

Interprofessional Geriatrics Training Program

Working with the Older Adult with Visual, Hearing, and/or Cognitive Impairment









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Learning Objectives

After completion of this module, learners will be able to:

1. Describe the most common causes of vision impairments that affect older adults
2. List the most common causes of hearing impairments that affect older adults
3. Explain the most common causes of cognitive impairment in older adults
4. Identify appropriate assessment and intervention strategies to address the needs of older adults with vision, hearing, and cognitive impairment




Visual Impairment




Visual Impairment in the Older Adult

- Most people with low vision are 65 years old or older (National Institutes of Health, 2013)
- The four most common causes of visual impairment in older adults addressed in this module include the following:
 - Glaucoma
 - Cataracts
 - Diabetic retinopathy
 - Macular degeneration (Quillen, 1999)




Visual Impairment in the Older Adult

- With the youngest of the baby boomers hitting 65 by 2029, the number of people with visual impairment or blindness in the U.S. is expected to double to more than 8 million by 2050 (National Eye Institute, 2016)
- 2.9 million Americans are living with low vision (National Institutes of Health, 2013)
- This number is projected to increase 72% by 2030, when the last of the baby boomers turn 65 (National Institutes of Health, 2013)
- Visual impairment is associated with a decreased ability to perform activities of daily living and increased risk of depression (Court et al., 2014; National Eye Institute, 2016)



Visual Impairment in the Older Adult


- Low vision means that, even with regular glasses, contact lenses, medicine, or surgery, people find everyday tasks difficult to do, such as:
 - Reading the mail
 - Shopping
 - Cooking
 - Seeing the television
 - Writing



Encourage your Patients to Regularly Test Their Eyes

Testing for Glaucoma

- Communicate to your patients to test their eyes regularly for early detection (Cioffi et al., n.d.)
- Eyes should be tested every two to four years if the patient is less than 40 (Cioffi et al., n.d.)
- Every one to three years from ages 40-54 (Cioffi et al., n.d.)
- Every one to two years from ages 55-64 (Cioffi et al., n.d.; Quillen, 1999)
- Every six to twelve months after the age 65 (Cioffi et al., n.d.)
- Every one to two years after the age of 35 for who anyone with high risk factors (Foster et al., 2016; Cioffi et al., n.d.)



**Visual Impairment:
Presenting Symptoms**

Glaucoma	<ul style="list-style-type: none"> • Visual field loss • Blurred vision
Cataracts	<ul style="list-style-type: none"> • Glare • Blurry vision • Monocular diplopia
Diabetic Retinopathy	<ul style="list-style-type: none"> • Blurry vision • Floaters • Poor night vision
Age-related Macular Degeneration	<ul style="list-style-type: none"> • Blurry vision • Image distortion • Difficulty reading • Loss of central vision

ENGAGE - IL *Referral Cue: Refer to Ophthalmology* (National Eye Institute, 2016)

Visual Impairment: Glaucoma

- Caused when fluid, or aqueous humor, does not drain properly from the eye, resulting in increased eye pressure (American Glaucoma Society, 2013; Glaucoma Foundation, 2016)
- This increased pressure causes damage to the optic nerve (American Glaucoma Society, 2013; Glaucoma Foundation, 2016)
- The damage to the optic nerve causes vision loss and may result in blindness (American Glaucoma Society, 2013; Glaucoma Foundation, 2016)
- Glaucoma is also understood as a group of disorders consisting of optic nerve damage and visual field loss (American Glaucoma Society, 2013; Glaucoma Foundation, 2016)



Visual Impairment: Glaucoma

- The second most common cause of blindness in the U.S. (American Glaucoma Society, 2013)
- The *most common* cause of blindness among African Americans (Glaucoma Research Foundation, 2011)
- Primary open-angle glaucoma is the cause of 10% of blindness in the U.S. (Glaucoma Foundation, 2016)
- Risk factors: age, family history, myopia, hypertension, diabetes (American Glaucoma Society, 2013)



