



Alzheimer's Disease and other Dementias: A Journey To Better Care

Sakina Ouedraogo Tall, MD, FACP

Clinical Assistant Professor

NYU School of Medicine/ Bellevue Hospital

Division of Geriatrics and Palliative Care

NYU Alzheimer's Disease Research Center



Disclosure

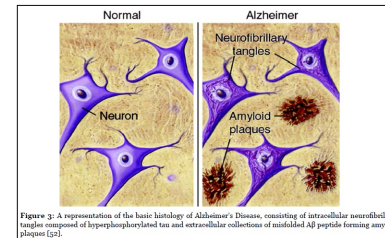
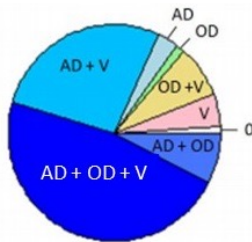
None

Introduction

- US population aging: 58 Million American 65 and older in 2021
- Alzheimer's Older age risk factor for Alzheimer's Disease (AD).
- 6.7 million American living with AD in 2023 -> 7.16 million in 2025.
- Current prevalence (about 1 out of 9 older adult , 65 + have AD):
 - 65-74 5%
 - 75-85: 13.3%
 - 85+: 33.3%
- Alzheimer's Disease: 7th leading cause of death in United States (6th prior to COVID)
- Unfortunately diagnosed late in the disease course or misdiagnosed.
- Negatively impact other comorbidities

Alzheimer's Disease or Dementia

- **Dementia:** overall term for a particular group of symptoms which includes (difficulties with memory, language, problem-solving and other thinking skills). Has several causes reflecting specific changes in the brain.
- **Alzheimer's disease:** most common cause of dementia due to the accumulation of the abnormal proteins beta-amyloid and phosphorylated tau, as well as the degeneration of neurons.
- **Other Causes of Dementia:** Vascular Dementia, Lewy Bodies Dementia, Frontotemporal Dementia, Parkinson's Disease Dementia, Mixed Dementia.




Definition of Dementia

- **Change from baseline +++, due to cognition or behaviors** and not physical limitations
- Must be sufficient impairment to **interfere with independence of daily living**: Handling Finances, Medications management, Appointments/Transportation, Telephone use, Food preparation, Laundry, Housekeeping , Shopping.... Personal care.
- Not in context of a delirium or another mental disorder (e.g. depression)

Racial/ethnic differences and prevalence of Dementia

- “Older Blacks are about twice as likely to have Alzheimer’s or other dementias as older Whites”.
- Prevalence of clinical AD or other dementias: 10.0% (non-Hispanic Whites), 14.0% (Hispanics), and 18.6% (non-Hispanic Blacks).
- Systematic review of the literature ->within population heterogeneity.
- Socioeconomic status possible contributors to the difference.
- Inconsistent studies on the contribution of genetics in this higher prevalence.
- Higher prevalence of cardiovascular risk factors among African Americans -> increasing risk of vascular dementia and potentially Alzheimer’s Disease.

Risk Factors of Dementia

- Non modifiable
 - Age : Greatest risk factor / Not a normal part of Aging!
 - Genetics: early onset AD < 1% cases
 - Family history: Increases risk independent of genetic mutations.
- Modifiable  40% worldwide dementias.
 - Physical inactivity, hypertension, obesity, diabetes, smoking, hearing impairment, less education, low social contact, depression, excessive alcohol consumption, traumatic brain injury, air pollution.

“ It is never too early and never too late in the life course for dementia prevention”.

Common reasons for visit at the memory center

- “I have memory issues, but I think it is my age”
- “ I don’t think I have any memory problem, but my daughter brought me here”
- “ I can’t find my words”
- “ I can no longer do what I used to do”
- “ He/she is not acting himself/herself”
- “ She/he believes someone is stealing her/his belongings”
- “ My mother/father had Alzheimer and I am afraid I am getting forgetful”
- “ I don’t think my mother/father can live alone; I want to know what you think”
- “Does he/she have dementia or Alzheimer’s Disease”
- “The doctor said I have Alzheimer’s”
- “I need to know so I can plan”
- “ I need tools to be able to better take care of my mother/dad”

COMPLETE COGNITIVE EVALUATION

History

*Cognitive
Tests*

*Physical
examination*

*Labs,
Brain Scans*

HISTORY

Self reported +
Collateral information

Cognitive history and
how it impacts function
++

Functional
assessment:
ADLS/IADLS affected
by cognition versus
physical limitations

Behavioral,
Depressive symptoms,
sleep

Gait issues/falls,
tremors, vision and
hearing issues

Safety concerns

Medical, family, social
history (alcohol..)

