Neuropsychological Assessment

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Your Presenter

- Neuropsychologist
- Wife
- Mother
- Veteran
- Entrepreneur

Objectives

- List practice guidelines for neuropsychological evaluation.
- Describe both the purpose of neuropsychological assessment and when to refer to a neuropsychologist for further testing (with a focus on aging and dementia).
- Explain what cultural and ethical issues need to be considered during neuropsychological evaluation.

AACN Practice Guidelines for Neuropsychological Assessment & Consultation

- Definitions
- Purpose & Scope
- Education & Training
- Work Settings
- Ethical & Clinical Issues
- Methods & Procedures

Ethical & Clinical Issues

- Informed Consent
- Patient Issues in Third-Party Assessments
- Test security
- Underserved Populations & Cultural Issues

Informed Consent

- Awareness of, and sensitivity to, ethical and legal issues with informed consent, confidentiality, autonomy, and related human rights
  - Vulnerable adults, including those who have designated legal guardians
- Limits of confidentiality are explained to all examinees (or parents/guardians)
- Establish clear understanding of examiner-examinee relationship
- Ensure understanding is share with examinee and relevant third parties (i.e., referring provider, special education administrator, attorney, insurance)
- Questions that must be asked:
  - For patient with dementia or intellectual disability, is there a court-appointed guardian?
  - For child, if parents are divorced, who has legal custody to give consent for the evaluation and who has a right to receive full disclosure of findings?

Third-Party Assessments

- Requested by insurance, attorney, judge, special education hearing officer, etc., as part of legal proceeding, disability evaluation, or special education due process hearings
- Clarify nature of relationship with referring third party
  - Establish that candid and objective opinions based on evaluation results will be provided, regardless of referring third party
- Clearly explain purpose, information requested, procedures, means of providing feedback, and to whom the report will be sent
- Discuss in advance who is responsible for payment and estimated costs
- Distinguish between role of expert and clinician
  - Expert- Unbiased opinions and answers to specific questions pertinent to case, based on relevant scientific and clinical evidence
    - Typically there is no feedback or treatment planning
  - Clinician- Advocate for patient
- Second opinions based on another's report must only consider available data and express caution when lacking information to provide more substance

Test Security

- Inappropriate and unethical to make copies of actual tests for patients or other parties as a means of providing feedback
- Unique pressures in forensic settings; however, clinicians MUST maintain integrity and security of test materials

Underserved Populations & Cultural Issues

- Agreement to evaluate members of special populations are educated about issues, and have experience administering and interpreting relevant procedures
  - Show that a local, better qualified colleague was sought
  - Potential harm of deferring or declining patient outweighs potential dangers or proceeding with evaluation
  - Attempt to compensate for limitations with appropriate consultation
- Discuss in report communication with patient, own fluency in patient's language, uncertainty about fidelity of interpreter mediated translation, and quality of interpersonal communication, including nonverbal.
  - Avoid using family members, friends, or other untrained individuals as interpreters, whenever possible
- Recognize threats to validity with introduction of cultural bias in both translated and adapted instruments

Methods & Procedures

- Decision to Evaluate
- Review of Records
- Interview of patient & Significant Others
- Measurement Procedures
- Assessment of Motivation & Effort
- Assessment of Concurrent Validity
- Test Administration & Scoring
- Interpretation
- Evaluation Report
- Providing Feedback

Neuropsychology vs Neuroimaging

- Structure does not equal function
- Structural changes are not always visible
- Symptoms often precede visible structural changes
- Neuropsychological evaluation is useful for serial assessment

Neuropsychological Assessment

- Neuropsychologist
  - Clinical psychologist who specializes in understanding how brain structures and systems relate to behavior and thinking.
- Clinical neuropsychology is an applied science that examines the impact of both normal and abnormal brain functioning on a broad range of cognitive, emotional & behavioral functions.
- Spectrum of Assessment
  - Diagnosis. Treatment & Rehabilitation Planning. Medicolegal. Capacity.
  - Neurological or medical comorbidity. Psychiatric comorbidity. Changes over time (i.e., neurodegeneration, improvement, post-intervention)

Neuropsychological Assessment

- Interview (60-90 minutes)
- Testing (1-6 hours)
  - 1:1 Interaction
  - Goal is best performance possible
  - Items span full range of difficulty
  - Verbal & nonverbal content
  - Timed & untimed
- Scoring (30-90 minutes), Interpretation (1-3 hours) & Feedback (30-60 minutes)

Interpreting Results

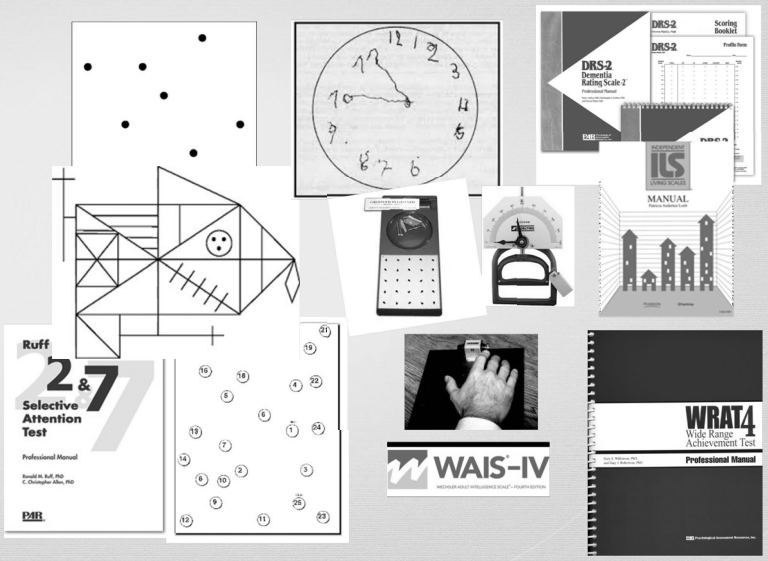
- Identify challenges & deficits
- Identify patterns of performance
- Entertain alternative explanations
- Examine for consistency within & across domains of function
- Map all results to neurobehavioral syndrome(s)