Visual Impairment: Glaucoma

Symptoms

- *Primary open-angle glaucoma* is most common type of glaucoma
 - It develops slowly and often does not have symptoms (Glaucoma Foundation, 2016; Glaucoma Research Foundation, 2014)
 - Usually peripheral vision is affected, but it may progress and affect the central vision (Glaucoma Foundation, 2016; Glaucoma Research Foundation, 2014)
 - If left untreated, significant vision loss or blindness can occur (Glaucoma Foundation, 2016; Glaucoma Research Foundation, 2014)



Visual Impairment: Glaucoma

Symptoms

- *Closed-angle glaucoma* is less common type of glaucoma
- Occurs abruptly, has severe eye pain, redness of eye, seeing halos around lights, nausea, and blurred vision (American Glaucoma Society, 2013; Glaucoma Foundation, 2013)
- Medical emergency and needs to be treated immediately to prevent severe vision loss that can occur quickly (American Glaucoma Society, 2013; Glaucoma Foundation, 2013)



Visual Impairment: Cataracts

- Painless clouding of the eye that affects vision
- Making it blurry, dull, or adding a brownish tint
- Colors seem to fade
- Unable to see well at night
- May see double vision or multiple images
- Lens opacities that interfere with visual function
- Most common cause of blindness worldwide
- Prevalence increases from 5% in adults < 65 to approximately 50% > 75 years of age



(Quillen, 1999)

Visual Impairment: Cataracts

- Cataract surgery is the most common surgery covered by Medicare



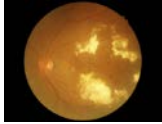
(Quillen, 1999)

Visual Impairment: Diabetic Retinopathy

- Leading cause of new blindness among middle-aged Americans
- Prevalence rises with increasing duration of diabetes

Non-Proliferative Diabetic Retinopathy

- Abnormalities of the retinal circulation
- Microaneurysms
- Intraretinal hemorrhages
- Cotton-wool spots



Proliferative Diabetic Retinopathy

- Newly formed blood vessels from the optic disc, retina, or iris as a result of widespread ischemia

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(Quillen, 1999)

Visual Impairment: Age-related Macular Degeneration (AMD)

- Usually affects older adults
- Loss of vision of the center of the visual field
- This loss of vision is caused by damage to the macula
- Results in the loss of central sharp vision, which is important for reading, driving, recognizing faces, and doing detailed work

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(Quillen, 1999)

Visual Impairment: Age-related Macular Degeneration (AMD)

- *Dry* AMD accounts for 90% of all cases and occurs slowly
 - Slow breakdown of light-sensing cells
 - Slow loss of central vision
- *Wet* AMD accounts for only 10% cases
 - 90% of severe vision loss transpires from this type
 - Rapid changes lead to rapid loss of central vision

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(Quillen, 1999)

Visual Impairment: Age-related Macular Degeneration (AMD)

- Smokers have nearly 3 times greater risk for macular degeneration
- Individuals who spend greater than 5 hours per day in the sun at twice the risk
- Leading cause of decreased vision in those > 65 years
- Responsible for central vision loss



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(Quillen, 1999)

Visual Impairment: Age-related Macular Degeneration (AMD)

Risk Factors Include:

- Age
- Family history
- Cardiovascular risk factors such as hypertension and smoking

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(Quillen, 1999)


Assessment and Management of Visual Impairment

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Assessment of Visual Impairment

Questions to Ask your Patient During the Visit


- Do you ever wear or have you ever been prescribed corrective lenses, contacts? If so, why?
- Do you use assistive devices to help you because of vision problems?
- Do you have any past history of eye conditions?
- Does anyone in your family have a history of eye conditions such as glaucoma, cataracts, macular degeneration, etc.?
- Are you experiencing any vision changes or eye pain?

 (National Eye Institute, 2016)

Assessment of Visual Impairment in Older Adults

The Snellen Eye Chart Test for Visual Acuity


- Position patient 20 feet from the chart
- Ask patient to read the smallest visible line
- Each eye should be tested separately
- 20/20 considered normal vision

 (National Eye Institute, 2016)

Assessment of Diabetic Retinopathy

Eye Exam in Patients with Diabetes


- Patients with diabetes should see an eye specialist (ophthalmologist) annually for a dilated eye exam because of increased risk for diabetic retinopathy and glaucoma

 (National Eye Institute, 2016)

Assessment: The Dilated Eye Exam

What is a Dilated Eye Exam?


