Beyond the Surface: A Therapist's Toolkit for Dementia Recognition and Intervention

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Accuracy, Utility, and Risks Statement

This program discusses the screening of dementia for the purpose of continuation of care.

Misapplication of this program's materials could result in misdiagnosis and other negative outcomes for clients, as well as increased liability for clinicians.

Program Notices

Conflicts of Interest:

None.

Commercial Support:

None.

Why is this important?

- Early detection is more important then ever before.
- Recent progress in medication trials offer hope of extended life and functioning in those in the early stages of dementia.
- Amyloid-Targeting medications can slow the progression of Alzheimer’s disease.
- Other types of dementia (e.g., cardiovascular dementia) could potentially be halted completely with appropriate detection and intervention.
- Older adults presenting for therapy may be experiencing early signs of dementia that present as mood-related disorders. Therapists who treat older adults are in an advantageous position to detect dementia earlier than other providers.

What will we talk about?

- Definition of Dementia
- Warning Signs of Dementia
- Appropriate Referrals
- Common Screening Tools
- Common Diagnostic Processes
- Treatment Disparities & Cross-Cultural Considerations
- Early-Onset vs. Late-Onset Dementia
- How to Talk to Clients About Dementia Assessment

Definition of Dementia

- "Dementia is a general term for loss of memory, language, problem-solving and other thinking abilities that are severe enough to interfere with daily life. Alzheimer's is the most common cause of dementia."
  - Alzheimer's Association. (n.d.). *What is dementia?* Retrieved from https://www.alz.org/alzheimers-dementia/what-is-dementia
  - Analogous to "Nasal Congestion" or "Fever"
  - Dementia vs. Neurocognitive Disorder (NCD)
  - Mild = No functional impairment; Major = functional impairment
  - Mild Cognitive Impairment (MCI) = Mild NCD without a specification of cause
- There are multiple causes of dementia in the DSM-5-TR
  - Alzheimer's Disease
  - Fronto-Temporal Dementia
  - Vascular Dementia
  - Lewy-Body Demantia
  - Traumatic Brain Injury
  - HIV

Alzheimer's Disease (AD)

- Most common cause of dementia.
  - 60%-90% of all new NCD diagnoses will be due to AD.
  - 5%-10% of all adults will show signs of AD in their 7th decade of life.
  - 25% will show signs of AD from their 8th decade of life onward.
- Characterized by "insidious onset" (i.e. slow & gradual).
- Typical presentation is "amnestic"
  - Amnestic = Impairment in memory and learning.
- Probable vs. Possible
  - Probable = Causative evidence detected via biomarkers and/or family history.
  - Possible = Evidence of biomarkers and/or family history is undetectable or unavailable.

Alzheimer's Disease (AD) cont.

- Diagnosis
  - There is no way to diagnose AD without an autopsy.
  - Biomarkers can offer a significant level of certainty, however.
- Prior to autopsy, there are several methods doctors will use to detect biomarkers for AD.
  - Physical Exam & Neurological Exam
  - Diagnostic Imaging
  - Analysis of CSF
  - Cognitive Testing

Fronto-Temporal Dementia (FTD)

- Insidious and gradual onset.
- Two Variants
- Behavioral Variant
  - Apathy
  - Behavioral Disinhibition
  - Loss of sympathy and empathy
  - Obsessive & Compulsive Behaviors
  - Hyper-Orality & Dietary Changes
  - Prominent decline in social cognition and executive abilities.

Fronto-Temporal Dementia (FTD) cont.

- Language Variant
  - Prominent decline in language ability
  - Speech production
    - Slow rate of speech
  - Word Finding
    - “We went to the…..oh what is it called…….the store!”
  - Object Naming
    - Unable to name objects that you point at
    - Calling a spoon a fork
  - Grammar
    - “No ifs, ands, or buts.”
  - Word Comprehension
    - Trouble understanding what you say

Fronto-Temporal Dementia (FTD) cont.

