Dementia & Neurocognitive Disorders: Myths & Realties

Maximilian E. Fuhrmann, PhD, ABPP

Clinical Psychologist

Gerontologist

February 2026

- Maximilian E. Fuhrmann PhD, ABPP is a licensed clinical psychologist with extensive experience in the assessment and psychotherapeutic treatment of older adults. In 2016, he was credentialled by the American Board of Professional Psychology (ABPP) in their new area of geropsychology. He received his PhD from the renowned Clinical-Aging Psychology program at USC. For over 30 years, he has maintained a private practice in Southern California, specializing in geriatrics. For older adults, he provides screenings and psychotherapy for depression and anxiety. He offers counseling and referrals to adult children who struggle to care for their elderly parents and relatives.

Soon to be published!

Aging Well Through the Lens of Nature and Psychology with 30 photographs

To access free publications and podcasts go to the educational website: www.agewelldrmax.com

or check out posts and follow me on:

Facebook Agewelldrmax@geropsychologist

X AgeWellDrMax@AgeWellDrMax1

Instagram agewelldrmax

Ronald Reagan telling a joke about an elderly couple having short term memory issues

https://www.youtube.com/shorts/l3P22GnUGD8

Facts of Memory Quiz

What do you believe you already know?

Facts on Memory Quiz

True or False?

FALSE 1. All types of memory decline in later life.

FALSE 2. Most old people can't learn new things & have a form of dementia.

TRUE 3. Recall of long term memory becomes more detailed and vivid in later life.

TRUE 4. The ability to recall names on demand becomes more difficult when one is an older adult.

TRUE 5. Younger people can recall most things faster than can an older adult because their data bases are much smaller (i.e. their brains' memory storage is emptier).

TRUE 6. Worrying about losing your memory is a risk factor for becoming demented.

Adapted from : Palmore, E.B. (2013). Ageism: Comes of age, *Gerontologist, 43*(3): 418-420.

Normal and Abnormal Memory Loss

- Forgetting where you left your glasses or keys
- Repeating a story to a friend or partner that you had previously told them
- Forgetting what you ate for breakfast yesterday
- Using calendars and lists as a memory aid.

- Forgetting that you wear glasses or what keys are for
- Repeating the same story over and over to the same person on the same day
- Forgetting that you ate breakfast 15 minutes ago
- Do not understand the nature of a calendar

Compiled from: Whitbourne, S.K. & Whitbourne, S.B. (2020) *Adult Development and Aging; Biopsychosocial Perspectives* (7th Edition). Wiley.

Normal and Abnormal Memory Loss

•Being disoriented for a moment upon waking in a hotel when traveling	•Getting lost in your home of many years
•Forgetting to turn off a boiling pot and burning the pot a couple of times	•No memory of putting a pot on the stove or of almost burning down the house
•Sometimes forgetting where you parked your car at the mall	•Forgetting that you drove to the mall or that you have a car
•Worrying that you are having memory problems	•Gradually unaware and uncaring that you are having memory problems

Compiled from: Whitbourne, S.K. & Whitbourne, S.B. (2020) *Adult Development and Aging; Biopsychosocial Perspectives* (7th Edition). Wiley.

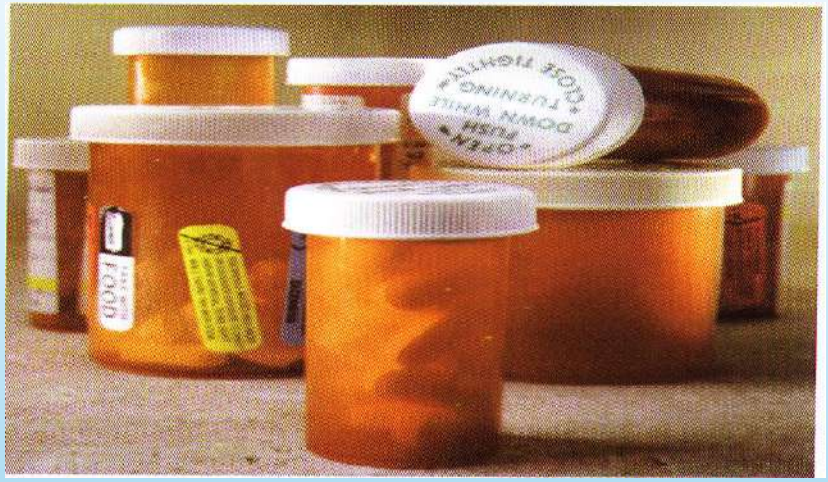
Perform A Comprehensive Dementia Workup Preferably at a Teaching and Training Hospital Department of Geriatric Medicine (UCLA,USC, Cedars-Sinai)

