Beyond Memory Books: Strategies for Dementia

Michelle S. Bourgeois, Ph.D., CCC-SLP
Ohio State University
Bourgeois.14@osu.edu

Diagnostic Criteria for Dementia: Diagnostic and Statistical Manual of Mental Disorders -IV (DSM-IV; APA, 2000)
- Memory impairment and related changes in another cognitive domain (language, abstract thinking, judgment, executive functioning) that are sufficiently severe to cause impairment in social and occupational functioning.
- And that reflect a decline from a previously higher level of functioning.
- Cognitive and behavioral symptoms are chronic and progressive, may be correlated with specific neuropathology of an organic basis, are differentiated from disturbances of consciousness (e.g., delirium) and that reflect a decline from a previously higher level of functioning.

Characteristics of Cognitive-Communication changes in Aphasia and Dementia: Dementia

Disorder of Cognition
- Memory Loss is the Core Symptom of most types of Dementia
- Other Symptoms include:
  - Language problems
  - Attention, Executive function, visuospatial difficulties
  - Troublesome behaviors: wandering, agitation, irritability, delusions, day-night disorientation
  - Depression

Outline
- Review of Dementia; Language, Cognitive, Behavior changes
- Brief discussion of Assessment for Functional Treatment
- Theoretical Models underlying Functional Treatment
- Treatment approaches: Evolution of Memory Books
- Developing Functional Goals for Long-term Care
- Case Examples

Differentiating the effects of normal aging from dementia
- Reversible and/or Treatable Conditions
  - Rule out and treat metabolic and nutritional disorders, depression, other disease processes and medical conditions
- Age-Associated Memory Impairment
  - Rule out depression and dementia
  - < 1 standard deviation below mean of young adult scores on cognitive tests
  - Slower psychomotor speed; benign forgetfulness
  - Preserved occupational and social functioning
- Mild Cognitive Impairment
  - Increased frequency of memory complaints
  - Preserved occupational and social functioning
  - < 1.5 standard deviations below mean of age and education matched healthy controls on cognitive tests

<table>
<thead>
<tr>
<th>Alzheimer's Disease (AD)</th>
<th>Vascular Dementia (VaD)</th>
<th>Frontotemporal Dementia (FTD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence</td>
<td>60-70% of cases</td>
<td>15-30% of cases</td>
</tr>
<tr>
<td>Onset</td>
<td>Slow, Gradual progression</td>
<td>Abrupt, severe progression</td>
</tr>
<tr>
<td>Cognition</td>
<td>Memory Deficits:</td>
<td>Some early, others late</td>
</tr>
<tr>
<td></td>
<td>Slow fading (early)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fluent aura (mid)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long-term (late)</td>
<td></td>
</tr>
<tr>
<td>Cognitive decline (early)</td>
<td>Multi-executive dysfunction</td>
<td>Some early in Down's disease</td>
</tr>
<tr>
<td>Language</td>
<td>Fluent, mild word finding (early)</td>
<td>Frontal lobe language deficits</td>
</tr>
<tr>
<td></td>
<td>Fluent, pragmatic, reading comprehension, perseveration (mid)</td>
<td>Primary progressive aphasia; early; nonfluent, language deficits</td>
</tr>
<tr>
<td></td>
<td>Fluent speech only (late)</td>
<td>Semantic Dementia; late; frontal language deficits</td>
</tr>
<tr>
<td>Neurological</td>
<td>Progressive deficits</td>
<td>Ventriculomegaly</td>
</tr>
<tr>
<td></td>
<td>Visual Field Deficits</td>
<td></td>
</tr>
<tr>
<td>Behavioral</td>
<td>Personality, mood changes (early)</td>
<td>Depression, agitation, anxiety, apathy (early)</td>
</tr>
<tr>
<td></td>
<td>Delusions, hallucinations, agitation, apathy (mid)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dysfunction, dysphagia, early (late)</td>
<td></td>
</tr>
</tbody>
</table>

