2019 Van Riper Lecture
Interprofessional Case Study Panel Discussion
Transdisciplinary Approaches to Support Individuals with Cognitive Communication Disorders

Panelists
- Diane Peirce, M.D., WMU Homer Stryker M.D. School of Medicine
- Joanne DeWit, M.S.N., R.N., WMU Bronson School of Nursing
- Linda Shuster, Ph.D., WMU Interdisciplinary Health Sciences Ph.D. Program, Department of Speech, Language and Hearing Sciences
- Alyssa Eminhizer, Au.D., WMU Department of Speech, Language and Hearing Sciences
- Yvonne Jackson, Ed.D., WMU Department of Physical Therapy
- Maureen Mickus, Ph.D., WMU Department of Occupational Therapy
- Donna Weinreich, Ph.D., WMU School of Social Work

Evaluation/Assessment
Perform: History and Physical examination
Assess for:
- Cognition – not oriented to town in which he lives and does not recognize caregiver
- Presence of pain – NA
- Neuro-psychiatric symptoms - depression, agitation, sleep disturbance (agitated)
- Decreased nutritional intake – needs assistance to eat
- Urinary incontinence - NA
- Polypharmacy – NA
Address:
- Goals of care - NA
- Advanced directives - NA

• Joanne DeWit MSN RN, Faculty Specialist II, Nurse Educator
• Increase the visibility of nursing: 24 hours a day/ 7 days a week care giver.
• Nurses have standards for professional performance that include attaining certain knowledge and competency for current practice, integrating science and research as a practice guide, using codes of ethics, knowledge in communication skills, collaboration (resource utilization), environmental health and leadership.
• Nursing can be described as both an art and a science; a heart and a mind
• Nurses use a scientific method designed to deliver the very best in patient care through five steps: Assessment, Diagnosis, Outcomes / Planning, Implementation & Evaluation
A. Nursing Diagnosis: Chronic Confusion related to diagnosed dementia
Nursing Outcomes: Disoriented though self-controlled
Herbie’s Outcomes: remain content and free from harm, participate in maximum functional abilities, minimal episodes of agitation, function at the highest level for the moment

B. Nursing Diagnosis: Compromised Family Coping as evident by family members being aggressive, sad, marriage issues, loneliness of children, etc.
Nursing Outcomes: Family Coping
Families Outcomes: Identify responses that are harmful, identify routines that need adapting, participate positively in client care, etc.

C. Nursing Diagnosis: Safety, Caregiver Role Strain, Self care Deficiency, Wandering, Risk for Injury, Risk for Relocation, Violence

Nursing Care Plan for Henry and his Family
12/9/15

• Linda Shuster, CCC-SLP
• Speech-language pathology
• Speech-language pathologist on the team

• Communication is a major problem contributing significantly to the level of stress
• A person-centered evaluation was conducted using VoiceMyChoice™ to determine intervention goals
• Cognitive Linguistic Quick Test+ (CLQT+) administered for documentation purposes


• Alyssa Eminhizer, Au.D., CCC-A

  Audiology

  Role in Case:
  • Early recognition of disease
  • Evaluate hearing and communication status and determine need for amplification/assistive devices and/or aural rehabilitation

• Thoughts about case:
  • Hearing loss not addressed, though is likely
  • Patient must be able to hear to be accurately evaluated by the rest of the team and to be a active participant in his care plan
  • Correlation between hearing loss and dementia

  Evaluation:
  • Diagnostic hearing evaluation revealed a mild sloping to severe sensorineural hearing loss bilaterally.
  • Word recognition at average conversational speech: 64% for right ear and 80% for left ear.
  • WRS at elevated level of speech: 80% for the right ear and 80% for the left ear.
  • Quick Sin revealed an SNR loss of >15 dB, showing that Herbie has significant difficulty in the presence of background noise.
• Yvonne Jackson

• Physical Therapist

• Involvement in the case – physical and functional mobility

• Thoughts on the case –
Being a caregiver for a family member requires the cooperation of all family members, not just one.