- Learning & Memory are typically spared.
- Typical onset is earlier than AD—often occurring in the 6th decade of life.
  - Known to onset as early as 3rd decade and as late as the 9th decade of life.
- Disease progression is faster compared to AD.
- Diagnosis
  - Diagnostic Imaging
  - Genetic Testing
  - Family History
    - 40% of new FTD cases have a close family relation to someone else who died of FTD.

Lewy-Body Dementia (LBD)

- Insidious onset and gradual progression
- Fluctuations in cognition and alertness
- Well-formed, detailed visual hallucinations
  - Contrasts with schizophrenia
- Spontaneous onset of Parkinsonian symptoms in conjunction with cognitive decline
- May meet criteria for REM sleep behavior disorder.
  - Described as incredibly vivid dreams.
  - Shouting, talking, or thrashing in sleep.
  - Acting out dreams.
- Severe sensitivity to anti-psychotic medication.

Lewy-Body Dementia (LBD) cont.

- Associated Features
  - Repeated falls, syncope, and unexplained LOC
  - Urinary incontinence
  - Auditory, non-visual hallucinations
  - Systematized Delusions
    - Highly developed & intricate
  - Delusional Misidentification
    - “That’s my daughter.”
    - “You’re not my daughter!”
  - Depression
- Prevalence
  - 1.7%-30.5% of new NCD cases

Vascular Dementia

- Onset after a cardiovascular event
- Common causes:
  - Stroke (large vessel or microvascular)
  - Aneurysm
  - Prolonged loss of oxygen to the brain (e.g., near drowning)
- Prevalence
  - 2nd most common cause of dementia
  - 20%-30% of all stroke victims will be diagnosed with vascular dementia
- Type of impairment is heterogenous since it depends on where the brain damage occurs.

Traumatic Brain Injury (TBI)

- Onset after a TBI
- Signs of TBI:
  - *Any* loss of consciousness
  - Post-trauma amnesia
  - Post-trauma confusion
  - Neurological Signs
    - Seizures
    - Visual field cuts
    - Hemiparesis (paralysis on one side of the body)
    - Anosmia (loss of sense of smell)
- Low correspondence between the severity of the TBI and the level of functional impairment.

Traumatic Brain Injury (TBI) cont.

- Risk factors for high levels of functional impairment post-trauma
  - Little to no healing precautions taken post-trauma
  - Age
  - History of TBI
    - TBI's can "stack" meaning that functional impairment will compound with each successive TBI.
  - Substance Use

Human Immunodeficiency Virus (HIV)

- Caused by viral spread to the brain.
- Results in encephalitis (i.e., swelling of the brain)
- Often manifests as problems with:
  - Executive functioning
  - Processing speed
  - Learning new information
  - Reduction in word fluency
- Autobiographical memory is spared
- 25% will progress to mild NCD
- 5% will progress to major NCD

Common Screening Tools: MoCA

- One of the most commonly used screening tools.
- Gained fame when the former president discussed it during a news interview.
- Meta-Analytic Study (Islam, Hashem, Gad et al., 2023) suggests a cutoff score between 23 & 25.
- ≥26 is considered normal and detected 90% of MCI cases (Nasreddine et al., 2005).
- Cutoff score = 23 yielded sensitivity of 86.5% of cases and 97.7% specificity (Wang et al., 2019).
- Can be administered on paper, iPad (in-person), or via telehealth.
  - Bulk of normative data used the paper administration.
- Can be downloaded for free. Trainings are available.

Common Screening Tools: MMSE

- Folstein Mini-Mental State Examination (MMSE)
  - Another one of the most common screening tools for dementia.
  - Can be downloaded for free.
  - Provides a total score, as well as subscores for different domains (e.g., attention, recall, etc).
  - Scores ≥25 indicate normal cognitive functioning.
  - Maximum score of 30.
  - Scores = 28-30 are quite easy to achieve for most non-clinical adults.
- Domain scores are not informative, but the total score is helpful in detecting impairment.
  - (Truong et al., 2024)

