When the Challenges of Aging and Visual Impairment Collide: Working Together to Build a Toolbox of Rehab Ideas of Best Care for Older Adults

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Preferred Citation
Robnett, Regula H. and Clarrage, Kathy, "When the Challenges of Aging and Visual Impairment Collide: Working Together to Build a Toolbox of Rehab Ideas of Best Care for Older Adults" (2016). Occupational Therapy Faculty Presentations. 1.
http://dune.une.edu/ot_facpres/1
WHEN THE CHALLENGES OF AGING AND VISUAL IMPAIRMENT COLLIDE:

Working Together to Build a Toolbox of Rehab Ideas of Best Care for Older Adults

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The Changes of Aging

- **Vision**—let’s review
  - Already starts to decline in the 3rd decade
  - Visual problems increase with age (Schieber, 2006)
  - The common conditions......
Other senses—what happens?

Decreased vision as a backdrop for other impairments

We often use vision to compensate....
Decreased Hearing – presbycusis

- Risk factors: male, urban living, chronic noise
- Men especially have difficulty hearing high pitched sounds; vowels more easily understood than consonants (Lewis, 2007)
- How does ability to hear help those who have difficulty seeing? (and vice versa)

https://www.google.com/search?q=i+can+hear+you+better+
Other Senses

- **Taste**
  - Fewer taste buds, salty sense decreases, & sweet is maintained (Stalworth & Sloane, 2007)
  - Relate taste to sight....

- **Smell — hyposmia**
  - Intricately related to taste
  - Insidious decline — unnoticed; majority have impaired olfaction (Murphy et al., 2002)
  - How are smell/taste related to visual skills?
Touch and Proprioception

- Do not decline significantly with age alone but small declines do occur
- Decrease associated with Acquired Brain Injury or Diabetes
- Vision key for compensation
- Last sense to go before death?
Physical Changes Related to Age

- Decreased ROM and strength
- Decreased balance
- Decreased endurance
- Other changes (e.g. reaction time, coordination, impact of arthritis…)

KEEP THESE IN MIND AS WE MOVE FORWARD….
Cognitive Changes Associated with Aging

- General changes (not as great as you might assume)
WHAT DO YOU EXPECT?

- Dementia is in your future?
- Mild Cognitive Impairment is in your future?
- A decline in memory is expected?

Cognitive decline should **not** be a normal aspect of aging.

- Max Lugavere (@maxlugavere)
Cognitive Changes Associated with Aging

- General changes (not as great as you might assume) (Robnett & Bolduc, 2015)
  - Decreased processing speed
  - Decreased memory (especially short term)
  - Decreased attention (increased distractibility)
Decreased Processing Speed

- Not only visual skills (scanning and responding)
- Gradual decline; typical aging still functional
- Life practice does help maintain skills (Salthouse, 2000)
Neurocognitive Disorders

- Mild neurocognitive disorders
- Amnestic disorder
- Delirium
- Dementia (Major Neurocognitive Disorders) (American Psychiatric Association, 2013)
- Let’s explore how these impact lives
  .....
MCI (Mild Neurocognitive Disorder)

- Gradual onset—a change in cognitive functioning
- Impacts higher level cognitive skills
- “Does not interfere with capacity for independence in everyday activities” (APA, p. 605)
- Not explained by another mental disorder
- More likely to convert to AD
Mild Cognitive Impairment (MCI)

- Malek-Ahmadi et al. (2012)
- **Determined that 4 questions on the Alzheimer’s Questionnaire were most predictive of MCI**
  - Does the patient have trouble remembering the date, year, and time? (most predictive — OR, 17.97; \( p = .003 \))
  - Does the patient repeat questions/statements in the same day? (OR, 13.12; \( p = .001 \))
  - Does the patient have difficulty managing finances? (OR, 11.60; \( p = .005 \))
  - Does the patient have a decreased sense of direction? (OR, 5.84; \( p = .04 \))
Major Neurocognitive Disorder—
Dementia (AD)

- Impairments in 3 areas
  - Decline in memory and learning and at least 1 other cognitive domain
- Prevalence increases with age (tops out at 40-50% over 85)
- Approximately 2/3rd of dementias are AD
- Mean survival is 10 years (3 to 20 range); younger onset means quicker progression
- AD tends to progress through stages—reverse developmental
Reisberg’s Stages of AD disease

- Functional Assessment Staging (FAST) Scale
- Stage 1 = typical aging------Stage 7 = Very severe decline (Late Stage)
  7. Very severe decline (Late Stage) http://www.ec-online.net/Knowledge/articles/alzstages.html
- Higher level cognitive skills lost first
- Consider developmental level of cognitive skills

Don't blame the person, blame the disease
Other Cognitive Problems associated with older age

- **DLB—Neurocognitive Disorder with Lewy Bodies**
  - Up to 30% of the dementias (APA, p. 619)
  - Problems with executive functioning and complex attention (not necessarily memory)
  - Involves visual hallucinations and sleep disorders

- **Frontotemporal Neurocognitive Disorder**
  - Behavior variant OR
  - Language variant (PPA)
  - Sparing of learning/memory/visual perception

- **Parkinson’s Disease**
  - Motor component precedes cognitive component
Delirium

FEATURES

- Sudden onset
- Change in baseline
- Cognitive disturbance—especially attention and awareness
- Often due to medical condition, medical procedure, medications

TREATMENT

- Prevention is key
- Orientation
- Cognitive engagement
- Use of glasses, hearing aids
- Active movement
- Promoting productive sleep routine
- HELP program (Inouye et al., 1999)
Interventions for Older Adults

- Keeping in mind the typical changes of aging
  - Sensory losses
  - Memory decline
  - Speed of processing
- Enhancing learning skills
  - Adult learning principles
  - Motivation to learn
  - Engagement with the material
  - Multimodal learning activities
Working with those who have cognitive decline

- Their Needs
- Patience
- Success
- Reminders
- Occupations
- Connections
- Routines
- Choice
- Respect
Two Models to Consider

- **The Best Friends Model (Bell & Troxel, 2002)**
  - Treat the person as if he/she is your best friend
  - Looking out for the best interests of the person
  - AD Bill of Rights
  - Imagine what it is like....

- **Improvisation (Healing Moments)**
  - Not meeting the person where you are, but where he/she is
  - Yes, and...
  - Affirmation—Acceptance—Validation (Lagraffe, 2016)
Plain Language

- Helps everyone, because the goal is to understand (health) information the first time they hear it or see it.

- Strategies to improve understanding
  - Use key elements (below)
  - Frame what you are going to say
  - Use teach back methods
  - Ask for questions
  - Have client bring a friend/family member
Plain Language

Key elements

- Important points first
- Use headings
- Use chunking
- Use plain language—everyday words
- Active voice
- Short sentences
- Photos and pictures
- Keep it precise/concise
- Size matters (Stableford, 2015)
Working together interprofessionally

- Who is on the team?

- What can we do for each other?

- How can we BEST serve the client with visual impairments?
Putting it all together (low vision, aging changes...) how to improve care
Presentation Slide Notes

Slide 2:
Schieber p 150

Slide 4:
Can listen instead of reading; can lip read if one cannot hear
Lewis see #89 ch 3 R and C S and S #90 Murphy p 169

Slide 11:
#40 p 142

Slide 17:
Behavior variant p 614 apathy inertia, disinhibition, loss of empathy, perseveration hyperorality (compulsive eating and drinking)

Slide 18:

Slide 21:
References