Impairment

- Test Data
  - Compare to others of similar age, gender & education
    - Also, racial background when available
  - Individual impairment in an area is determined by scoring 1.5 SD below expectation
    - For average person, concern when below ~9th percentile compared to peers

Domains

- Effort
- Orientation, Global Functioning, Premorbid IQ
- Academic & IQ
- Attention
- Language
- Visuospatial
- Memory
- Executive Functioning/Processing Speed
- Motor
- ADLs
- Psychological Functioning



Dissecting the Report

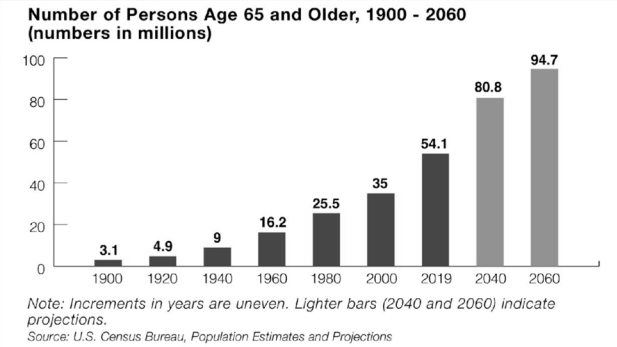
- History & Background
- Behavioral Observations
- Test List
- Test Results
- Integrative Summary
- Diagnoses
- Recommendations

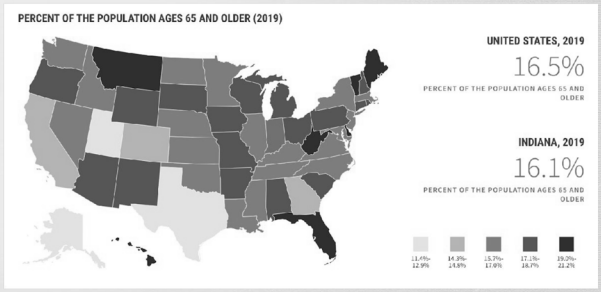
When & How to Refer for Neuropsychological Assessment

- Refer whenever there is doubt about a patient's cognitive functioning or competency
  - Short term memory problems, losing items frequently, confusion
  - Poor decision making, inability to manage finances
  - Unexplained neurologic complaints
  - Unexplained change in personality
  - Poor attention & concentration
  - Failure to recognize peers
  - Language difficulty
- Specify what you want from the referral
  - Areas of concern & type of conclusions requested (i.e., treatment planning, competency, functional limitations, diagnostic accuracy)

Cognitive Decline in Aging Population

Aging Population- By the Numbers





Normal Aging

- Can see decline in the following:
  - Motor speed
  - Cognitive processing
  - Mental flexibility
  - Memory efficiency
- Memory decline is not necessarily normal

Neurocognitive Disorders (NCD)

- Group of disorders in which the primary clinical deficit is in cognitive functioning
  - Acquired
  - Not developmental
  - Represents a decline in functioning
- DSM-IV called these: dementia, delirium, amnestic disorder, and other cognitive disorders

Mild vs Major NCD

- Evidence of **modest vs significant** cognitive decline from a previous level of performance in one or more cognitive domains based on:
  - Concern of the individual, a knowledgeable informant, or the clinician
  - A **modest vs substantial** impairment in cognitive performance, preferably documented by standardized neuropsychological testing
- Cognitive deficits **do vs do not** interfere with independence in everyday activities
- Cognitive deficits do not occur exclusively in the context of a delirium
- Cognitive deficits are not better explained by another mental disorder

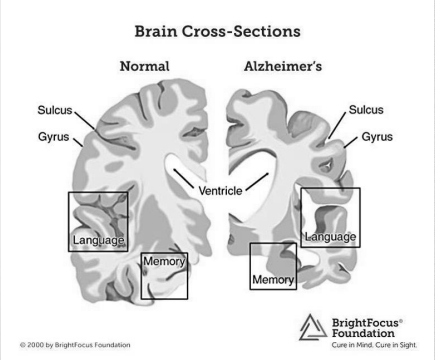
- Note: When the case is not clear- typically when differentiating between MDD and dementia- go with the less severe diagnosis.

Delirium

- State of massive confusion
  - Difficulty concentrating, focusing attention, thinking sequentially
  - Leads to misinterpretations, illusions, and sometimes hallucinations
- Sudden onset
- Typically occurs over a short period of time, usually hours or days
- Causes include:
  - Diseases and infections, poor nutrition, head injuries, strokes, stress, and intoxication of substances

Poor Outcomes of Aging

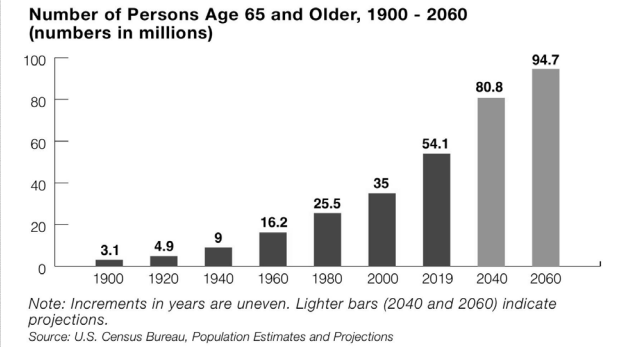
- Alzheimer's is the most common dementia
- 65-70 years old prevalence is 1 per 100
- Over 85 years old prevalence is 20-50%
- Prevalence continues to rise with age

