did you watch the basketball game last night?”
    - Yes/No
  - “Did you have pizza or fish for dinner?”
    - Choice

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## Reduce demands on episodic memory (cont.)

- Supplement verbal communication with written information
  - Label items & rooms around house
    - bathroom, jewelry box, underwear, silverware
  - Written instructions in obvious location
    - On door- “Don’t open this door- the cat will get out”
      - Highlight with color and **size** changes
      - Use upper and lower case **INSTEAD OF ALL CAPITAL LETTERS**
  - Calendar, daily schedule (dry erase board), clock
  - Personal information (Name, address, birthdate, etc)

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## Reduce demands on episodic memory (cont.)

- Photos
  - Familiar people & places (with descriptions)
- Memory book or wallet
  - ID info (name, address, birthdate)
  - Photos (with names)
  - Lists (things I like to do, my favorite foods, stores in my neighborhood, trips I’ve taken...)

## Support working memory

- Increase attention
- Reducing distractions
  - quiet atmosphere (sounds and visual distractions)
  - one-to-one communication
- Chunking information
  - Provide shorter pieces of information
    - Single-step procedures
      - “After you finish the news, you need to take a bath, trim your beard, and then set out your clothes for tomorrow’s doctor appointment”

## Modify environment to evoke successful interactions

- Create or simulate familiar environments
  - - hospital, SNF, assisted living
  - - favorite chair, dresser, clothes, bedspread
- Engage in familiar activities
  - cooking, exercise, crafts, shopping
  - music- (sing, play, listen, dance, clap)
- Current events; special discussion groups

## Tips:

### Increasing language comprehension

- Get their attention
  - Establish eye contact
- Use simple grammar (short and direct)
- Use highly occurring (common) words- more familiar
- Provide “choices” and Yes/No questions
  - Avoid open-ended questions
- Reduce amount of information you expect them to remember
  - Shorten your stories

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### Increasing language comprehension (cont.)

- Talk about current & immediate topics
  - Supplement with concrete items (objects, photos, etc)
  - Memory book, wallet
- Rephrase and repeat what you have said
- Use proper nouns instead of pronouns
  - “Marsha” instead of frequent uses of “she, her”
- Calm tone
  - Angry or harsh tone evokes anxiety
  - Acts as distraction; reduces comprehension

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### Increasing language comprehension (cont.)

- Avoid figurative language, metaphors, analogies
  - - abstract expressions
- Be direct
  - don't use a question to make a request
    - “Can you clear the dishes from the table?”
    - “Haven't I told you not to let the dog out?”
- Use multiple modalities when giving instructions
  - Spoken, written, gestures

### Increasing language expression (output)

- Reduce distractions
- Maintain eye contact
- Body proximity
- Encourage communication through validation
  - - don't directly correct wrong information
  - - restate what you have heard (“You told me that \_\_\_\_\_”)
  - - allow patient to self-correct
    - “That's funny- I didn't mean to say that”
    - “What I meant to say was \_\_\_\_\_”
  - - don't argue
  - Remember- goal is to increase communication (social interaction), not necessarily convey accurate information

[more]

### Increasing language expression (cont.)

- Reminiscence
  - “Let's talk about your job during the Korean War”
  - “Tell me about your favorite TV shows when you were young”
- Conversational coaching
  - Use objects, photos, etc to stimulate communication
  - Communicate during familiar activities
    - - (cooking, gardening, crafts, etc)
  - Redirect conversation by reintroducing topic
    - “You were talking about your first house”

[more]

### Increasing language expression (cont.)

- Spaced Retrieval Training
    - Training individuals to retrieve info from LTM over increasing periods of time
    - Use for important information (family names, locations, etc)
1. Tell patient: “Your son's name is Bill”
  2. Immediately ask: “What is your son's name?”
  3. Engage in brief conversation or activity (1 minute)  
“What is your son's name”
  5. If correct- engage in longer conversation or activity (2-5 minutes)
  6. If incorrect- provide “Your son's name is Bill”, and use shorter conversational interval.