3/6/2012
Dementia with Lewy Bodies (DLB) | Dementia in Parkinson's Disease
---|---
**Prevalence** | 20-30%, 14-40% of Parkinson's patients
**Onset** | Slow, Gradual
**Cognitive** | Initial (early), Gradually fluctuating; Similar to AD
**Executive Function** | Mild limitations
**Language** | Initial (early), Executive dysfunction (early)
**Behavior** | Visual hallucinations, delusions, depression (early)

More dementia types
- Dementia in Huntington's disease
- Human immunodeficiency virus-associated dementia (HIV-D)
- Creutzfeldt-Jakob disease (CJD)
- Pseudo dementia
- Other Co-morbidities
  - Heart disease
  - Hip Fracture
  - Diabetes
  - CVA, stroke
  - Lung diseases

Behavior Problems are symptoms of Memory, Language, & Cognitive Deficits
- Frequency, intensity, severity, and pattern vary by person, etiology, stage of disease, and environmental factors
- Early stage – memory issues, fearful, irritable, personality changes, mood swings
- Middle stages – problems more diverse, frequent, and difficult to manage
- Late stages – behaviors slow down, more predictable and manageable, related to nursing care

Assessment: The Role of SLP in Dementia
- Diagnosis vs. Treatment: Historical perspective
  - International Classification of Functioning, Disability and Health (ICF); (WHO; 2001)
  - Body structures and function/Impairment
  - Physiology and anatomy
  - Activity/Activity Limitations
  - Participation/Participation Restriction
  - Involvement in a life situation
- Assessment for Treatment Planning
- Determine preserved skills & deficits
- Planning Functional Assessment to Address Functional Outcomes
- Determine desired outcomes for maintaining function

Need-Driven Compromised Behavior Model
- Theory of Unmet Needs
- Personal, social, environmental, physical, emotional needs
- Cannot communicate effectively due to language and cognitive changes
- Behaviors are expressions of need
- Misinterpreted as maladaptive
- MOST Behavior problems can be addressed with Communication-based treatments
Purposes of Assessment

- To provide a baseline measure of cognitive-communicative functioning against which to measure progress
- To identify and profile cognitive-linguistic strengths and weaknesses around which goals and a treatment plan are developed
- To provide a diagnosis and prognosis, when possible
- Assessment should not take place only at pre and post treatment evaluation sessions, but whenever there is a documented change in status

Assessment at the Activity & Participation Levels

- Identify patient
  - limitations in communication & activities of daily living
  - strengths in communication & functioning
  - problem behaviors (anxieties, repetitive questions and behaviors, social isolation)
  - environmental barriers for communication
  - desired activities and participation
- Interview the Caregivers for behavior complaints and expectations
  - These will lead to potential goals for treatment programs

Identify Problem Behaviors

- Identify, describe, and count frequency of caregiver and patient complaints.
  - What are the specific problems?
  - Where do they occur; what time of day?
  - How often do they occur?
  - What is the consequence of the problem; who says and does what; does it work?
  - What is causing this problem; activity limitation?
  - What impact does this problem have on quality of life (participation in desired activities)?

Determine frequency of problem:

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Describe the Behavior</th>
<th>How Often?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Problem: Cannot find room</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Problem: Asks what time it is.</td>
<td></td>
</tr>
</tbody>
</table>

Behavior Diary

Behavior Log

<table>
<thead>
<tr>
<th>Day</th>
<th>Church Problems (Behavior Log)</th>
<th>Church Problems (Behavior Log)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Circle the number</td>
<td>Write a short description</td>
</tr>
<tr>
<td></td>
<td>Wednesday</td>
<td>Tuesday</td>
</tr>
<tr>
<td></td>
<td>Thursday</td>
<td>Friday</td>
</tr>
<tr>
<td></td>
<td>Saturday</td>
<td>Sunday</td>
</tr>
</tbody>
</table>
**Daily Schedule/Routines**