Common Screening Tools: AD-8

- Ascertain Dementia—8 (AD-8)
  - (Galvin et al., 2005)
- Differs from MoCA & MMSE
- Does not use cognitive performance
- Utilizes self-report & informant reports
- Scores of 0 or 1 are indicative of normal functioning
- Scores ≥2 indicate further testing
- This is essentially a symptom checklist
- Preferable to administer to an informant, rather than the client themselves
- Sensitivity = >84%; Specificity = >80%

Referrals

- As a therapist, there are three major referrals you should consider when you suspect on of your clients may be in the early stages of dementia.
  - Neurologists
  - Psychologists
  - Family Medicine Physicians
- The order may depend on test scores found via screener, the preferences of the client, managed care parameters.

Referrals: Neurologist

- When to refer to a neurologist:
  - Test scores on screeners are in the moderate to severe range.
  - Psychological testing is unlikely to provide any *diagnostic* value and might delay treatment.
  - Neurological signs are present:
    - Loss of consciousness
    - Paralysis, tingling, visual field cuts, clumsiness
  - What a neurologist will likely do:
    - Full physical and neurological examination.
    - May order diagnostic imaging.
    - May perform a lumbar puncture (i.e., a “spinal tap”)
    - May refer to a psychologist for baseline testing and to ascertain cognitive strengths & weaknesses.

Referrals: Psychologist

- When to refer to a psychologist:
  - When screener scores via screening are in the mild range.
  - When screener scores are in the normal range, but the client continues to report clinically significant difficulty or distress related to cognitive functioning.
- What a psychologist will likely do:
  - IQ testing (e.g., WAIS-IV)
  - Tests of Executive Function (e.g., DKEFS)
  - Tests of Memory & Learning (e.g., WMS or WRAML)
  - Collateral Interviews
  - Clinical Interviews
  - Psychiatric assessment
  - May refer to neurologist or PCP based on results

Referrals: Family Medicine (PCP)

- When to refer to a Primary Care Provider (Family Medicine)
  - When clients require an insurance prior authorization for other providers.
  - When the client has co-morbid health conditions.
    - Cardiovascular Risk
    - Thyroid Risk
  - After a diagnosis of dementia has been made.
    - PCP's will be the primary source of contact for the management of comorbid health conditions that will exacerbate dementia decline.

Referrals: Occupational Therapist

- When to refer to an occupational therapist:
  - After a diagnosis has been made, and the client is reporting functional impairment.
  - Occupational therapists can assist clients and caregivers in maintaining their autonomy for longer periods.

What do you do as a therapist?

- Given the level of support that individuals with dementia need, it is important to consider two factors:
  - Mental health of the client
  - Mental health of caregivers (Shoesmith, Griffiths, Sass, & Charura, 2020)
- Client mental health:
  - Research on the efficacy of traditional psychotherapies (CBT, ACT, Psychodynamic) for individuals with dementia is still in its infancy.
  - Current research suggests that these therapies can still be helpful with accommodations. Therefore, sticking too closely to a protocol might prevent a client with dementia from accessing the therapeutic effects.
  - Efficacy of psychotherapy is inversely correlated with the severity of the dementia.
  - Cognitive Rehabilitation Therapy vs. Traditional Psychotherapy

What should you do as a therapist?

- Two evidence-based interventions have strong research support for their ability to maintain functioning and slow the rate of cognitive decline.
  - Mindfulness/Meditation (Berk, Warmenhoven, van Os, & van Boxtel, 2018)
    - Shown to reduce the rate of cognitive decline.
    - Reduces the client's perceived stress related the diagnosis.
    - Increases quality of life.
    - Maintains functional brain connectivity.
  - Music Therapy (Lam, Li, Laher, & Wong, 2020)
    - Improved Quality of Life in clients
    - Protects against depression for clients
    - Often includes the caregiver
  - Group Therapy (Cheston & Ivanecka, 2016)
    - Protects against depression for clients
    - Can also alleviate caregiver stress.

What should you do as a therapist?