- During the dilated eye exam, explain what is going on to the patient
- The eye doctor checks the patient's vision with the Snellen Chart
- Give the patient eye drops to better see the back of the eye
- The doctor looks through a special magnifying glass using a bright light to see the back of the patient's eye

 (National Eye Institute, 2016)

Assessment: The Dilated Eye Exam

What is a Dilated Eye Exam? (Continued)

- After the exam, the patient may have blurry vision for about 6 hours if their eyes received drops to dilate their eyes
- Sunlight may damage the patient's eyes if they received drops, so instruct the patient to wear dark glasses or shade their eyes

 (National Eye Institute, 2016)

Management of Diabetic Retinopathy

Diabetic Retinopathy Management Goals


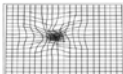
- Aggressively control blood glucose
- Surgical options available in severe cases of vision loss
 - Panretinal laser photocoagulation





 (National Eye Institute, 2016)

Assessment of Macular Degeneration

- Teach your patient how to use an Amsler Grid for daily examination
- The patient should visit an eye doctor if they:
 - Develop blind spots or a hazy field of vision
 - Find it difficult to adapt to low levels of light
 - Have difficulty recognizing colors or faces
 - Notice that straight lines appear wavy or crooked
- Access the Amsler Grid:
 - <http://www.amd.org/the-amsler-grid/>



(Macular Degeneration Partnership, 2016)


Treatment of Visual Impairment: Macular Degeneration

Dry AMD

- Antioxidant vitamins A, C, E, and zinc (AREDS: Age-related Eye Disease Study) (Age-related Eye Disease Study Research Group, 2001)

Wet AMD


- Inject medication into the eye with anti-vascular endothelial growth factor (anti-VEGF) as outpatient procedure
- Blocking VEGF reduces the growth of abnormal blood vessels, slows their leakage, helping to slow vision loss
- Clean eye to prevent infection
- Anesthetic drop to numb eye (Macular Degeneration Partnership, 2016)
- There is no cure, only treatments as discussed in the upcoming slides



Treatment of Visual Impairment: Macular Degeneration

Management Goals of Macular Degeneration


- The most important thing the patient can do is follow-up with the eye doctor regularly
- Report changes in vision right away
- Avoid driving, especially at night
- Wear sunglasses that block UVA/UVB rays
- Eat a low-fat diet that includes fish and green leafy vegetables



Treatment of Glaucoma

Open-Angle Glaucoma


- Medications lower intraocular pressure by either reducing the secretion of aqueous humor by the ciliary body or enhancing aqueous outflow
 - Beta-adrenergic antagonists
 - Alpha-2 adrenergic agonists
 - Parasympathomimetic agents
 - Carbonic anhydrase inhibitors
 - Prostaglandin receptor agonists
 - Hyperosmotic agents

 (Quillen, 1999)

Treatment of Glaucoma


Surgical Options

- Laser surgery
- Traditional surgery

 (Quillen, 1999)


Treatment of Cataracts

- No medications to treat or improve cataracts
- 95% of the 3 million cataract surgeries in U.S. each year are considered successes (Prevent Blindness, 2016)
- Surgery considered when cataract reduces visual function to a point where everyday activities are affected
- Cataract surgery is the most common surgery covered by Medicare (not in narration)
- Outpatient procedure (not in narration)
- Complications occur in less than 1% of surgeries (not in narration)

 (Quillen, 1999)

Treatment of Cataracts

- Early cataract may be improved with:
 - New glasses
 - Brighter lighting
 - Anti-glare sunglasses
- Surgery is needed when vision loss interferes with everyday activities, like driving, reading, or watching television

 (Vision Australia, n.d.)


Assisting Low-Vision Patients with Ambulation Guide Techniques

Getting Started

- Ask the person if they need assistance
- If they do need assistance, touch the back of their hand with the back of yours
- They can then hold your arm just above the elbow

Walking

- When you start walking, make sure the person is half a step behind you and slightly to the side
- Walk at a pace that is comfortable for both of you
- Look ahead for obstacles at foot level, head height, and to the side

 (Vision Australia, n.d.)