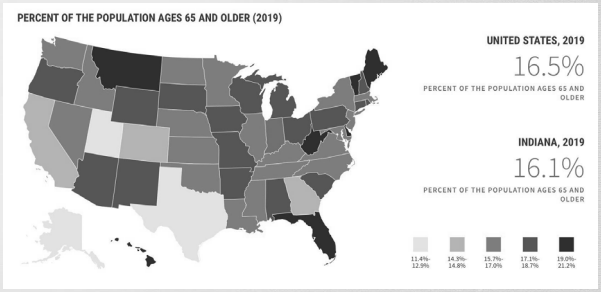


Aging Population- By the Numbers

- Percentage of Americans over 65 has grown 34.2% since 2010
  - 16% of the population in 2019
    - Expected to be 21.6% by 2040
  - Approximately 90,000 centenarians
    - By 2060, estimated to be 603,000
- 61% live with spouse/partner; 27% live alone
  - In 2019, 1.1 million ages 60+ were responsible for *at least one grandchild* <18
- Poverty in 2019= 7.7% Hoosiers
- Insurance= 94% Medicare

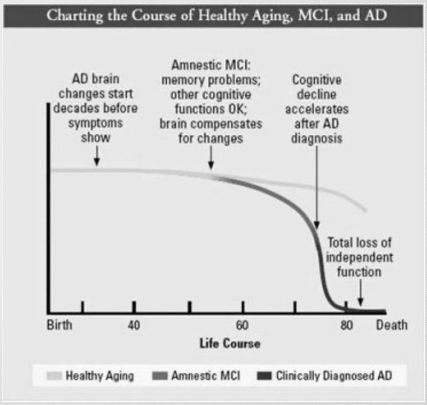
Aging Population- By the Numbers





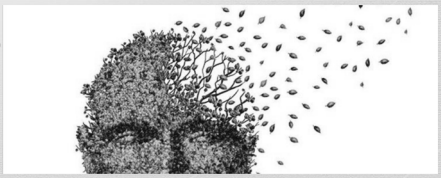
Longitudinal Cognitive Changes

- 99.6% of drug trials have failed (Cummings et al., 2004)



Dementia (aka MNCD)

- An adult onset brain disease
  - Dementia= Memory loss + other cognitive loss
- Alzheimer's disease- Most common cause of dementia (65% - 75%)
  - Sixth leading cause of death in the United States
  - Fifth leading cause of death in people over 65
- No cure



Types of Dementia

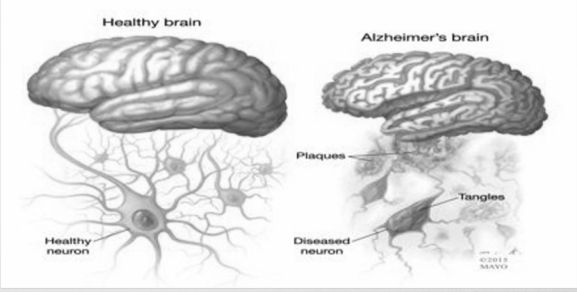
- Alzheimer's Disease
- Vascular Dementia
- Mixed Dementia
- Dementia with Lewy-Bodies
- Fronto-Temporal Dementia
- Wernicke-Korsakoff's Syndrome
- Parkinson's Disease Dementia

Risk Factors

- Age
- Family history
- Genetics
  - APOE-e4 and other rare genes directly cause Alzheimer's disease
- Gender
- Ethnicity
  - Older Latino/a individuals are 1 ½ times as likely than older Caucasians
  - Older African—American individuals are 2 times as likely than older Caucasians
- Head injury
  - Well-established risk factor for developing AD
- Modifiable health risk factors
  - Tobacco use, exercise, heart-heathy diet, etc.

Brain Changes

- Brain atrophy
- Synapes and neuronal loss



Genetics

- Some research suggests:
  - 1 relative with dementia = 4x risk
  - 2+ relatives with dementia = 40x risk

APOE

- Apolipoprotein E (APOE)
  - Plasma protein, transports cholesterol and regulates lipid metabolism
  - Encoded on Chromosome 19
    - E2 allele (potentially protective)
    - E3 allele (intermediate risk)
    - E4 allele (highest risk)
  - 2 copies (E2/E2; E2/E3; E2/E4; E3/E3/; E3/E4; E4/E4)
    - 2-3% of population have E4/E4

APOE

- 50-65% of persons with Alzheimer's disease have at least one E4 allele
- Variants of Alzheimer's disease are more likely to have APOE E4 allele
- 15-20% of Alzheimer's disease patients have E4/E4
- 24-31% of population have one copy and are non-affected
  - Smaller hippocampi
  - Increased brain activation in prefrontal, hippocampus and parietal cortex on challenging memory tasks (compensatory recruitment)
  - Some studies suggest E4/E4 and reach the age of 80= 100% will develop Alzheimer's disease
- E4/E4= 5x likelihood; Onset 10 years earlier than no E4
- E4 and E2/E3= 2x likelihood; Onset 5 years earlier

Protective Factors

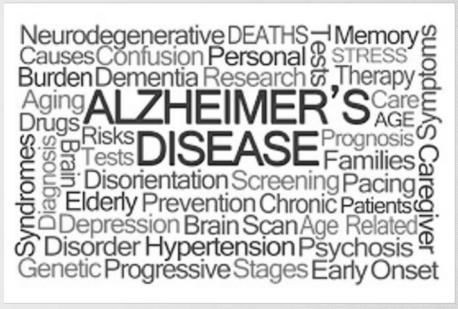
- Estrogen
- Higher education
- Anti-inflammatory drug use
- APOE E2/E2
- Antioxidant use
- Vitamin E
- Yellow & green veggies
- Vitamin C fruits
- Ginkgo
- Exercise

Differential Diagnosis

- Normal aging
- Other dementia types
- Depression
- Neurodegeneration
- Cerebrovascular accident
- Demyelinating diseases
- Nutritional deficiencies
- Toxic/metabolic abnormalities
- Inflammation/infection/tumor

Alzheimer's Disease

https://www.youtube.com/watch?v=7_kO6c2NfmE



Word List Memory

Trial 1	Trial 2	Trial 3	Delay
1. Butter	1. Butter	1. Butter	1.
2. Arm	2. Arm	2. Arm	2.
↓	↓	↓	↓
10. Engine	10. Engine	10. Engine	10.