Biological (Medications, Illnesses, Full Physical Exam)
Psychological (Presence of Depression, Anxiety, etc.)
Social (Isolation, Sense of Purpose, Social Network)

Common Reversible & Treatable Etiologies of Dementias

Arvanitakis, Z., Shah, R.C., & Bennet, D.A. (2019). Diagnosis and management of dementia: A review. *JAMA 2019 Oct 22, 322*(16) 1589-1599. https://doi.org/10.1001/jama 2019.4782

Assessing Cognitive Impairment in Older Adults (2023) Retrieved from https://www.nia.nih.gov/health/health-care-professionals-information/assessing-cognitive-impairment-older-patients



Drug Use - Prescription & Over the Counter Medications

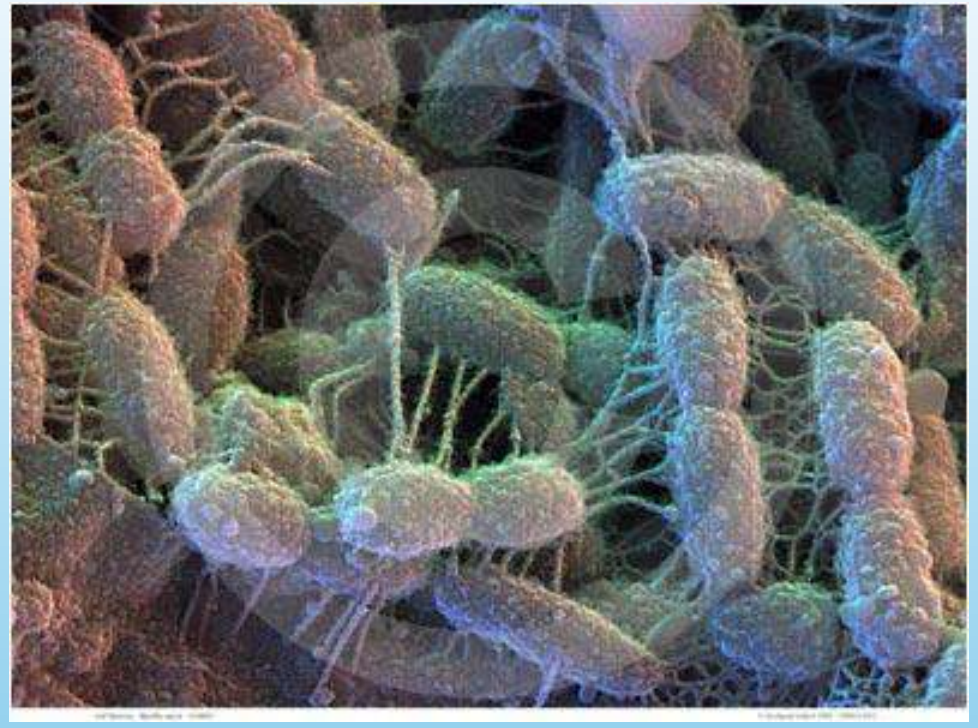
- Anti-hypertensives
- Narcotics
- Anti-convulsants (neurontin, depakote)
- Allergy medications
- Acetaminophen & other non-narcotic pain relievers