Management Principles

Changing Sides

- When changing sides with the person you are guiding, it is important that they do not lose contact with you
- This is easiest to achieve if you remain stationary
- Allow the person to hold your guiding arm with both of their hands
- They can then move one hand to reach your other arm without losing contact

Seating


- Explain which way the chair is facing and where it is placed in relation to the rest of the room
- Then walk up and place your guiding arm on the chair and explain which part of the chair you are touching
- The person you are guiding can then move their hand down your arm to locate the chair to seat themselves

 (Vision Australia, n.d.)

Management Principles

Describe Surroundings


- When describing the person's surroundings, try to be specific
- Rather than saying, "there is a spare seat to your right," it might be more helpful to say "the seat next to you, on your right, is occupied, but the next seat along is vacant"

 (Vision Australia, n.d.)

For Patients: Driving With Visual Impairment


Driving Tips

- Reduce your speed, and limit yourself to daytime driving
- Avoid wearing eyeglasses and/or sunglasses with wide frames or temples
- Have an annual vision examination
- Use extra caution at intersections

 (American Optometric Association, 2016)


For Patients: Driving With Visual Impairment

For a comprehensive training module, see the ENGAGE-IL module "Driving Safety" at engageil.com.




Impaired Vision: Adaptive Technologies

<ul style="list-style-type: none"> • Accessible mobile phones • Braille embossers • Braille translation software • Computer-based magnification systems • Electronic or refreshable braille displays • Electronic identification 	<p>Flexible Ways to Read</p> <ul style="list-style-type: none"> • Portable reading devices • Digital playback devices for DAISY format books • Screen readers • Print scanners • Talking GPS systems • Talking web browsers • Video magnifiers (CCTV)
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Assessment Question 1


During a visit with his primary care physician last week, Mr. Cubias tells his doctor that he has been having blurry vision and has noticed a glare that has been progressively worsening for the past 2 years. The doctor checked Mr. Cubias' records and noted that he has not seen an ophthalmologist in over 2 years. His doctor therefore made Mr. Cubias an appointment for next week.



Assessment Question 1

What is the most likely cause of Mr. Cubias' vision loss?


- a) Glaucoma
- b) Macular degeneration
- c) Cataracts
- d) Diabetic retinopathy




Assessment Question 1: Answer

What is the most likely cause of Mr. Cubias' vision loss?

- a) Glaucoma
- b) Macular degeneration
- c) Cataracts (Correct Answer)**
- d) Diabetic retinopathy




Hearing Impairment




Hearing Impairment in Older Adults

- Nearly 25% of those aged 65 to 74 and 50% of those who are 75 and older have disabling hearing loss (Johnson et al., 2013)
- Among adults aged 70 and older with hearing loss who could benefit from hearing aids, fewer than one in three (30%) has ever used them (Zelazo et al., 2015)
- Hearing loss is more common in men (Blackwell et al., 2014)
- The most common type of hearing loss is age-related hearing loss (Blackwell et al., 2014)
- After hypertension and arthritis, hearing loss is the most common chronic health problem in older persons (Blackwell et al., 2014)



Hearing Impairment in Older Adults


- Normal conversations use frequencies of 500-3000 hertz (Hz) at 45-60 decibels (dB)
- After 60 years of age, hearing decreases by 1 dB annually
- Hearing loss of 25 dB or more affects about
 - 35% of adults 60-70 years of age
 - 60% of adults 71-80 years of age
 - 80% of adults greater than 85 years of age


(Walling & Dickson, 2012)

**Hearing Impairment in Older Adults:
How Does It Impact the Patient?**

Older Adults with Hearing Impairment May Have:


- Decreased functional ability
- Decreased quality of life
- Cognitive decline
- Depression
- Decreased social interactions


(Walling & Dickson, 2012)

Hearing Impairment in Older Adults: Conductive Hearing Loss

Causes May Include:

- Obstruction of auditory canal (i.e., cerumen, osteomas, foreign body (not in narration))
- Impairment of tympanic membrane function:
 - Perforated tympanic membrane
- Middle ear conditions:
 - Otitis media (with effusion, cholesteatoma, otosclerosis)


(Walling & Dickson, 2012)

Hearing Impairment in Older Adults: Sensorineural Hearing Loss

Causes May Include:

- Age-related hearing loss
- Noise trauma (e.g., occupation, trauma-related)
- Medications
- Meniere's disease
- Infection (e.g., meningitis, labyrinthitis)



(Walling & Dickson, 2012)

Hearing Impairment in Older Adults: Risk Factors

Risk Factors for Age-related Hearing Loss Include:

- Alcohol use
- Family history
- Diabetes
- Renal failure
- Atherosclerosis
- Immunosuppression
- Head injury
- Noise trauma
- Tobacco abuse



(Walling & Dickson, 2012)

Hearing Impairment in Older Adults

Common Medications Causing Hearing Impairment

- Salicylates
- NSAIDs
- Acetaminophen
- Diuretics
- Neomycin/polymyxin
- Macrolides
- Sildenafil




(Walling & Dickson, 2012)

Assessment of Hearing Impairment

- History and physical examination will reveal the majority of etiology of hearing loss
- Laterality: Local pathology, obstruction (with unilateral hearing loss)
- Onset: Gradual loss suggests age-related hearing loss, otosclerosis, acoustic
- Inciting Factors: Medications, trauma, infections


(Walling & Dickson, 2012)



Assessment: Screening and Examination of Hearing Impairment

- Ask older patients or caretakers about hearing difficulties
- *Hearing Handicap Inventory Screening Questionnaire for Adults*
 - <http://www.sfotomed.com/webdocuments/questionnaire-hearing-handicap.pdf> (Adapted from: Ventry & Weinstein, 1982)
- Physical Exam
 - Inspection of auditory canal for obstruction
- Whispered Voice Test
- Weber and Rinne Tests
 - Distinguish between conductive and sensorineural hearing loss


(Walling & Dickson, 2012)



The Whispered Voice Test


- A simple and accurate test for detecting hearing impairment
- It is the only test of hearing that requires no equipment
- The examiner stands an arm's length behind the patient, in order to prevent lip reading, and whispers a combination of three numbers and letters
- The examiner then asks the patient to repeat the sequence
- If the patient responds incorrectly, the test is repeated using a different number and letter combination
- The patient is considered to have passed the screening test if they repeat at least three out of a possible six numbers and letters correctly
 - In other words, 50% correct

(Walling & Dickson, 2012)




The Whispered Voice Test

- Each ear is tested individually, starting with the ear with better hearing
- During testing, the non-test ear is masked by gently occluding the auditory canal with a finger, rubbing the tragus in a circular motion
- The other ear is assessed similarly, with a different combination of numbers and letters



**Assessment: Screening
Patient Education**


Patients can ask themselves the following questions to help them assess whether they have a hearing problem:



(National Institute on Deafness and Other Communication Disorders, 2013)

**Assessment: Screening
Patient Education**


- “Yes” to 3 or more of the following questions indicates they may have a hearing problem:
 - Do I have a problem hearing on the telephone or cell phone?
 - Do I have trouble hearing when there is noise in the background?
 - Is it hard for me to follow a conversation when two or more people talk at the same time?
 - Do I have to strain to understand a conversation?
 - Do many people I talk to seem to mumble (or not speak clearly)?
 - Do I misunderstand what others are saying and respond inappropriately?
 - Do I often ask people to repeat themselves?
 - Do people complain that I turn the TV volume up too high?



(National Institute on Deafness and Other Communication Disorders, 2013)


Treatments for Hearing Impairment

- Hearing aids – three different types:
 - Behind the ear
 - In the ear
 - Canal aids
- Assistive listening devices
 - Include phone-amplifying devices, smart phones/tablet apps
- Surgical implants
 - Small devices that are surgically implanted into the inner ear
- Rehabilitation
 - Helps people with hearing impairment follow conversational speech, learn to pay close attention to body gestures, and lip read

 (National Institute on Deafness and Other Communication Disorders, 2013)

Treatment/Management of Hearing Impairment
What Can I Do If I Have A Hearing Problem?