- Given the lack of RCTs for psychotherapy modalities, it is important to be aware of prevention strategies.
  - Exercise (Nuzum et al., 2020)
    - Even the habit of taking the stairs versus the elevator can be helpful.
    - Exercise promotes cardiovascular health and brain health—two huge factors in most types of dementia.
  - Diet (What Do We Know About Diet and Prevention of Alzheimer's Disease?, n.d.)
    - MIND Diet & Mediterranean Diet (Agarwal et al., 2023)
  - Community (Penninkilampi, Casey, Singh, Brodaty, 2018)
    - Poor social network made it 59% more likely to develop dementia (RR = 1.59)
    - Poor social support made it 28% more likely to develop dementia (RR = 1.28)
- Evidence for these preventative factors is highly replicated and requires interprofessional collaboration.

Cross-Cultural Considerations: Disparities

- Disparities in dementia prevention, detection, and treatment are evident.
- Intersectionality is always present, and socioeconomic status (SES) is a common factor.
  - Exercise
    - Leisure activity is less accessible to people who need to work multiple jobs or long hours. This is compounded if they have children.
    - Certain types of leisure activity may either be inaccessible or avoided for good reason by people of color.
      - Example: Hiking
  - Diet
    - The presence of food deserts may prevent individuals in low-income communities from accessing the foods needed to prevent dementia.
    - Given the grip that White supremacy has over economic policy, people of color face more obstacles to reaching financial independence than their white counterparts.
  - Preventative healthcare
    - Healthcare coverage is disproportionately denied to people of color.
    - Affordable Care Act of 2010 increased insured population by 20 million. State rollbacks—predominately in the South—removed a disproportionate amount of people of color from health insurance.
    - Racism from within the healthcare system—historical and contemporary—erodes the trust of people of color.
    - Psychological measures are normed primarily on people of European descent.

Cross-Cultural Considerations: Disparities

- Women and LGBTQ individuals—especially those who are low SES—are disproportionately denied healthcare.
- Healthcare facilities that provided free or low-cost services are routinely underfunded or harassed.
  - Planned Parenthood, while often spoken of in conjunction with abortion, provides other services important for dementia prevention.
    - Cholesterol Screenings
    - STD testing
    - Hypertension Screenings
    - Diabetes Screenings
    - Thyroid Screenings
- The Reagan administration's neglect of the HIV-AIDS crisis in the 80's continues to be realized as that generation of the LGBTQ begins to reach older age.

Cross-Cultural Considerations: Disparities

- Ways to contribute to healthcare access.
  - Take time to research healthcare disparities in the United States and provide yourself with as much education as you can.
  - Be willing to name the reality of institutional racism in the healthcare system and inquire about your clients' level of trust in the healthcare system.
  - Know the resources available in your community.
  - Provide psychoeducation and explore how your clients can use that knowledge in an empowering way, rather than telling them what to do with it.
  - Connect them with people they trust, whom they might feel safer with as they explore their decision to seek healthcare.

Questions from the Audience

- What is the difference between early onset dementia and late onset dementia.
  - There are two ways to answer this question.
    - First, it depends on the type of dementia.
    - Second, there is overlap with the concept of early onset Alzheimer's disease.
  - Early onset dementia is most commonly associated with early onset Alzheimer's Disease (AD) and Fronto-Temporal Dementia (FTD).
  - "Early onset" = <65 years old
  - Early Onset AD
    - 5%-6% of new AD cases
    - Significantly related to genetic loading
    - Presalin 1 & 2 and amyloid precursor proteins
    - Mutations in these genes means a child has a 50% chance of inheriting the same mutation.