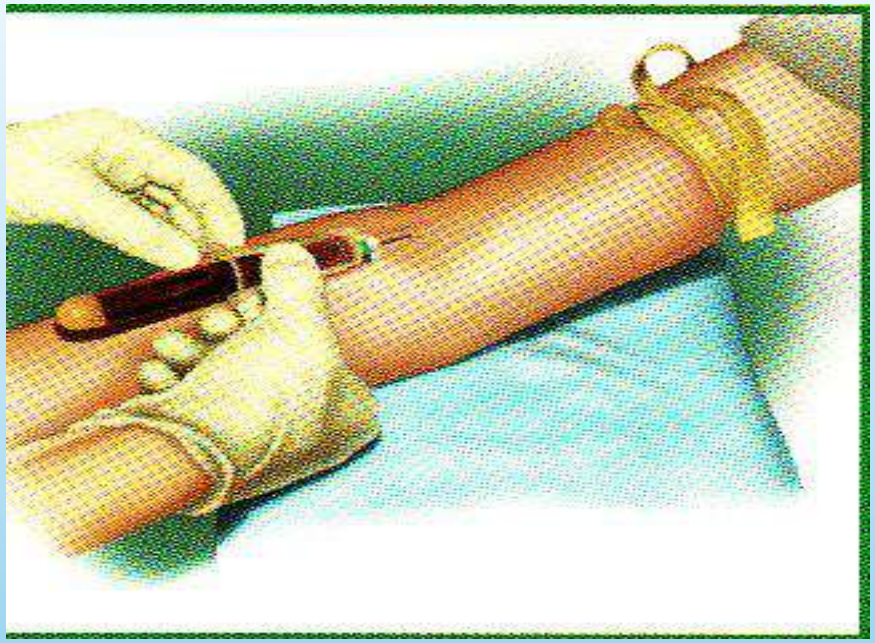
Drug Use - Prescription & Over the Counter Medications

- Sleeping pills & sedatives
- Anxiolytics (klonopin, xanax, ativan)
- Laxatives
- Supplements (melatonin, herbs, etc.)?

Infections from:

- Influenza
- Pneumonia
- Blood
- Urinary Tract (especially in elderly women)
- Kidney
- Digestive Tract
- Sinus



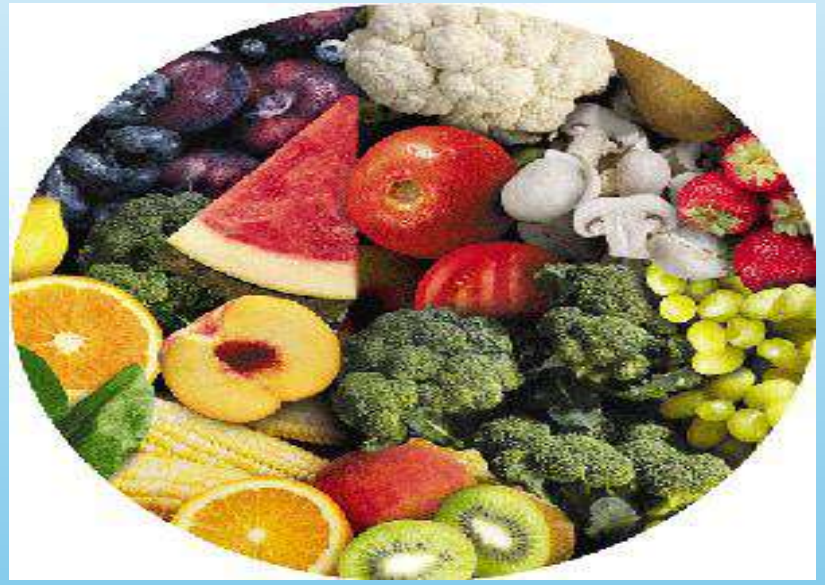


Endocrine Disorders-
check the following:

- ❖Thyroid gland
- ❖Sex hormones
- ❖Blood volume (including anemia and polycythymia)
- ❖Glucose & insulin difficulties

Nutritional Disorders & Deficiencies

- Protein
- Vitamin B1
- Folate
- Malnutrition



Lab tests may reveal

Metabolic & Electrolyte Imbalances
oCalcium
oSodium
oPotassium

Toxicity

✓Natural gas

✓Pesticides

✓Other environmental & occupational exposure
(e.g. carpet cleaning solvents)