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 am</td>
<td>Breakfast</td>
<td>Dessert</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 am</td>
<td>Lunch</td>
<td>Dessert</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 pm</td>
<td>Dinner</td>
<td>Dinner</td>
<td>Dinner</td>
<td>Dinner</td>
<td>Dinner</td>
<td>Dinner</td>
</tr>
<tr>
<td>6 pm</td>
<td>TV news</td>
<td>6 pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 pm</td>
<td>Choir practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 pm</td>
<td>Bed</td>
<td>Bed</td>
<td>Bed</td>
<td>Bed</td>
<td>Bed</td>
<td>Bed</td>
</tr>
</tbody>
</table>

**Functional Goals Screening Protocol: Community Clients with Dementia**

Name: _________________________________________ Date of Screening: ________________
Medical Diagnosis:  _____________________________________________________________________________
Date of Birth: _______________________  Age: ____________  Gender: _______________

**PART 1: CLIENT INTERVIEW**

A. **Personal Information**
- Family Occupation
- Lives with: Hobbies
- Friends: Activities
- Preferences: Dislikes
- Premorbid Basic Reading Ability: Yes No Unable to answer
- Premorbid Basic Writing Ability: Yes No Unable to answer
- Wears Hearing Aid: Yes No
- Wears glasses: Yes No For some activities
- Other languages spoken: Yes No Other: _______________

B. **MMSE Score:** ___________    Mild=20-23; Moderate=17-19; Severe= <17
- Strengths:  _________________________  Weaknesses: _____________________________
- Discourse features Present Absent No opportunity
  - Takes turns ______ ______ ______
  - Relinquishes turn ______ ______ ______
  - Maintains topic ______ ______ ______
  - Initiates new topic ______ ______ ______
  - Transitions from topic ______ ______ ______
  - Requests clarification ______ ______ ______
  - Clarifies ______ ______ ______

C. **Conversational Sample:**
Tell me about your family (or what you did for a living):

D. **Orientation to Environment:**
- Show me where the bathroom is? Able Requires assistance (Mild Mod Max) Not able
- Show me where your telephone is? Able Requires assistance (Mild Mod Max) Not able
- Show me where I can get a glass of water? Able Requires assistance (Mild Mod Max) Not able

E. **Auditory and Tactile Behaviors:**
- Is attentive when others are talking?  Yes No
- Holds, squeezes, manipulates objects?            Yes   No
- Is bothered by noises (radio, tv)? Yes No
- Rubs, smooths, explores surface with hands?   Yes No
- Is attentive to or participates in music, singing?  Yes           No
- Hits, bangs, slaps objects or surfaces?            Yes No

F. **Visual and Functional Reading Behaviors:**
- Prompt client to "Tell me something interesting from this paper (magazine, mail, etc.)." Does client read aloud from the materials? Yes  No
- Does client make comments about the topic? Yes  No

**Assess to determine Expectation for Treatment Effects**

Bourgeois Oral Reading Measure (1992)

**Informal Reading Assessment**

Today is August 5, 2010. (40)
There is a cool breeze blowing. (36)
Buffalo are grazing on the plain. (44)
Ice cream would be a refreshing treat. (48)

Let's have a picnic near the swimming hole. (6)
Spaced-Retrieval Screening (Brush & Camp, 1998)

3．(NO DELAY)  “Today we are going to practice remembering my name. My name is________________. What is my name?”
Correct: “That’s right. I am glad that you remembered.”

2. (SHORT DELAY)  “Good. I will give you more opportunities to practice as I am working with you today. Let’s try again. What is my name?”
Correct: “That’s right. I am glad that you remembered”

3. (LONG DELAY)  “You are doing well remembering my name for a longer period of time, and that’s the idea. I would like you to always remember my name. I will be practicing this with you during therapy by asking you often. What is my name?”
Correct: “That’s right you are remembering for a longer period of time. You did a great job remembering my name.

If the client is incorrect at any level 3 times in a row, this client is not appropriate for SR training, say: “Thanks for trying so hard. Let’s work on something else now.”