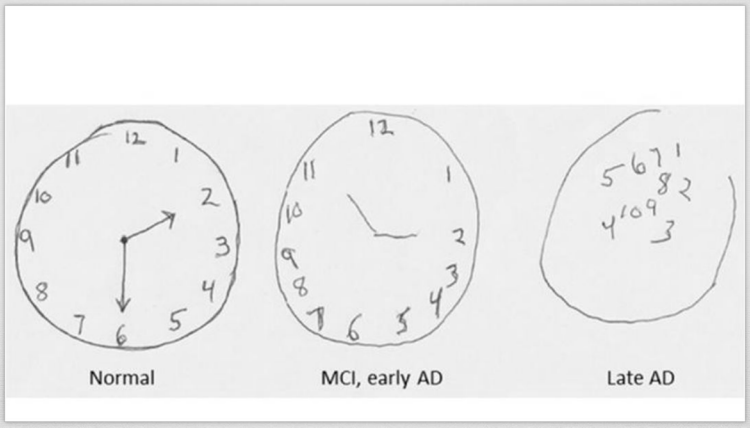
Recognition Recall

1. Target

↓

20. Distractor

Visuospatial & Executive Functioning



Cognitive Abilities Affected

- Agnosia- recognition of familiar objects
- Apathy
- Aphasia- expression/comprehension of language
- Apraxia- carrying out purposeful actions
- Compensation- concealing deficits
- Disorientation- who, what (day/date), when (sense of time)
- Distractibility- ability to focus on one thing
- Impulse Control- ability to control, divert, or postpone expression of feelings such as anger, frustration, fear, and anxiety
- Insight- ability for brain to monitor what one is doing

Cognitive Abilities Affected

- Judgment- ability to make critical distinctions and to arrive at sensible decisions
- Learning/Memory
- Making choices
- Mental flexibility
- Perseveration- getting stuck doing the same activity or motion repeatedly
- Planning- carrying out step-by-step tasks
- Postponing- ability to wait to have needs met
- Sequencing- doing things in proper order
- Visuospatial- knowing where things are in reference to yourself
- Way-finding- having a mental map of the area

Symptom Progression- Very Early

- Decreased job performance
- Difficulty traveling to new locations
- Forgets important appointments for first time in life
- Decreased participation in demanding social and/or occupational settings

Symptom Progression- Early

- Decreased performance of complex household tasks
- Dinner/Entertaining
- Checkbook/Finances
- Shopping
- Medications
- Poor recall of specific events
- Repetitive questions
- Frequent misplacing
- Trouble with time

Symptom Progression- Middle

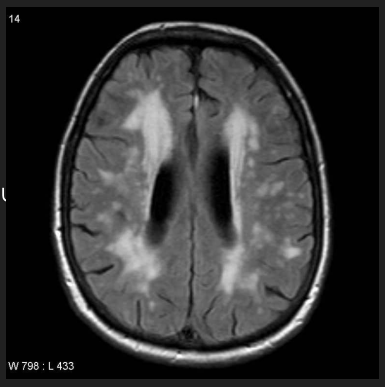
- Needs help in choosing clothes
- Wears same clothes
- Incongruent combinations
- Forgets to bathe
- Difficulty driving a car

Symptom Progression- Later

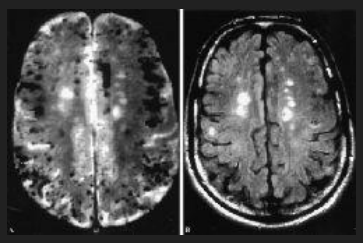
- Difficulty dressing
- Unable to bathe
- Difficulty with toileting
- Incontinence
- Unable to speak/walk

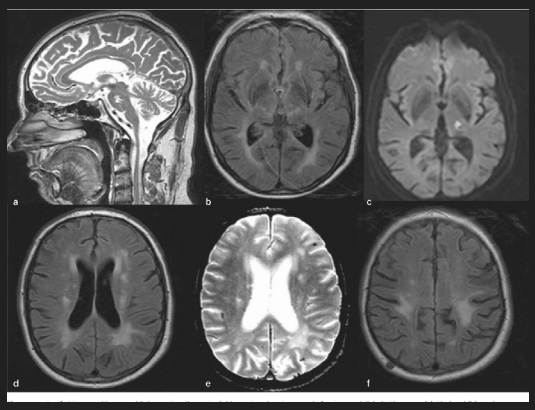
NCD due to Vascular Disease

- Anatomical Structures Affected:
  - Various infarcts often deep in the white matter in the distribu



NCD due to Vascular Disease





Vascular Observable Patterns

- Focal deficits
- Multifocal deficits
- Patchy deficits

- Common to have:
  - LH lesion: language and verbal memory
  - RH lesion: visuospatial and visual memory
  - Visual agnosia
  - Hemiparesis
  - Apraxtic difficulties
  - Dysphasia
  - Topography and orientation difficulties

Vascular Observable Patterns

- Depression
- Emotional lability
- Pseudobulbar palsy
- Gait disturbance
- Insight often good about difficulties
- Weakness
- Fluctuating course
- Personality relatively unchanged