- Let people know you have a hearing problem
- Ask people to face you and to speak more slowly and clearly
- Ask people to speak louder without shouting
- Pay attention to what is being said and to facial expressions or gestures
- Let the person talking know if you do not understand what he or she said
- Ask the person speaking to reword a sentence and try again

 (National Institute on Deafness and Other Communication Disorders, 2013)


Treatment/Management of Hearing Impairment:
Patient Education

Health Providers Should Coach Patients To:

- Reduce background noise; find a place that is quiet to speak
- Use facial expressions or gestures to give clues
- Face the person and speak clearly and at a slower pace
- Speak a little more loudly than normal, but don't shout
- Not hide your mouth, eat, or chew gum while speaking

Tips for Health Providers

- Repeat yourself if necessary, using different words
- Have only one person speak at a time

 (Bartlett, 2002)

Assessment Question 2

Mrs. Ramirez visits her primary care physician with her daughter. The daughter tells the physician that she often comes into the home and the TV is turned on to a very high volume. She believes that her mother has been losing her hearing over the past year. Mrs. Ramirez's physician does a physical exam and finds cerumen impaction, which she removes.



Assessment Question 2

If Mrs. Ramirez's hearing loss went untreated, which of the following is she at risk for? Select all that apply:

- a) Depression
- b) Decreased quality of life
- c) Cognitive decline
- d) Decreased functional ability
- e) All of the above




Assessment Question 2: Answer

If Mrs. Ramirez's hearing loss went untreated, which of the following is she at risk for? Select all that apply:

- a) Depression
- b) Decreased quality of life
- c) Cognitive decline
- d) Decreased functional ability
- e) All of the above (Correct Response)**




Cognitive Impairment




Cognitive Impairment in the Older Adult

- Cognitive impairment affects memory, judgement, attention, and language
- People with Alzheimer's disease and related dementias
 - Today there are approximately 5.3 million people over age 65 with dementia in the United States (Alzheimer's Association, 2015)
 - By 2025, this number will nearly triple to a projected 13.8 million (Hibbert et al., 2015)
 - Experience more than three times as many hospital stays per year as other older adults (Bynum, 2011)
 - Common reasons for hospitalization in patients with dementia include:
 - Syncope, fall and trauma, ischemic heart disease, and gastrointestinal disease (Rudolph et al., 2010)



Risk Factors for Cognitive Impairment


• Age is #1	• Physical inactivity
• Family history	• Medication side effects
• Education level	• Vitamin B12 deficiency
• Brain injury	• Depression
• Exposure to pesticides or toxins	
• Chronic conditions (i.e., Parkinson's disease, heart disease, and stroke)	



(Alzheimer's Association, 2016)

Assessment: Screening for Cognitive Impairment

- Some patients or families are reluctant to mention complaints, as they fear a dementia diagnosis
- Evidence for routine screening is insufficient
- Clinicians should be alert for the early signs of cognitive impairment



(National Institute on Aging, 2014)

Assessment: Screening for Cognitive Impairment

Assessment Tool	Website
Dementia Screening Indicator <small>(Barnes et al., 2014)</small>	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4119094/figure/F2/
Ascertain Dementia 8-Item Information Questionnaire (AD8)	http://alzheimer.wustl.edu/cdr/ad8.htm
Mini-Cog <small>(Benson et al., 2003)</small>	http://www.alz.org/documents_custom/minicog.pdf
Mini-Mental State Examination	<small>COPYRIGHTED: http://www4.parinc.com/products/product.asp?ProductID=MMSE The MMSE was originally distributed free but the current copyright holders are Psychological Assessment Resources (PAR) who "will not grant permission to include or reproduce an entire test or scale in any publication (including dissertations and theses) or on any website." All users will need to purchase the tests from PAR.</small>