Assessment Results Determine Candidacy for Treatment

• Intervene with individuals who:
  • Show intent to communicate
  • Demonstrate cognitive-linguistic strengths around which to structure a treatment program
  • Respond to cues
  • Follow simple directions
  • Exhibit recent/significant change in status

Guiding Principles for Functional Intervention

• Maintain independent functioning as long as possible
• Maintain quality of life via supported participation and engagement
• Emphasize personal relevance and contextual training

Theoretical basis for these intervention effects

• WHO Model (WHO, 2002):
  • Impairment, Activity, Participation
• Memory Model (Baddeley, 1995)
  • Preserved and Impaired memory systems
  • Sensory, Short term/Working, Long term memory
  • A theory of Learning (Squire, 1994)
• Person-Centered Care Model (Kitwood, 1997):
  • People need comfort, attachment, inclusion, occupation, and identity

WHO model of Treatment in Dementia

• Impairment level treatment
  • Pharmacological
  • Change language, cognition, memory processes?
  • Poor maintenance as disease progresses
• Activity level treatment
  • Non-Pharmacological
  • Support compensatory strategies for functional behaviors
  • Modify cues and environment
• Participation level treatment
  • Increase participation and engagement in desired activities
  • Improves quality of life

Treatment needs to be appropriate:
for the setting: (Environmental factors)
and for the person: (Personal factors: person-centered approach)

Theoretical rationale for intervention strategies: A memory model

• Preserved memory systems
• Enhance strength areas
• Impaired memory systems
• Reduce demands on impaired systems by using cues and compensatory strategies
A Model of Memory for Dementia
(Baddeley, 1995)

- Sensory memory
  - Problems with recognition and identification
  - Early stages: relatively preserved
- Short term memory (working, temporary)
  - Problems with encoding and decoding
  - Early stages: most impaired
  - Reduce demands with memory aids
- Long term memory (semantic, episodic, and procedural)
  - Problems with retrieval
  - Early stages: word retrieval problems
  - Later stages: procedural memories relatively preserved
  - Enhance cues and reduce demands with memory aids

Classifying language deficits and problem behaviors by memory subsystem

<table>
<thead>
<tr>
<th>Sensory memory: Problems with registration, recognition, and identification</th>
<th>Short term, temporary working memory: problems with encoding/decoding</th>
<th>Long term, semantic, episodic, and procedural memory: Problems with retrieval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual agnosia: does not recognize common objects; puts objects in wrong places</td>
<td>Repetitive questioning; failure to encode answer</td>
<td>Word-finding problems: specific words, facts, names of familiar persons, places, and events; uses wrong name</td>
</tr>
<tr>
<td>Sundowning: does not recognize his home</td>
<td>Failure to follow directions or instructions: failure to encode or decode verbal stimuli</td>
<td>States erroneous information; lying and accusations</td>
</tr>
<tr>
<td>Repetitive tactile manipulation; does not recognize object</td>
<td>Apathy, pacing: failure to encode responses to anxiety induced behavior</td>
<td>Disruptive vocalization; inability to access words to express wants and needs</td>
</tr>
<tr>
<td>Delusions; misidentifications</td>
<td>Failure to encode or decode verbal stimuli</td>
<td>Forgets how to dress, bathe, feed, toilet self</td>
</tr>
<tr>
<td>Hallucinations; sees people, objects that are not there</td>
<td>Distincted by competing sensory stimuli; sensory overload</td>
<td>Forgets how to use telephone, other familiar implements</td>
</tr>
<tr>
<td>Distracted by competing sensory stimuli; sensory overload</td>
<td>Problems with retrieval</td>
<td>Does not complete tasks</td>
</tr>
</tbody>
</table>

Memory Strategies can be...

**INTERNAL STRATEGIES**

- Mnemonics
- Face-Name associations
- Mental retraceing of events
- First letter associations
- Memory games and drills

**EXTERNAL STRATEGIES**

- Calendar, planner, diary
- Multifunctional watch, timers
- Shopping lists, string on finger
- Putting things in a special place
- Signs, labels, notes
- Tape recording

External Aids for Sensory Memory

**Visual cues, Auditory cues**

**Tactile cues, Olfactory cues**

Familiar objects, sounds, smells...