✓ Mold

✓ Fungus

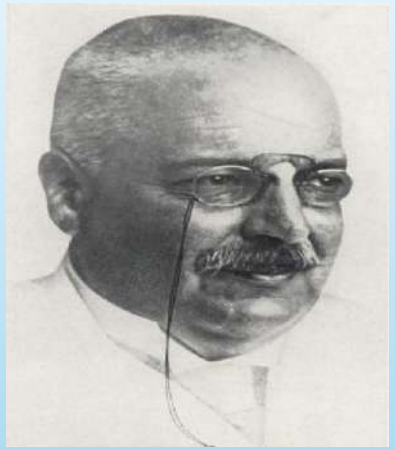
Types of Dementias

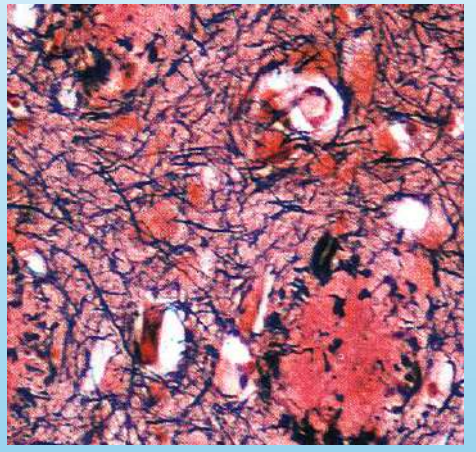
Arvanitakis, Z., Shah, R.C., & Bennet, D.A. (2019). Diagnosis and management of dementia: A review. *JAMA 2019 Oct 22, 322*(16*)* 1589-1599. https://doi.org/10.1001/jama 2019.4782

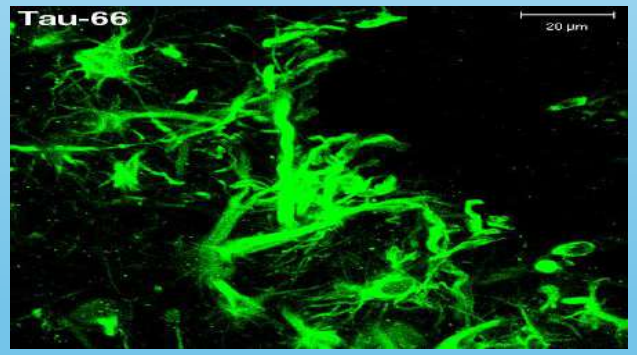
Alzheimer's Disease - is it more than one illness?

What causes/contributes to it?

a. genes: APP, PSEN1, PSEN2, APOE
b. clumping of beta amyloid protein
c. tangling of tau
d. reduced levels of insulin & insulin receptors
e. glutamate?
f. vascular inflammation?
g. loneliness?
h. pessimism?







Attia, P., & Gifford, B. (2023*). Outlive: The science and art of longevity.* Harmony Publishing.

Alzheimer's and dementia (2024) National Institute on Aging
https://www.nia.nih.gov/health/alzheimers-and-dementia?page=0

Vascular Dementia

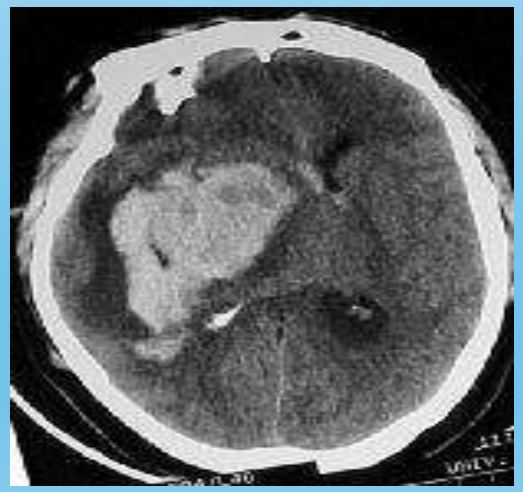
What causes/contributes to it?

a. genes & lifestyle issues putting one at risk for high blood pressure, high cholesterol and cardiovascular disease and other vascular illnesses

b. ongoing cerebrovascular disease involving blood flow to and throughout the brain which can cause transient ischemic attacks and strokes (cerebrovascular accident). A stroke can be from blockage of blood flow or hemorrhaging

Sanders, A.E., School C. & Kalish, V.B. (2023) *Vascular dementia*. Statpearls Publishing

Vascular dementia: Causes, symptoms and treatrments.(2021). https://www.nia.nih.gov/health/vascular-dementia/vascular-dementia-causes-symptoms-and-treatments



Lewy Body Dementia

What causes/contributes to it?

Lewy Bodies are abnormal structures in the mid-brain: microscopic alpha-synuclein protein deposits found in nerve cells that disrupt the brain's normal functioning, causing it to slowly deteriorate. They were first discovered in 1912 by Frederick Lewy, a colleague of Alois Alzheimer (for whom Alzheimer's disease is named).

People with Lewy Body Disease have Lewy Bodies in both the mid-brain and cortex. Lewy Body Disease patients often have the plaque characteristic of Alzheimer's disease, while people with Alzheimer's may also have cortical Lewy Bodies. This overlap leads to frequent misdiagnosis.