Lewy Body Dementia

- 7-26% of all dementia
- Risk factors:
  - Age
  - Male
  - Alzheimer's disease
  - Parkinson's disease
- Onset: 5—90
- Slow progression
  - Cognitive change AND Parkinsonism
    - Within 1 year of each other
  - Visual hallucinations
  - Fluctuant arousal/attention/cognition
  - Survival= 7 years

Lewy Body Dementia

- Early onset visual hallucinations (prior to 4th year)
  - Poor eyesight
  - Detailed
  - Recurrent
  - Well-formed
    - Small people or animals
    - Not bothered by hallucinations
  - Delusions
    - Paramnesias, persecutory/paranoid, abandonment

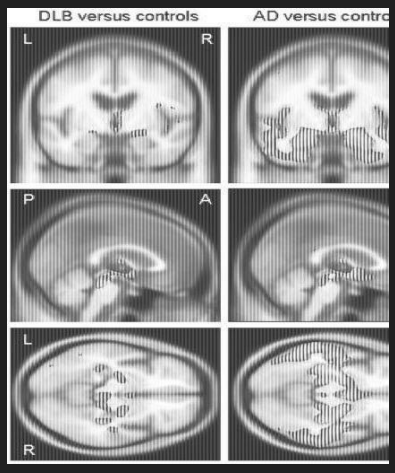
Lewy Body Dementia

- Increased sensitivity to antipsychotics
  - Adverse events 81% compared to 29% of Alzheimer's with classic neuroleptics
  - Atypicals
    - Olanzapine (Zyprexa)
    - Risperidone (Risperdal)
    - Quetiapine (Seroquel)
    - New agents have less binding to dopamine receptors
      - Can see EPS exacerbation

Lewy Body Dementia

- Higher incidence of depression than in Alzheimer's disease
- Anxiety
- Irritability/agitation
- Apathy
- Violent behavior
- nocturnal confusion
- Insomnia
- Restlessness

Lewy Body Dementia



Lewy Body Dementia Observable Patterns

- Similar to Alzheimer's disease but greater deficits in:
  - Fluctuating attention
  - Fluctuating arousal
  - Visuospatial abilities
    - Blocks, clock, visual tracking
  - Constructional abilities
    - Copying
  - Psychomotor speed
  - Verbal fluency

NCD due to Frontotemporal Degeneration

- Neurodegenerative disorders that share overlapping pathologies and clinical features.
  - Progressive deterioration of the anterior temporal and/or frontal lobes results in behavioral changes, language dysfunction, and/or motor deficits.
  - Ultimately causes significant functional decline.
- Three variants according to the symptom pattern:
  - Behavioral variant
  - Language variant
  - Motor variant

Behavioral Variant

- Presentation
  - Insidious
  - Begins with changes in personality, interpersonal conduct, and emotional regulation
    - This reflects progressive disintegration of the underlying neural circuits
  - Specific changes include reduced social cognition, reduced motivation, inertia, lack of interest in prior activities, progressive social isolation, and poor decision making.
    - Disinhibition and decreased empathy are also common, and patients typically lack insight into these changes

Behavioral Variant

- Etiology
  - Caused by progressive, focal degeneration of the frontal and temporal brain regions, and/or the presences of argyrophilic globular inclusions (Pick bodies) and swollen, achromatic neurons (Pick cells).
- Neuropathology
  - Mutated tau protein affects the microtubules to which it binds and produces the toxic inclusions.
  - 50% of patients present with greater left hemisphere involvement, whereas 20% have greater right hemisphere pathology.
  - Although frontotemporal regions are the most common areas of neuropathology, lesions can occur in other areas.
  - Neurotransmitters also seem to be affected, including altered metabolism of serotonin and lower levels of CSF dopamine, although functioning of the cholinergic system appears to be unaffected.
- Imaging
  - MRI shows atrophy of the orbitofrontal, mesial frontal, and anterior insula cortices; SPECT shows frontal hypoperfusion; PET shows frontal hypometabolism.

Language Variant

- Presentation
  - Begins with disordered language and progressively worsens to include more widespread neuropsychological problems.
  - There is little evidence that the progression can be slowed and there is no cure.
- Impairments on language based measures, with relatively strong performance in other domains.
  - As disease progresses, greater impairment becomes evident on language based tasks, and more widespread cognitive, motor and behavioral problems may become evident.

Motor Variant

- Presentation
  - Characterized by progressive deterioration of motor functions, with cognitive and psychological symptoms
- Progressive supranuclear palsy is the most common motor variant.
  - Typical onset in 60s
  - Symptoms include:
    - Supranuclear vertical gaze (impaired downward gaze)
    - Bradykinesia
    - Rigidity
    - Swallowing problems
    - Frequent falls
- Other variants: Motor Neuron Disease and Corticobasal Degeneration

Epidemiology

- Behavioral Variant
  - Most common of the three FTD variants
  - Men > Women
  - Average age of onset is younger than AD and occurs between ages 40-65, with an average age of 54. Very rare to have onset after age 75.
  - Rate of diagnosis= 15 per 100,000, which reflects the second most common cause of early-onset dementia.
  - Median survival rate= 3-8+ years