Over learned memories are most resistant to neurological disease
Visual Aids
Written Cues: Notes, Labels, Lists, Signs
Organizational Cues: Planners, Medication boxes
Environmental Cues: Objects, color-coding, special places

Auditory Aids for Sensory Memory

Tactile Aids for Sensory Memory

Short term Memory Problems: Getting information into Memory

• Repetitive questions
• Forgets information quickly
• Does not follow directions or instructions
• Lack of cooperation, refuses, makes excuses
• All are examples of failure to encode, or get information into Memory
Aids for Encoding Information:

**Shopping Organizers**

<table>
<thead>
<tr>
<th>Weekly Meal Planner</th>
<th>Weekly Meal Planner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Meal Planner</td>
<td>Monthly Meal Planner</td>
</tr>
<tr>
<td>Shopping Organizer</td>
<td>Shopping Organizer</td>
</tr>
<tr>
<td>Grocery List</td>
<td>Grocery List</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vegetables</th>
<th>Dairy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats</td>
<td>Breads</td>
</tr>
<tr>
<td>Canned goods</td>
<td>Paper</td>
</tr>
<tr>
<td>Frozen foods</td>
<td>Pet food</td>
</tr>
</tbody>
</table>

Written information can be re-read repeatedly

More Aids for Memory Encoding: reminder cards & memo boards

My wife Jane lost her valiant fight with cancer on May 10, 1999 and rests peacefully here.

I walk with a cane for safety.

Low tech and higher tech aids for encoding information

A Common Problem...

.....Learning New Information using Memory Aids

All Memory Aids must ......
- be Attractive to the user
- be Desirable to the user
- perform a useful function
- be Needed frequently, every day

And....You need to incorporate training, rehearsal, and repetitive practice to ensure learning of desired information

Practice, practice, practice!

Ways to practice...
- Talk about memory cues in the environment; read them out loud together.
- Use rehearsal strategies, like Spaced Retrieval
  - (Camp et al., 1996; Brush & Camp, 1998)
  - "What do you do to remember where I am?"
    - "I read the memo board."
    - "What do you do to walk safely?"
      - "I walk with my cane."
Retrieval from Long term memory

- Word-finding problems: specific words, facts, names, places, events
- Forgets previously learned information
- Forgets how to use telephone, other familiar implements
- Forgets how to get to familiar places
- Forgets how to dress, bathe, feed, toilet self

Memory Aids for Information Retrieval:
Organizational aids & Planners

Memory Wallets

Bourgeois, 1990

Memory Books

Text can address Problem Behaviors

Caregiver reported Problem Behaviors:
- Repetitive Questions
  - Where is my wife?
  - Where are we going today?
- Restlessness, Pacing
  - Places to go...things to do.
- Delusions, Hallucinations
  - You are not my husband.
  - There’s a construction crew in the backyard.
Reminder Cards

My wife Jane lost her valiant fight with cancer on May 10, 1999 and rests peacefully here. My favorite dog, Buster, was my best friend for many years.

Problem in the Nursing Home:
Memory Books are not used by Residents or Nursing Aides

Solutions:
1. Make them more functional
   - Add Orientation information
   - Add Activity of Daily living information
   - Add Problem Behavior Resolution Info.
   - Give Nursing Aide ownership
2. Make them more portable
3. Establish use through training (Spaced Retrieval)

Functional & Portable Memory Aids

Wearable Memory Aids

Eating keeps me healthy and strong.

Showering makes me feel fresh and clean.

Trained Nursing Aides to use Memory Cards during care interactions

RESULTS:
- Improved quantity and quality of interaction
  - Nursing Aides & Residents talked more
  - Nursing Aides used more facilitative behaviors
  - Nursing aides’ judgment of resident depression improved


**Music activities** are free.

The bathroom is next to my room.

**Movie Pass**

**Movie Pass**

Good for 1 FREE Movie

**Movie Pass**

**Movie Pass**

Countdown to Laundry Day…

√ I changed my clothes.

√ I changed my clothes.

√ I changed my clothes.

√ I changed my clothes.

√ I changed my clothes.

√ I changed my clothes.

I need to change my clothes everyday.