• Evaluation results? Timed up and Go (TUG) Test

Timed Up and Go (TUG) Test

Description: Measure of function with correlates to balance and fall risk

Equipment: Stopwatch, Standard Chair, Measured distance of 3 meters (10 feet)

Patient Instructions: “My commands for this test are going to be ‘ready, set, go’. When I say go, I want you to stand up from the chair. You may use the arms of the chair to stand up or sit down. Once you are up, you may take any path you like, but I want you to move as QUICKLY as you feel safe and comfortable until you pass this piece of tape (or end of marked course) with both feet. Turn around and walk back to the chair. I will stop the clock when your back touches the back of the chair. You will complete one practice run and two that are counted.”

Therapist Instructions: Start timing on the word “GO” and stop timing when the subject is seated again correctly in the chair with their back resting on the back of the chair. The subject wears their regular footwear, may use any gait aid that they normally use during ambulation, but may not be assisted by another person. There is no time limit. They may stop and rest (but not sit down) if they need to.

Interpretation:

≤ 10 seconds = normal
≤ 20 seconds = good mobility, can go out alone, mobile without gait aid
≤ 30 seconds = problems, cannot go outside alone, requires gait aid

* A score of ≥ 14 seconds has been shown to indicate high risk of falls

Age Matched Norms:

<table>
<thead>
<tr>
<th>Age in years</th>
<th>Mean in seconds</th>
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<tbody>
<tr>
<td>60-69</td>
<td>7.9 +/- 0.9</td>
</tr>
<tr>
<td>70-79</td>
<td>7.7 +/- 2.3</td>
</tr>
<tr>
<td>80-89</td>
<td>11.0 +/- 2.2</td>
</tr>
<tr>
<td>90-101</td>
<td>14.7 +/- 7.9</td>
</tr>
</tbody>
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4. Saskatoon Falls Prevention Consortium, Falls Screening and Referral Algorithm, TUG, Saskatoon Falls Prevention Consortium, June 2005
Key roles for OTs in Dementia Care -- Promoting Optimal Functioning

1. Maintaining independence of persons with dementia.
2. Providing education and promoting wellness of care providers.
3. Modifying the environment for safety and accessibility.

In the middle stage of Alzheimer’s disease, Herbie exhibits a number of neuropsychiatric behaviors, such as wandering and confusion. His dependency on caregivers is also increasing. However, what strengths and interests still remain?

**Focus:** Herbie’s pre-morbid interests
Meaningful occupations that could be adapted

Herbie enjoyed being near and in water, having spent much of adult life near the ocean. What activities could provide a positive experience for him and match his interests?

**Examples:**
- Sorting seashells
- Listening to ocean sounds
- Reminiscing with photos
- Swimming/wading in water

Determining Functional Level

- Functional Assessment Staging Test [link]
- Allen Cognitive Level Screen [link]

Planning for Meaningful Activities in Dementia Care

Donna M. Weinreich, PhD

School of Social Work

My involvement in the case: as a gerontological social worker

About the case:
- Caregiver stress
  - Beyond the hired caregivers, there is a lack of professional assistance for this family
  - Herbie’s trips to his beach house are therapeutic for everyone
  - Herbie’s trips to his beach house are therapeutic for everyone
  - The daughter’s job is rewarding yet taxing with the additional energy drain of taking care of her family and her father
  - The children and husband are being intellectually and emotionally influenced by Herbie’s decline causing stress and tension

What social workers do:
- Assessment of the environment and the cognitive status of the client
  - This includes those “in the trenches” taking care of someone in decline

Resources
- MMSE
  - https://www.brightfocus.org/alzheimers/article/diagnostic-tests-alzheimers-disease
Audience Participation

Use the blank cue cards in your folder to answer the questions below:

1. Based on the video and evaluation, what types of support does Herbie need?
2. What treatment goals would best benefit Herbie?
Interventions:
- Cognition – Anti-cholinesterase inhibitors and NMDA receptor antagonists modest benefit
- If Herbie is experiencing pain – consider scheduling non opioid pain medications
- Neuro-psychiatric symptoms – non pharmacologic preferred over pharmacologic therapy
- Decreased nutritional intake – one on one feeding already occurring
- Polypharmacy – “de-prescribe” medications that have a low benefit to burden ratio
- Goals of Care – did daughter have any prior discussions with Herbie regarding quality of life that is important to him ex being able to go to his beach house?
- Advance Directives – Is daughter surrogate decision maker? End of life preferences?