Prognosis and Course

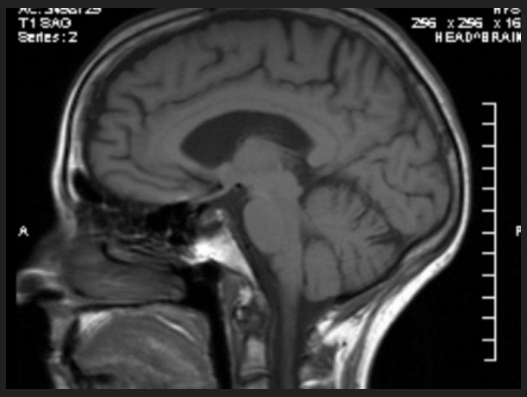
- Behavioral Variant
  - Best estimated by early clinical features
  - Criteria for possible bvFTD include:
    - Early behavioral disinhibition, early apathy or inertia (most common symptom), early loss of sympathy or empathy, early perseverative, stereotyped, or compulsive/ritualistic behavior, hyperorality and dietary changes, and neuropsychological profile with executive/generation deficits as well as relative sparing of memory and visuospatial functioning.
  - Criteria for probably bvFTD include meeting criteria for possible bvFTD plus:
    - Significant functional decline and structural or functional neuroimaging results that are consistent with the disorder.
  - Criteria for definite bvFTD include meeting criteria for probable or possible bvFTD and having histopathical evidence on biopsy or at postmortem examination or having a known genetic mutation.
  - No cure

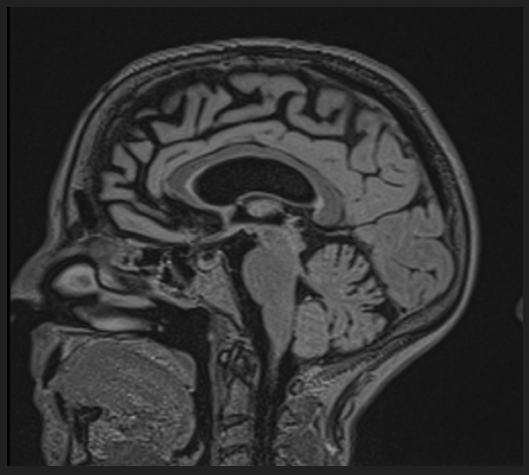
Prognosis and Course

- Language Variant
  - Severity is determined by progression of language impairments as well as the onset and progression of additional neuropsychological problems, including behavior problems, impaired motor functions, and more global cognitive deficits.
  - No evidence that the progression can be slowed.
  - There is no cure.

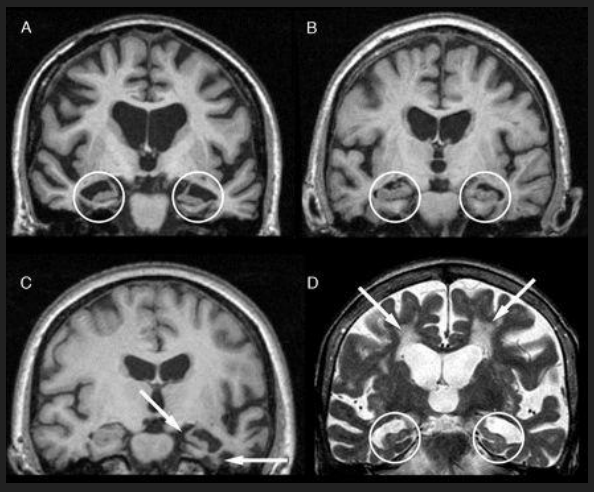
Prognosis and Course

- Motor Variant
  - Severity characterized by the extent of motor problems and the onset and severity of cognitive and psychological problems.
    - No rating systems for severity.
  - Progressive in nature.
  - Fatal within 5 years.





AD vs LBD vs FTD vs Mixed



Wernicke-Korsakoff's Syndrome

- Caused by severe deficiency in thiamine (Vitamin B-1)
- Most commonly caused by excessive alcohol use
  - Can also be associated with AIDS, chronic infections, poor nutrition
- Thiamine helps brain cells produce energy from sugar
  - When levels too low, brain cells cannot generate enough energy to function properly

Wernicke-Korsakoff's Syndrome

- Korsakoff syndrome is often, but not always, preceded by an episode of Wernicke Encephalopathy
  - This is an acute brain reaction to severe lack of thiamine
- Wernicke Encephalopathy is a medical emergency that causes life-threatening brain dysfunction:
  - Confusion, staggering and stumbling, lack of coordination, and abnormal eye movements
- Chronic memory loss of Korsakoff Syndrome often follows Wernicke Encephalopathy
  - Known as Wernicke-Korsakoff Syndrome
  - However, Korsakoff Syndrome can develop in individuals without prior episodes of WE.

Treatment Goals

- Maximize quality of life
- Promote coping in caregiver and family
- Manage behavioral and psychiatric symptoms in patient

Treatment

- FDA-Approved Pharmacological Interventions in Alzheimer's disease
  - Neurotransmitter enhancement
    - Increase acetylcholine in the brain
      - Aricept (Donepezil)
      - Excelon (Rivastigmine)
      - Razadyne (Galantamine)
    - Blocks glutamate
      - Namenda (Memantine)

Management- Patient

- Environmental Adaptations
  - Match demands/stimulation to abilities
  - Avoid complex tasks and chaotic situations
  - Simplify environment and assist with ADLs
  - Monitor nutrition, exercise, and sleep
  - Assure physical comfort and wellness
- Pharmacological Intervention
  - Proceed with caution

Management- Caregiver and Family

- Response to diagnosis
- Education
  - Cause and course of disease
  - Estate planning
  - Environmental adaptations
  - Appropriate response to problem behaviors
- Emotional Support
  - Family and support groups

Management- Caregiver and Family

- Preserving Activities for Self-Care
  - Healthy eating and exercise
  - Spread caregiver load
  - Schedule time away
  - Avoid isolation
    - Maintain outside contacts and activities
  - Indulge occasionally
  - Seek emotional support
  - Journal

Resources

- Alzheimer's Association- Indiana Chapter
  - www.alzindiana.org
  - 24-hr helpline: 1-800-272-3900
- Literature
  - The 36-Hour Day: A Family Guide to Caring for Persons with Alzheimer's Disease, Related Dementing Illnesses, and Memory Loss in Later Life (Mace & Rabins)
  - Mom's OK, She Just Forgets: The Alzheimer's Journey from Denial to Acceptance (McLay & Young)
  - Where the Light Gets In: Losing My Mother Only to Find Her Again (Williams-Paisley)

Case Example A

- 90+ Caucasian male
- 12 years education
- Owned grocery store
- Family reports memory problems beginning 5 years ago, worse in last year
  - Forgetting what people say to him. Misplaces items often. Repeats himself in conversations. Required assistance for basic and advanced ADLs.
- Patient believes he is fine. He's "just getting old."