Assessment: Screening for Cognitive Impairment

Assessment Tool	Website
The Saint Louis University Mental Status (SLUMS) Exam	http://aging.slu.edu/index.php?page=saint-louis-university-mental-status-slums-exam
Rapid Cognitive Screen <small>(Mullins et al., 2013)</small>	http://aging.slu.edu/index.php?page=rapid-cognitive-screen-assessment-tool
Tool Database	www.nia.nih.gov/research/cognitive-instrument



Treatment: Pharmacologic Management of Cognitive Impairment

- Cholinesterase inhibitors work at the neurotransmitter level
 - Donepezil*
 - Galantamine*
 - Rivastigmine*
- Regulate the activity of the neurotransmitter glutamate
 - Memantine*

*Above medications are palliative (not curative)



(Eskandar et al., 2015)

Treatment: Pharmacologic Management of Cognitive Impairment

- Antioxidants (not FDA-approved)
 - Vitamin E
 - Vitamin C
 - Ginkgo biloba
 - Curcumin



(Eskandar et al., 2015)

Treatment: Non-Pharmacologic Management

Cognitive Behavioral Therapy (CBT)

- Crossword puzzles
- Reading novels

Family and Caregiver Support


- Encouragement
- Engagement
- Patience
- Respect



(Eskandar et al., 2015)


Treatment: Non-Pharmacologic Management

<p>Lifestyle</p> <ul style="list-style-type: none"> • Exercise • Proper sleep • Limited alcohol intake • Healthy diet • Smoking cessation 	<p>Control of Vascular Risk Factors</p> <ul style="list-style-type: none"> • Hypertension • Hyperlipidemia • Diabetes
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(Edhooor et al., 2013)


Treatment/Management: Hospital Care of Cognitively Impaired Patients

- The attitudes, opinions, and beliefs of the health care providers can affect the type of care that people with dementia receive
- The average length of stay for the dementia patient is longer than a person admitted without dementia
- Patients admitted to the hospital with a dementia diagnosis have increased hospital costs, higher admittance to long-term care following hospital admission, and extremely high incidence of delirium


(Edhooor et al., 2013)


Treatment/Management: Stroke and Cognitive Impairment

- Cognitive impairment is frequently found (71%) in patients with excellent clinical recovery and no functional disability (Tatemichi et al., 1994)
- Most patients have impairment in one domain, and many have impairment in two domains
 - Most frequent impairments include memory, visuoconstructional, and executive functions
 - Other deficits include language and verbal functions (de Koning et al., 1998; Tatemichi et al., 1994)
- A detailed cognitive assessment should be part of the routine clinical evaluation of stroke patients (Murao et al., 2013)



**Treatment/Management: Care Planning
Person-Centered Care Goals**


- Treat the underlying disease or health condition (Hogan et al., 2008)
- Manage comorbid conditions more effectively (Hogan et al., 2008)
- Avert or address potential safety issues (Hogan et al., 2008)
- Allow the patient to create or update advanced directives and plan long-term care (Sampson & Burns, 2013)
- Ensure the patient has a caregiver or someone to help with medical, legal, and financial concerns (Hogan et al., 2008)
- Ensure the caregiver receives appropriate information and referrals (Hogan et al., 2008)
- Consider participation in clinical research (Choi et al., 2014)



Treatment/Management: Additional Patient Care Strategies

Approaches


- Occupational therapy focuses on teaching the patient strategies to minimize the effect that cognitive impairment has on day-to-day living (McGrath & O'Callaghan, 2014)
- Environmental approaches, such as reducing clutter and noise around the patient to make it easier to focus on tasks and reduce confusion and frustration (Hayne & Fleming, 2014)



Treatment/Management: Additional Patient Care Strategies

Tips

- Approach from the front, make eye contact, address the person by name, and speak in a calm voice
- Do not argue or insist that the patient accept your reality
- Express one thought or one question at a time
- Allow for extra time in caring for those with dementia




(Wilson et al., 2012)

Assessment Question 3

Which of the following is not a risk factor for cognitive impairment in the older adult?


- a) Increasing age
- b) Increased physical activity
- c) Vitamin B12 deficiency
- d) Depression



Assessment Question 3: Answer

Which of the following is not a risk factor for cognitive impairment in the older adult?