A. Interventions: Keep routines, use Henry's name when speaking to him, assessment tools to determine client's cognitive level, calm approach, scheduled activities, simple directions one at a time, promote sleep with restful environment, structured social and physical activities, simple activities that he enjoys, sorting, etc.

B. Interventions: Prompt reporting of abuse, refer family to appropriate community services (counseling, family support groups, AAA) education for family care givers, assess for strain (weight loss, illness, depression, eating too much or too little, lack of sleep), care skills, etc.

Evaluation: How are things going after a week? What needs to change? What needs to stay the same?
<table>
<thead>
<tr>
<th>Date</th>
<th>Name</th>
<th>Role</th>
<th>Details</th>
</tr>
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</table>
| 12/9/15    | Linda Shuster, CCC-SLP      | Speech-language pathology         | • Communication is a major problem contributing significantly to the level of stress
- Intervention goals:
  o Herbie will fold his clothes using a folding board.
  o Herbie will safely use an indoor/outdoor putting green to practice putting.
  o Herbie’s family will use a memory book to enhance communication and reduce negative interactions associated with transitions, e.g., between locations.
  o Family and caregivers will interact with Herbie in a manner that is appropriate to his age.
  o Herbie will learn to change the TV channels using a simple remote. |
| 12/9/15    | Alyssa Eminhizer, Au.D., CCC-A | Audiology                         | • Early recognition of disease
• Evaluate hearing and communication status and determine need for amplification/assistive devices and/or aural rehabilitation |
• Intervention
  • Preliminary research suggesting that treatment for hearing loss (amplification) may be beneficial with regards to cognition
  • Binaural hearing aids, with fitting verified via real ear measures
  • Remote microphone technology
  • Family and patient counseling re: communication strategies
  • Environmental adjustments in his listening environment to maximize hearing potential
  • Train care team and family in hearing aid and microphone use and troubleshooting
  • Option of aural rehabilitation sessions with AuD and/or SLP, or materials given to family to complete at home

• Yvonne Jackson
  • Physical Therapist
  • Involvement in the case – physical and functional mobility

• Thoughts on the case – Being a caregiver for a family member requires the cooperation of all family member, not just one.

• Needs for intervention/action? Keeping Herbie as active as possible would be the main goal. Having a care-giver was a good way to give the family a break.
Key roles for OTs in Dementia Care – Promoting Optimal Functioning

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3. Modifying the environment for safety and accessibility.

Determining Functional Level


Planning for Meaningful Activities in Dementia Care

• What social workers do:
  • Assessment of the environment and the cognitive status of the client
    • This includes those “in the trenches” taking care of someone in decline

• Intervention, action:
  • Routine contact with a primary care physician
  • Routine respite for both Herbie and his family members
  • Counseling for Herbie’s girlfriend so that she might be able to “let go”

Resource Materials
Alzheimer’s Association: https://www.alz.org/
Area Agency on Aging: https://www.aaa.org/
Senior Services of Southwest Michigan: https://www.seniorservices1.org/
National Alzheimer’s and Dementia Resource Center: https://nadc.acl.gov/
National Institute on Aging: https://www.nia.nih.gov/
American Federation on Aging Research: https://www.afar.org/
Alzheimer’s Foundation of America: https://www.alzfdn.org/
The Gerontological Society of America: https://www.geron.org/
AARP: https://www.aarp.org
Alzheimer’s disease and hearing loss: https://www.audiologyonline.com/articles/remember-me-guide
National Institute of Neurological Disorders and Stroke: https://www.ninds.nih.gov/
Health Resources and Services Administration (HRSA) Alzheimer’s Disease Training Curriculum (offers CE credits): https://bhw.hrsa.gov/grants/geriatrics/alzheimers-curriculum
Dementia Australia: https://www.dementia.org.au
Alzheimer Society of Canada: https://www.alzheimer.ca/en/home
Alzheimer’s Association UK: https://www.alzheimers.org.uk/
WHO and Dementia: https://www.who.int/zh/topics/dementia/