**Memo Boards**

**Interest & Hobby Albums**

My Favorite Trips and Vacations

**Need-Driven Compromised Behavior Model** (Algase et al., 1998)

- Theory of Unmet Needs
- Personal, social, environmental, physical, emotional needs
- Cannot communicate effectively due to language and cognitive changes
- Behaviors are expressions of need
- Misinterpreted as maladaptive

- MOST Behavior problems can be addressed with Communication-based treatments
Problem Behaviors & Goal Writing

- Orientation
- Wants & Needs
- Engagement & Activities
- Problem Behaviors
  - Nursing Home
  - Home & Family

Orientation Assessment Form (Bourgeois, 2006)

Assessing the Orientation Behaviors of: J.P.

Past Behaviors for Location/Profession:
- Retired Lawyer

Desired Behaviors for Location/Activities:
- Home, drives to golf course, doctors, and church

Person:
- Oriented to person
  - Supports Driver’s license

- Needs personal identity information

- Supports Driver’s license, Wallet identity card

Place:
- Oriented to place
  - Uses maps some
  - Uses GPS in car

- Needs written location information for emergency use

- Needs written supports for directions to familiar locations

- Written address by telephone & in wallet

- Driving Directions Notebook for car

Time:
- Oriented to time
  - Wrist watch
  - Outlook calendar on computer
  - PDA (personal digital assistant)
  - Cell phone

- Needs to keep daily appointments
- Worried about taxes & bill paying

- Consolidate electronic systems (computer, PDA, or cell phone)
- Use monthly wall calendar to note bill/tax due dates
- Wrist watch

What types of Orientation goals do you write?

- Orientation to person?
- Orientation to place?
- Orientation to time?

Orientation to person

Medic Alert

I am Melissa Browning.

I am diabetic.

Please call (333)111-2222

Orientation to Place:

Physical Location (immediate, residence, community)

I live at 314 Elm Street.

Orientation to time

Medic Alert

I am Melissa Browning.

I am diabetic.

Please call (333)111-2222

Wants & Needs

- The expression of personal preferences, likes and dislikes
- The satisfaction of hunger, thirst, physical comforts, emotional needs
- Pain, Emotions
- Safety: At home, falls prevention, medications, emergencies, in the hospital, safe eating/swallowing, personal hygiene

Personal Wants, Needs, and Safety Assessment Form (Bourgeois, 2006)

Assessing the Wants, Needs of: Margaret Jones

Environment: Home, Hospital, Assisted Living, Nursing Home (circle one)

Wants: The expression of personal preferences, likes and dislikes

- Likes:
  - Toast & black coffee for Breakfast
  - Bath in the evening before bed
  - Books, stuffed animals, a favorite shawl
  - Classical music; she played the violin.
  - Prefers to be alone in her room.

- Dislikes:
  - Bright light (keep blinds semi-drawn)
  - Broccoli, rutabaga, slimy foods, peppermint
  - Large, group activities
  - Frank, a former neighbor who was mean to her dog.

Needs: The satisfaction of physical comforts and emotional needs

- Likes:
  - To be touched on hands, hugged
  - Family pictures and her bible are comforting
  - Likes animals

- Dislikes:
  - To be touched on hands, hugged
  - Family pictures and her bible are comforting
  - Likes animals

- Personal:
  - Likes to be touched on hands, hugged
  - Family pictures and her bible are comforting
  - Likes animals
I change my clothes every day.

Engagement & Activities
- Early Stage Dementia
  - Successful use of Planners and calendars to maintain desired activities
- Middle Stage Dementia
  - Successful engagement or participation with
    - Activity reminders
    - Enhanced stimulus characteristics
- Late Stage
  - Successful engagement with Activity modifications

Problem Behaviors
- Repetitive Questions
- Fears and Anxieties
- Agitation
- Solutions:
  - Memory Book page
  - Fake letters
  - Reminder Cards
  - Memo Board

Functional Goals
- Expressive Language: Conversation, Wants/Needs
- Receptive Language: Comprehension of conversation, questions, reading, understanding cues (auditory, visual, tactile)
- Cognition: Memory
  - Long term: naming, orientation
  - Short term: reduce repetitive questions
  - Procedural: sequencing
- Level and type of cuing/assistance?
- Criterion for mastery?
- Caregiver training goals?