Case Example A

- Memory
  - Initial LM: 2%; Delayed LM: 1%
  - Initial VR: 16%; Delayed VR: 2%
  - Initial AVLT: <0.1%; Delayed AVLT: 0.1%
- Attention
  - Omissions: >99.9%; Perseverations: >99.9%
- Language
  - BNT: 0.4%
  - Phonemic Fluency: 2%; Semantic Fluency: 0.5%
- Executive Functioning
  - Verbal: <1%; Visual: <1% (>300 seconds)

Case Example A

- Major Neurocognitive Disorder due to Multiple Etiologies (AD & VD)
- Recommendations
  - Immediate care & supervision, including medications
  - Legal affairs & finances in order
  - No more driving
  - Monitor for signs of delirium
  - Routine exercise & heart healthy diet
  - Socially & mentally stimulating activities
  - Dementia resources provided at feedback

Case Example B

- 85 year old Caucasian male
- 16 years education
- Career military
- Family reports memory problems beginning two years ago
  - Frequently writes notes but doesn't act on them; sometimes writes several notes saying the same thing
  - Six months ago, family discovered patient had not filed taxes for two years
  - Also reported difficulties with balancing checkbook, paying bills, driving & getting lost in familiar areas
- Patient believes he is "fine."

Case Example B

- Memory
  - Initial Recall: 50%
  - Delayed Recall: 63%
- Attention
  - 63% for simple attention; 91% for complex attention
- Language
  - BNT: 6%
  - Verbal Fluency: 70%
- Visuospatial: 5%
- Executive Functioning
  - Verbal: 68%; Visual: 6%

Case Example B

- Memory, attention, fluency, and verbal EF tasks are too good
  - What else might be happening?
- Age-Related Macular Degeneration
  - Loss of vision in the center of the visual field caused by damage to the retina
  - Prevalence: 66-74 years 10%; 75+ 30%

CULTURAL, DIVERSITY, & ETHICAL CONSIDERATIONS

CULTURAL & DIVERSITY CONSIDERATIONS

- Racial & ethnic minorities account for 25% of older adults
  - Experience significant health disparities
    - Greater risk of poor health, social isolation and poverty
  - Excessive deaths and excess morbidity and disability are prevalent
  - Overrepresented as high risk for mental illness
    - Less access to mental health services
    - Less likely to receive needed services
    - Receive lower quality services
  - Especially true for minority older adults with serious mental illness

2020 Profile of Older Americans, 2021; American Psychological Association, 2018; SAGE, 2018; U.S. Census Bureau, 2012

CULTURAL & DIVERSITY CONSIDERATIONS

- LGBT account for 4.5% of older adults (Indiana=229,000 as of 2020)
  - Expected to comprise up to 7% by 2030
  - 40% reported their health care providers do not know their sexual orientation
- Often do not access adequate resources necessary
  - Healthcare
  - Housing
  - Caregiving and other social services
- Higher rates of poor physical health and mental distress
  - 41% report having a disability

2020 Profile of Older Americans, 2021; American Psychological Association, 2018; SAGE, 2018; U.S. Census Bureau, 2012

CULTURAL & DIVERSITY CONSIDERATIONS

- Veterans over 60= 11 million
  - Unique cultural, subcultural and health care needs resulting from military service
    - Generally resilient but typically present with greater clinical complexity
    - Older veterans less likely to utilize mental health services compared to younger veterans
      - Stigma, less knowledge/access, and addressing needs with PCP
- Intersectionality of multiple cultural and/or diversity factors (examples)
  - Trans-female veteran

"Thank you, Dr. April, for the appointment one week ago. I have never met anyone with so much 'Cognitive Empathy,' Compassion and Understanding for their fellow man as yourself. Peace be with you."

2020 Profile of Older Americans, 2021; American Psychological Association, 2018; Karel et al., 2020; SAGE, 2018; U.S. Census Bureau, 2012

ADDRESSING A NEED FOR PSYCHOLOGISTS

- APA predicts 15 million older adults will have mental and behavioral health problems by 2030
  - 2/3 of those with a mental health disorder do not receive services
  - Common concerns
    - Depression
    - Anxiety
    - Substance Use
    - Complicated & Anticipatory Grief
    - Dementia
  - Physical comorbidities
    - Older adults with medical problems have higher rates of depression
    - Even mild depression lowers immunity; affects cognitive efficiency

Alzheimer's Disease International, 2021; American Psychological Association, 2014; American Psychological Association, n.d.; Gaunt, 2021

GUIDELINES FOR WORKING WITH OLDER ADULTS

- General skills can be applied to older adults; however, may require medications to treatment (e.g., pace of therapy)
  - Prepare for complexities specific to older adults
- Self-reflect on attitudes/beliefs about aging
  - Inaccurate stereotypes negative biases delivery of psychological services
  - Negative stereotypes self-fulfilling prophecies attitudes toward older adults
- Strive to be aware of social and psychological dynamics of the aging process
  - Late-life development involves both stability and change
  - Normative and non-normative experiences
  - Specific later-in-life issues
  - Special stressors in late adulthood

