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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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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….

Other senses—what happens?

- 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…)

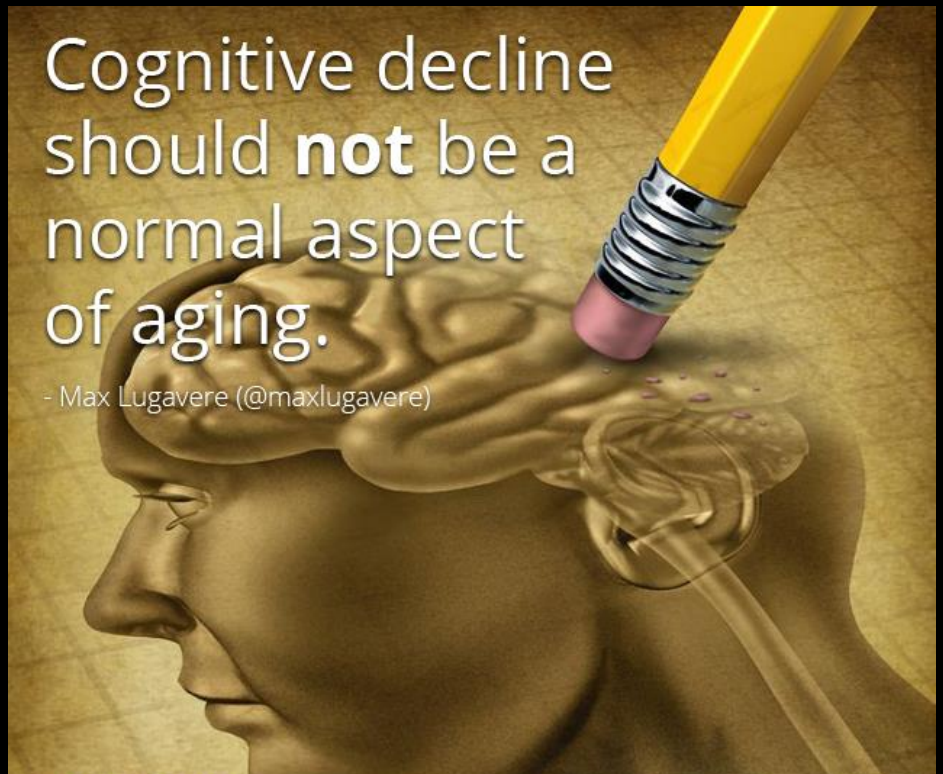
KEEP THESE IN MIND AS WE MOVE FORWARD….

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 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)

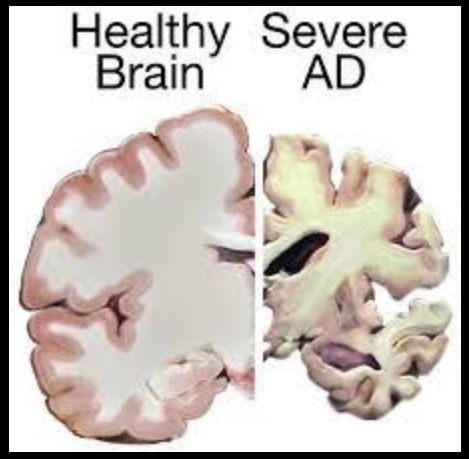
- Malek-Ahmadi et al. (2012)
- **Determined that 4 questions on the Alzheimer's Questionnaire were most predictive of MCI**
  - Does the patient have trouble remembering the date, year, and time? (most predictive—OR, 17.97; $p = .003$)
  - Does the patient repeat questions/statements in the same day? (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:

Reference for help—A multicomponent intervention to prevent delirium in hospitalized older patients. 1999 Inouye SK, Bogardus ST, Charpentier PA, Leo-Summers L, Acampora D, Holford TR, Cooney LM. The New England journal of medicine, 340:9 (669-76)

Slide 21:

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