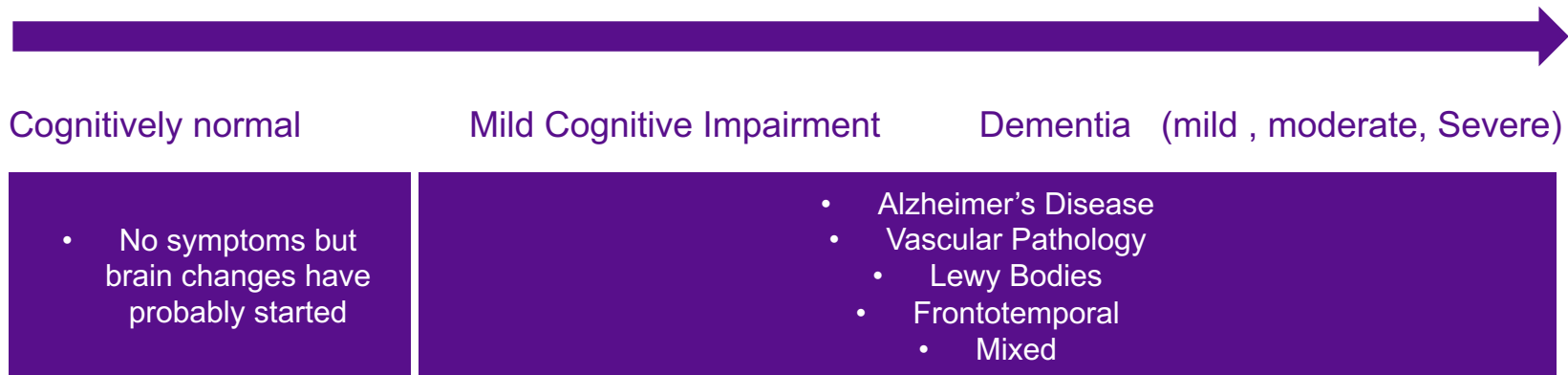
Medications review

Support system for
patient and screen for
caregiver burden.

Cognitive Tests- Physical Examination

- No single perfect test
 - Use test appropriate to patient population: language, education, culture
 - Short cognitive tests....full neuropsychological testing
 - Ensure sensory devices : Hearing aids or hearing amplifier, eyeglasses
 - Physical examination which includes a thorough neurological exam
- **The diagnosis is based on the overall evaluation and not solemnly based on test results.**

Alzheimer's Disease or Dementia?



*AFTER DIAGNOSIS:
THE JOURNEY TO BETTER CARE*

An Holistic Management

- Physical and cognitive exercise, social engagement, Mediterranean diet.
- Assess and treat modifiable risk factors (Hypertension, Diabetes, High Cholesterol, Depression, Hypothyroidism, Sleep Apnea, Hearing loss, address Smoking and Alcohol misuse).
- Treat cardiovascular and/or cerebrovascular disease.
- Discuss discontinuation of inappropriate medications and substances.
- DATA do not support the use of OTC to prevent cognitive decline
- Refer to community resources for patients and caregivers.

Symptomatic Treatment of Alzheimer's Disease

- MCI stage : No evidence
- Dementia stage : Discuss symptomatic benefits, limitations, and potential side effects
 - Cholinesterase inhibitors: Donepezil (Aricept), Rivastigmine (Exelon), Galantamine
 - Memantine

An Era of Disease Modifying Therapy? : LECANEMAB

- January 6, 2023: Accelerated approval by FDA Not yet available
- Monoclonal antibody selectively binds A β
- Biweekly infusion
- Some cognitive improvement at 18months (based on testing during the study)
- Improvement of Amyloid burden on PET Amyloid Scan
- Approved for Mild Cognitive Impairment/Mild Dementia due to Alzheimer's Disease
- Need for confirmation A β on cerebral fluid or PET Amyloid.
- Side effects : Brain edema and microhemorrhages

Treatment of Behavioral Manifestations of Dementia

- Importance of caregiver support and education
- Nonpharmacological management
 - Identify any trigger: pain, depression, constipation, urinary retention/symptoms, skin issues
 - Music therapy, diverting activities
- Pharmacological management:
 - Treat any depression, pain
 - Antidepressants
 - Antipsychotics to be used only if nonpharmacological measures failed and there is a risk for self or others – Use second generation antipsychotics.