Functional Goals: Early Stage Dementia
- Client will describe current week’s events using daily planner providing 4 items
- Client will describe future scheduled events using daily planner
- Client will describe how to drive to desired locations using driving notebook
- Client will explain how to retrieve email from his computer using written cues
- Client will increase pleasure reading to 15 min per day using large print materials.
### Personal Identity Card

- **Name:** Melissa Browning
- **Address:** 1234 Ivy Street
- **City:** My City
- **State:** My State
- **Zipcode:**
- **Telephone:** (xxx) 123-4567
- **In case of Emergency:** Notify: Harvey Browning, my brother
  - **Telephone:** (xxx) 234-5678
- **Medical Alert:** Allergic to penicillin
- **My doctor is:** Dr. William Smith at St. Mary's Hospital
  - **Telephone:** (xxx) 567-8912

### Driving Instructions

#### From Home to Grocery Store
1. Turn RIGHT at end of driveway.
2. Turn LEFT at Stop sign (Shamrock Rd.)
3. Turn RIGHT at Shannon Lakes Rd.
4. Turn LEFT at Shopping Center Entrance
5. Park the car.

#### From Grocery Store to Home
1. Drive to Shopping Center Entrance.
2. Turn RIGHT onto Shannon Lakes Rd.
3. Turn LEFT at Stop sign (Shamrock Rd).
4. Turn RIGHT at Edenderry Drive.
5. Turn LEFT into home driveway.

### To Check e-mail on your computer:
1. Press the [power] button.
2. Wait until icons appear at the bottom of screen.
3. Using the mouse, move the arrow to the Outlook icon.
4. Click the left mouse button.
5. Read through the list of mail messages.
6. Using the mouse, move the arrow to the message you want to read.
7. Click the left mouse button.
8. Read your message.

### Functional Goals: Middle Stages:
1. Client will increase accuracy of yes/no responses using memory book and picture cues.
2. Client will decrease daytime napping with increased engagement in structured activities using reading, writing, and matching skills.
3. Client and caregivers will use Memory book and Written choice for conversation.
4. Client will use words, symbols, gestures to say “Thank you” and “I love you.”

- **My wife is Linda.**
- **I love you!**

### Functional Goals: Later Stages

- **Interventions designed to**
  - Improve comprehension & cooperation
  - Increase memory retrieval & conversation
  - Maintain safety
  - Maintain socialization & preferred activities
  - Decrease agitation
  - Maintain self feeding, dressing, bathing
  - Decrease frequency of aberrant or disruptive behaviors

### Examples of specific communication behaviors

- Remembering a caregiver’s name
- Conversing at meal times, with family & friends
- Requesting preferred objects & activities
- Stating needs, level of pain & discomfort
- Sharing feelings with caregiver & friends
- Reading aloud (for socialization, to choose menu items, etc.)
- Participating in preferred activities
- Expressing satisfaction, happiness

### Document change in cognitive-communication function as a result of therapy

- Language produced and/or comprehended
- Ability to express needs, satisfaction, pain
- Greater language output during social activity than during non-social activities
- Frequency of agitation or disruptive behaviors
- Amount of assistance needed during ADL
High Stage Level Activity:

- **Goal:** To improve functional communication for basic and social needs, the patient will produce 3 statements about personally relevant topics (therapies provided by physical therapists) with minimal assistance with 80% accuracy per 15 min session.
- This goal could be modified by increasing the number of statements when mastered at 5 and 8, related to the topic when provided with visual stimuli [therapy photographs, partial written prompts] and auditory cues [i.e., minimal prompts to encourage conversation and matching activity].

Middle Stage Level Activity:

- **Goal:** To increase communication regarding personally relevant information (names of major muscles), the client will match muscle names to their location in the body with minimal assistance (visual cues: word bank and physical body cues from speech-pathologist) with 50% accuracy during 3 out of 5 opportunities per 15 minute conversation.
- This can be modified with mastery to 60-75-80% accuracy during 4-5 opportunities.