- a) Increasing age
- b) Increased physical activity (Correct Response)**
- c) Vitamin B12 deficiency
- d) Depression



Assessment Question 4

Match the appropriate assessment or intervention with the impairment it best addresses

Assessment Tool/ Treatment Approaches	Decline
Pharmacologic and non-pharmacologic approaches	Hearing Decline
Weber test	Cognitive Decline



Assessment Question 4: Answer

MATCHED CORRECT RESPONSES

Assessment Tool/ Treatment Approaches	Decline
Weber test	Hearing Decline
Pharmacologic and non-pharmacologic approaches	Cognitive Decline



Assessment Question 5

Match the appropriate assessment or intervention with the impairment it best addresses

Assessment Tool/ Treatment Approaches	Decline
Snellen test/assessment	Visual Decline
MMSE	Cognitive Decline



Assessment Question 5: Answer

MATCHED CORRECT RESPONSES

Assessment Tool/Treatment Approaches	Decline
Snellen test/assessment	Visual Decline
MMSE	Cognitive Decline



Assessment Question 6

Match the appropriate assessment or intervention with the impairment it best addresses

Assessment Tool/Treatment Approaches	Decline
SLUMS test	Hearing Decline
Rinne test	Cognitive Decline

ENGAGE - IL
Illinois Network of Geriatric Education

Assessment Question 6: Answer

MATCHED CORRECT RESPONSES

Assessment Tool/Treatment Approaches	Decline
Rinne test	Hearing Decline
SLUMS test	Cognitive Decline

ENGAGE - IL
Illinois Network of Geriatric Education

Patient Resources

Finding an Eye Care Professional	Website
The American Academy of Ophthalmology	https://secure.aao.org/aao/find-ophthalmologist
American Board of Ophthalmology	http://abop.org/verify-a-physician/
American Glaucoma Society	https://aosso.americanglaucomasociety.net/ags/Find-An-AGS-Doctor
National Eye Institute, Patient Education	https://nei.nih.gov/sites/default/files/health-pdfs/FactsAbout_EYE_CARE_PROFESSIONAL_2013.pdf

ENGAGE - IL
Illinois Network of Geriatric Education

Patient Resources	
Resource	Website
Amsler Grid	http://www.amd.org/the-amsler-grid/
Facts about clinical trials in vision research	https://nei.nih.gov/health/clinicaltrials_facts



Resources	
http://aging.chi.edu/index.php?page=saint-kovacs-university-mental-status-dhms-exam Accessed October 13, 2016	
http://aging.chi.edu/index.php?page=epid-comitree-screen-assessment.html Accessed October 13, 2016	
http://www.ah.org/documents_custom/minicog.pdf Accessed October 13, 2016	
http://alzheimer.usual.edu/cdr/sb/18.htm Accessed November 8, 2016	
www.nia.nih.gov/research/cognitive-instrument Accessed October 13, 2016	
http://www.4-pwfr.com/products/product.aspx?ProductID=31852 Accessed October 13, 2016	
http://www.americanaudiology.org/Files/Print-AN-AGS-Dvctng Accessed October 13, 2016	
http://aging.chi.edu/verifx-4-physics.html Accessed October 13, 2016	
http://aging.chi.edu/index.php?page=saint-kovacs-university-mental-status-dhms-exam Accessed October 13, 2016	
http://www.ah.org/documents_custom/minicog.pdf Accessed October 13, 2016	
http://alzheimer.usual.edu/cdr/sb/18.htm Accessed October 28, 2016	
http://www.amd.org/the-amsler-grid/ Accessed October 13, 2016	



Resources	
http://www.americanaudiology.org/Files/Print-AN-AGS-Dvctng Accessed October 13, 2016	
COPYRIGHTED http://www.4-pwfr.com/products/product.aspx?ProductID=31852 Accessed October 13, 2016	
http://www.nia.nih.gov/research/cognitive-instrument Accessed October 13, 2016	
http://www.ah.org/documents_custom/minicog.pdf Accessed October 13, 2016	
http://www.ah.org/documents/questionnaire-hearing-handicap.pdf Accessed November 8, 2016	
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