CAREGIVING



Caregiving of PLWD and Access to Home Care

- In US, 83% caregiving provided by family/friends/unpaid caregivers. 45% found it rewarding, 59% report high or very level emotional stress
- Home Care very expensive. Paid by either :
 - Long Term Care Insurance (if bought before the diagnosis, and the policy includes supervision)
 - Medicaid (should earn less than \$1,200 a month. Many families work with an elder law attorney to set up a trust)
 - Veterans Affairs (anyone who is a vet).
- Long term care costly annual fees (copayments, deductible, coinsurance..)

Resources/ Caregiver support

- NYU Family Support Program 646-754-2277
- NYU Buddy Program: matches NYU student with a patient with early stage memory problem.
- Caringkind NYC: caringkindnyc.org 646-744-2900
- Alzheimer's Association: 1800-272-3900
- The Alzheimer's Store- alzstore.com- Products designed for people with dementia
- Arts and Minds-<http://www.artsandminds.org/> Museum visits and art program for people with memory problems and their caregivers. Many programs virtual.
- Lincoln Center Moments access@lincolncenter.org or 212-875-5375 Music for people with memory problems and their caregivers.
- 92nd street Y Cognitive strengths and ability program: paid program for people who have memory problems.
- NYC Department for the Aging: Offers various programs including community centers.

IMPACTS OF COVID-19

- COVID-19 related deaths and complications
- Delayed in seeking care of patients with medical comorbidities.
- Restrictions -> closure of programs and activities
- Social isolation and loneliness -> Depression, Cognitive decline and Dementia.
- Challenges using technology -> early retirement, inability to attend online classes
- Impact on Quality of Life.
- Telecommute led to increased awareness on cognitive deficits of loved ones, ability to provide care to loved ones.
- Welcome return of activities and programs.

Healthy Aging

- Physical, cognitive, and psychological health are All important in normal aging, and interact with one another.
- Adjust and make accommodations while maintaining their quality of life and independence..
- Adapting to transitions in life « self identity »
 - From parenting
 - Retirement->Importance of having a plan to maintain cognitive functioning, physical and mental health, and overall well-being
- Socialization, physical exercise, mindfulness, religion and faith

CONCLUSION

- Diagnosis of dementia: overall evaluation
- Holistic approach to dementia management
- Need multidisciplinary collaboration, address caregiver burden, use community resources
- Might negatively impact other medical comorbidities
- New era of disease modifying treatments for Alzheimer's Disease?
- Need for better representation in clinical trials
- Addressing modifiable risks factors might prevent 40% of dementias worldwide
- Healthy Aging includes physical, cognitive, and psychological health
- Master Plan for Aging: Hope for better care and resources for Older Population.



THANK YOU

References:

1. www.census.gov/topics/population/race/about.html
2. Alzheimer's Association 2023 Alzheimer's Disease FACTS and FIGURES special report
3. Rajan KB, Weuve J, Barnes LL, McAninch EA, Wilson RS, Evans DA. Population estimate of people with clinical AD and mild cognitive impairment in the United States (2020-2060). *Alzheimers Dement* 2021;doi:10.1002/alz.12362
4. [Zahodne LB](#), [Sharifian N](#), [A. Kraal AZ](#), [Zaheed AB](#), [Sol K](#), [Morris EP](#), [Schupf N](#), [Manly JJ](#), [Brickman AM](#). Socioeconomic and psychosocial mechanisms underlying racial/ethnic disparities in cognition among older adults. *Neuropsychology*. 2021 March ; 35(3): 265–275. doi:10.1037/neu0000720
5. Bradford A, Kunik ME, Schulz P, Williams SP, Singh H. Missed and Delayed Diagnosis of Dementia in Primary Care: Prevalence and Contributing Factors. *Alzheimer Dis Assoc Disord*. 2009 ; 23(4): 306–314. doi:10.1097/WAD.0b013e3181a6bebc.
6. [ementia prevention, intervention, and care: 2020 report of the Lancet Commission](#)
7. [Agle J](#), [Delong J](#), [Janotab A](#), [Carsonb A](#), [Robertsa J](#), [Maupomec G](#). Reflections on project ECHO: qualitative findings from five different ECHO programs. *MEDICAL EDUCATION ONLINE* 2021, VOL. 26, 1936435 <https://doi.org/10.1080/10872981.2021.1936435>
8. [Lecanemab in Early Alzheimer's Disease](#) . November 29, 2022. *NEJM*. DOI: 10.1056/NEJMoa2212948