Late Stage Level Activity:

- **Goal:** To maintain interests, increase communication of social needs, and increase engagement with personally relevant materials (which is improved quality of life), the client will correctly match personally relevant stimuli (pictures of different therapies done by physical therapists), with moderate assistance (written prompts) with 50% accuracy during 2 out of 3 opportunities.
- This can be modified with mastery to 60-75-80% accuracy during 4-5 opportunities.
Activity: The client will match therapy pictures to each other. Clinician could put the name of the therapy underneath the 1st one to give assistance to the client.

Examples of Functional Goals
1. Client will refer to memory book to initiate conversation
   a. with clinician 8/10 times within 30 minute treatment session for a consecutive day
   b. with peers 6/8 times over 4 consecutive treatment days with minimal assist (clinician points to book)
2. Client will address people by name by reading name tag
   a. with clinician; upon initial contact without prompts
   b. with peers; upon initial contact with minimal prompts (pointing)
3. Client will remember room number
   a. with clinician; client will respond with 90% accuracy to prompt, "what is your room number?"
   b. client will reduce questions about room number to staff to -once per day
4. Client will read cue card before transferring to wheelchair
   Client will respond to prompt, "What do you need to do before you get into your wheelchair?"
   "I will read this card and do what it says."

Goals:
1. Client will use her memory book to initiate conversation
2. Client will read the card and follow safe swallowing strategies
3. Client will recall clinician’s name
4. Client will remember to ask or call her caregiver when she wants to get up

Illustrative Case #1: Dementia
- V.S. (86 yrs., B.S. degree)
- Lives in Assisted Living Facility
- Assessment: July, 2000
- MMSE: 22/30; mild dementia
- Boston Naming Test: 9/15
- WRAT 3: 52/57
- Oral Reading: 24/24 large print
- Expressive Language Conversation: rating = 5/6
- SR Screen: passed

Caregiver identified problem behaviors:
1. Client experiences difficulty remembering names daily
2. Client has difficulty initiating conversation daily
3. Client cannot recall room number daily
4. Client experiences trouble when transferring to wheelchair daily

Case #2 M.H. (84 yrs., B.S.)
Diagnosis: Progressive Neurological Disorder, Balance Disorder
Assessment: July, 2000; Assisted Living Facility
MMSE: 24/30 WRAT 3: 39/57 Boston Naming Test: 11/15
SR Screen: passed
Expressive Language Conversation: rating = 5/6
Oral Reading: 24/24 small print

Caregiver identified problem behaviors:
1. Cannot remember clinician’s name
2. Consistently chokes during swallowing
3. Frequently gets bored during the day and would like to talk to someone
4. Forgets to call someone to help her get up, which results in falling

Getting Nursing Assistants to Cooperate
Development of training materials
Interactive CD-ROM, VHS, and Web-based training programs for nursing aides

Strategies for Dementia
1. Dementia Overview
2. Speaking Skills
3. Redirecting Skills
4. Communication Cards

Solving Problems
1. What’s the Problem?
2. What’s the Solution?
3. Preventing Problems

When Bad Things Happen
1. When Bad Things are Said: Racist Comments
2. When Bad Things are Said: Sexual Talk
3. When Bad Things are Said: Insults
4. When a Resident Dies

Strategies for managing Residents with Aggressive Behavior

Strategies for managing Residents with Psychiatric Problems

16
...and the research continues

• to document the effects of written and graphic cues in a variety of settings
• to explore new ways to support and maintain personal interests and identity
• to develop caregiver training materials that enhance quality of life of both the person with dementia and their caregivers

Final thoughts....

Individuals with dementia can

• learn new information
• re-learn previously known but forgotten information and behaviors
• using interventions that reduce demands on impaired cognitive abilities and capitalize on spared ones

Clinicians can be reimbursed for

• Direct client intervention
• Caregiver training

Evaluation of Training Materials