Questions from the Audience

- How do you motivate a client to see a doctor for dementia screening when they are resistant to doing so?
  - Important to discern if the obstacle is external, internal, or both.
    - External Obstacles = Financial concerns, fear of healthcare providers related to discrimination, misinformation
    - Internal Obstacles = Fear of finding out, denial, fear of losing autonomy
  - External obstacles may require therapeutic conversations about how to access resources or utilize social support in opposition to societal barriers.
  - Internal obstacles might benefit from therapeutic approaches like motivational interviewing.
  - Utilize screeners in session.
    - Obtaining a score in session may provide enough data to convince the client of the need to seek further care.
      - MoCA, MMSE, AD-8

Conclusion

- There are measures available for use by clinicians who hold a Master's degree or above, which can help to screen clients for dementia-related symptoms.
- Dementia can mimic psychiatric disorders (i.e., anxiety, depression, OCD, and schizophrenia)
- Knowing the risk factors for dementia, common presentations, and being aware of precipitating factors (e.g., a stroke) can help clinicians top spot dementia symptoms early.
- Therapists—especially those working in primary care—are uniquely equipped to provide counseling on preventative measures like exercise, diet, and socialization.
- Disparities exist based on race and ethnicity, sexuality, and gender.

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders, 5th (Ed).* Washington, DC: American Psychiatric Publishing.

Agarwal P, Leurgans SE, Agrawal S, Aggarwal NT, Cherian LJ, James BD, Dhana K, Barnes LL, Bennett DA, Schneider JA. *Association of Mediterranean-DASH Intervention for Neurodegenerative Delay and Mediterranean Diets With Alzheimer Disease Pathology. Neurology.* 2023 May 30;100(22):e2259-e2268. doi: 10.1212/WNL.0000000000207176.

Berk L, Warmenhoven F, van Os J, van Boxtel M. *Mindfulness Training for People With Dementia and Their Caregivers: Rationale, Current Research, and Future Directions. Front Psychol*. 2018 Jun 13;9:982. doi: 10.3389/fpsyg.2018.00982.

Cheston R, Ivanecka A. Individual and group psychotherapy with people diagnosed with dementia: a systematic review of the literature. Int J Geriatr Psychiatry. 2017 Jan;32(1):3-31. doi: 10.1002/gps.4529.

References

Galvin JE, Roe CM, Powlishta KK, Coats MA, Muich SJ, Grant E, Miller JP, Storandt M, Morris JC. The AD8: a brief informant interview to detect dementia. Neurology. 2005 Aug 23;65(4):559-64. doi: 10.1212/01.wnl.0000172958.95282.2a. PMID: 16116116.

Islam N, Hashem R, Gad M, Brown A, Levis B, Renoux C, Thombs BD, McInnes MD. Accuracy of the Montreal Cognitive Assessment tool for detecting mild cognitive impairment: A systematic review and meta-analysis. Alzheimers Dement. 2023 Jul;19(7):3235-3243. doi: 10.1002/alz.13040. Epub 2023 Mar 19. PMID: 36934438.

Lam HL, Li WTV, Laher I, Wong RY. Effects of Music Therapy on Patients with Dementia-A Systematic Review. Geriatrics (Basel). 2020 Sep 25;5(4):62. doi: 10.3390/geriatrics5040062

Nuzum H, Stickel A, Corona M, Zeller M, Melrose RJ, Wilkins SS. Potential Benefits of Physical Activity in MCI and Dementia. Behav Neurol. 2020 Feb 12;2020:7807856. doi: 10.1155/2020/7807856.

Penninkilampi R, Casey AN, Singh MF, Brodaty H. The Association between Social Engagement, Loneliness, and Risk of Dementia: A Systematic Review and Meta-Analysis. J Alzheimers Dis. 2018;66(4):1619-1633. doi: 10.3233/JAD-180439.

References

Shoesmith, E. K., Griffiths, A., Sass, C., & Charura, D. (2020). Effectiveness of counselling and psychotherapeutic interventions for people with dementia and their families: a systematic review. Ageing & Society. https://doi.org/10.1017/S0144686X2000135X

Truong, Q.C., Cervin, M., Choo, C.C., Numbers, K., Bentvelzen, A.C., Kochan, N.A., Brodaty, H., Sachdev, P.S. and Medvedev, O.N. (2024), Examining the validity of the Mini-Mental State Examination (MMSE) and its domains using network analysis. Psychogeriatrics, 24: 259-271. https://doi.org/10.1111/psyg.13069

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