American Psychological Association, 2014

GUIDELINES FOR WORKING WITH OLDER ADULTS

- Understand diversity in aging process, including gender, race, ethnicity, SES, sexual orientation, disability status, etc.
- Remain familiar with current information about biological and health-related aspects of aging
  - Knowledge about common pharmacological interventions
- Be aware of cognitive changes
  - Better preserved functions rely on stored information and knowledge
  - Older adults are capable of new learning
  - Executive abilities = greater amount of change
  - Many factors influence cognition

American Psychological Association, 2014

PSYCHOLOGICAL INTERVENTIONS

- Psychotherapy to patient
  - Mindfulness
- Psychotherapy/Consult to caregiver(s)
- Environmental strategies
- End of life concerns
- *Health promotion*
  - What's good for the heart is good for the brain
- Insomnia
- Management of chronic diseases
- Substance use
- Suicide prevention

American Psychological Association, 2014; American Psychological Association, n.d.; Dutt et al., 2018;
National Council on Aging, 2021; National Institute on Drug Abuse, 2020

HEALTH PROMOTION

- Promoting physical activity to elevate mood, relieve depressive symptoms and contribute to management of hypertension and diabetes
- The importance of exercise
  - Physical activity in young and/or middle adulthood were less likely to have cognitive impairment as older adults
  - Physical activity at mid-life is associated with a decreased risk of dementia later in life
    - Even if not physically active when younger
  - Regular physical activity may reduce the risk or delay the onset of dementia
    - Especially true for individuals at higher genetic risk for cognitive decline

Excerpt from Krowel, 2017

HEALTH PROMOTION

- Moderate exercise done either in mid- or late-life reduced the likelihood of MCI
- Never too late to begin exercising- at least four hours of exercise/week protects against cognitive impairment in the *oldest old* (age 80+)
- Exercise essentially results in a 20% reduction
  in risk for cognitive impairment of the equivalent
  of taking three years off your age

"What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?"

Excerpt from Krowel, 2017

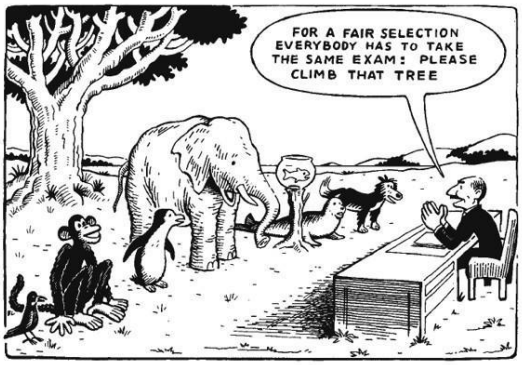
EVIDENCE-BASED PROGRAMS

- Healthy IDEAS (Identifying Depression Empowering Activities for Seniors)
  - Depression self-management for older adults with chronic conditions
  - In-person at home/community; telehealth- 3-6 months, with minimum of 3 in-person visits and 5+ telehealth visits
  - No adaptations available
- PEARLS (Program to Encourage Active, Rewarding Lives for Seniors)
  - In-home depression management and empowerment for older adults
  - In-person at home/community; telehealth- 19 weeks, with 6-8 50-minute sessions
  - Accessibility and cultural adaptations available
- BRITE (Brief Intervention and Treatment of Elders)
  - Substance use screening and intervention for older adults experiencing issues with alcohol, prescription medication, over-the-counter medication, or illicit use
  - In-person at community- 1-5 sessions
  - No adaptations available

National Council on Aging, 2021

ETHICAL CONCERNS

- We have an ethical duty to consider cultural, linguistic, and educational backgrounds of the individuals we assess in all aspects of our practice
- Ethical issues relate to physical and mental health status and the intersectionality of cultural and diversity factors



Byrd, 2013

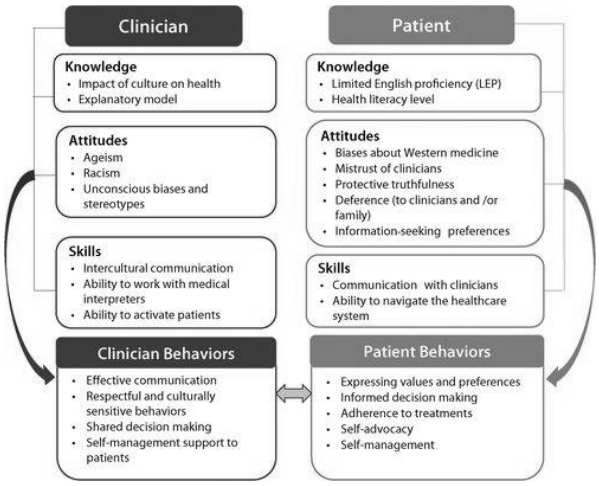
ETHICAL CONCERNS

- Broad concerns
  - Professional competence
  - Confidentiality
  - Informed consent
  - Capacity vs competency
  - Autonomy vs safety
- Unique concerns
  - Driving
  - Finances
  - Relocation
  - Advance directives
  - Treatment decisions
- Legal concerns
- Distinct concerns
  - End of life
  - Elder abuse
  - Substance use
  - Family dynamics
  - Cognitive impairment

Periyakoil, 2019

ETHICAL CONCERNS

- Cultural concerns
  - Knowledge gaps about culture
    - Impacts patient health
    - Explanatory model
  - Culture of biomedicine
  - Clinicians' unconscious biases



Periyakoil, 2019

RESOURCES

- Advocacy & Services for LGBT Elders
- APA Committee on Aging Multicultural Competency in Geropsychology Report
- APA Guidelines for Psychological Practice with Older Adults
- National Council on Aging Behavioral Health Programs
- National Institute on Aging Free Publications
- Star-VA Intervention for Managing Challenging Behaviors
- World Alzheimer Report 2022

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Getting In Touch

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