Haider, A., Spurling, B.C., & Sanchez-Manso, J.C. (2023). *Lewy Body Dementia* StatPearls Publishing

What is Lewy Body Dementia? Causes, symptoms and treatments (2024). National Institute on Aging. https://www.nia.nih.gov/health/lewy-body-dementia/what-lewy-body-dementia-causes-symptoms-and-treatments

Normal Pressure Hydrocephalus

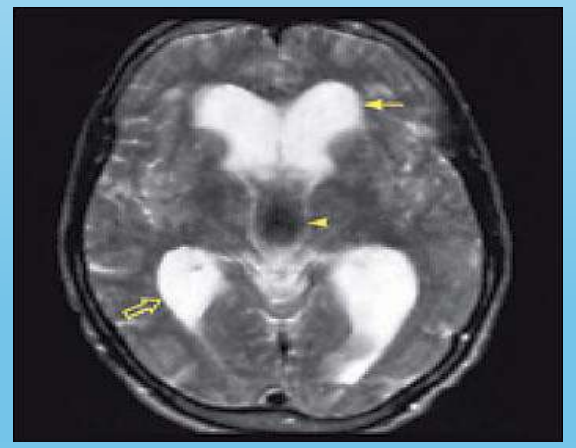
What causes/contributes to it?

Increase in spinal fluid exerting pressure on the brain and brain stem, even though the pressure reading on a lumbar puncture may have a normal reading

Initial symptoms can be bladder incontinence, gait disturbance

Potential treatment

Insertion of shunt to drain fluid from the brain to the abdomen, which may help more with gait and bladder control than cognition



Das, J.M., Biagioni (2023). *Normal Pressure Hydrocephalus*. Statpearls Publishing

Normal Pressure Hydrocephalus (2024). National Institute of Neurological Disorders and Stroke https://www.ninds.nih.gov/health-information/disorders/normal-pressure-hydrocephalus

Wernicke-Korsakoff syndrome

What causes/contributes to it?

History of chronic, long-term alcoholism and subsequent thiamine deficiency

Symptoms

Confabulation, eye movement abnormalities, loss of muscle coordination, appearance of malnutrition in addition to neuro-cognitive disorder symptoms

Potential treatments

Treatment of thiamine deficiency? Substance abuse treatment program

Akhouri, S., Kuhn, J., Newton, E.J. (2023). *Wernicke Korsakoff Syndrome* Statpearls Publishing

Wernicke Korsakoff Syndrome (2024). National Institute of Neurological Disorders and Stroke https://www.ninds.nih.gov/health-information/disorders/normal-pressure-hydrocephalus

Other Neurocognitive Disorders

What causes/contributes to them?

Parkinson's, Huntington's, or Prion diseases (including Jakob Kreutzfeldt Disease) Down's syndrome, HIV/AIDS, Frontotemporal lobar degeneration, Traumatic Brain Injury (including CTE), Long Covid?

Treatment of the primary etiology, when possible

Dementias (2024). National Institute of Neurological Disorders and Stroke tps://www.ninds.nih.gov/health-information/disorders/dementias#toc-other-neurodegenerative-diseases-and-conditions-that-include-dementia-or-dementia-like-symptoms

What Can You Do for Someone With Dementia?

a. Provide treatments (medications) which may slow down progression or manage symptoms, nutritional education, removal or mitigation of environmental hazards (e.g. mold, noise), talk in supportive not challenging ways (utilize information, including photos from the past).

b. dementia adult day care

c. memory care unit

d. caregiver support and respite

Attia, P., & Gifford, B. (2023*). Outlive: The science and art of longevity.* Harmony Publishing.

Alzheimer's and dementia (2024) National Institute on Aging https://www.nia.nih.gov/health/alzheimers-and-dementia?page

What can you do to improve your memory now?

- Look at medications and supplements
- Good sleep? Sleep hygiene issues
- Nutrition and hydration
- Physical exercise
- Mental exercise
- Social interaction (especially with children
- Relaxation and prayer
- Have a purpose
- Be of service to others
- Caring for a pet
- Assess ageism in you and in others

A. What do you recall from this presentation?

Are you certain of your answer?

B. Remember your memory was not perfect when you were “younger”!

C. Congratulations! You are older and your brain is a little more full than it was at 1030am today.

D. Thank you for this teaching opportunity!