

DEMENTIA IN AGING HOMELESS VETERANS: RESEARCH AND CLINICAL IMPLICATIONS

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Homeless
Program
Office

DEMENTIA IN AGING HOMELESS VETERANS: RESEARCH AND CLINICAL IMPLICATIONS

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1/Definitions and Basic Facts

- Although symptoms of dementia are described in the writings of Greeks centuries ago, the recognition and scientific study of Alzheimer's disease (AD) and other dementias has been a research effort only in the last 70 years or so.
- The reason for this is that AD and other dementias are diseases of older age, and prevalence has become notable only in the latter half of the 20th century.



2/Definitions and Basic Facts

Year	Lifespan	
	Men	Women
1900	47	49
1940	62	67
1980	71	78
2000	75	80



3/Definitions and Basic Facts

- With this increase in lifespan, there have been growing public health concerns about the impact of AD and other dementias as the size of the U.S. population age 65 and older continues to increase.
- This segment of the population of Americans is projected to grow from 53 million in 2018 to 88 million by 2050.



4/Definitions and Basic Facts

- A high prevalence of dementia would be expected in the aging Veteran population.
- However, an increasing number of alarms are being raised about symptoms of significant cognitive loss in homeless Veterans in their 50s, substantially below the usual age of risk for dementia.



5/Definitions and Basic Facts

In this presentation I will provide:

- An overview of current research status on aging and cognitive decline and of risk for AD and other dementias.
- Evidence for cognitive impairment and functional decline in homeless populations and Veterans experiencing homelessness.
- Implications and recommendations for clinical assessment.



6/Definitions and Basic Facts

- The term dementia describes an irreversible condition characterized by progressive loss of cognitive abilities, such as memory and language, to the degree that everyday functioning (ADLs and IADLs) is eventually impaired.
- The most common cause is Alzheimer's disease (70+% of cases). Other types include vascular, Lewy body, and frontotemporal dementias.



7/Definitions and Basic Facts

- Most cases of dementia have onset at age 65 or older. Risk increases with age.
- The very large majority of cases of Alzheimer's disease (AD) dementia are called "late onset," because they occur at age 65+.
- Early onset AD, occurring as early as age 40, is very uncommon, comprising only 1% of cases.



8/Definitions and Basic Facts

- The early onset cases are more rapidly progressive. As a result, these cases are usually quickly recognized.
- Early onset AD is caused by a spontaneous genetic mutation which in almost all cases does not affect offspring.
- It is very unlikely that you will ever see an early onset case of AD in your program.



9/Risk Factors

- Late onset AD and other dementias have multiple risk factors. The genetic risk is highly complex and involves multiple genes.
- These dementias are not inherited in classic "dominant/recessive" pathways, as is handedness, for example, but rather as an interactive combination of these multiple genes.



10/ Risk Factors

- Because of this complexity, there are no practical genetic methods of predicting who will develop AD and other dementias.
- Family history is not a good predictor: about as many people without a family history develop AD as those with a family history.
- Notably, studies of monozygotic (identical twins) with late onset AD show only a 50% concordance.



11/ Risk Factors

- The risk of AD and other dementias increases with age beyond age 65.
- Age is therefore unquestionably the best predictor of AD and other dementias.
- The Veteran population is aging and approximately 45% of Veterans are now age 65+--they have entered the age of risk for dementia and particularly AD.



12/ Assessing Cognitive Change

- The Veteran homeless population also has a significant number of age 65+ Veterans. In FY15, 8.3% (1 in 12) of Veterans receiving housing services from VA were age 65+.
- The primary, and usually the earliest, symptoms of dementia are cognitive, and memory loss is the cardinal feature.



13/Assessing Cognitive Change

- Significant memory loss is not a characteristic of normal aging. However, some degree of cognitive decline does occur, beginning as early as age 50, in some individuals.
- “Normal” cognitive decline is usually characterized by common complaints that do not interfere with functional capacity (the ability to perform ADLs and IADLs).



14/Assessing Cognitive Change

- "I came into this room to get something and I forget what it is."
- "I can't find my car keys (glasses, wallet)."
- "I know I put that screwdriver (spatula, hairbrush) on that counter and now it is gone."
- "I ran into a person at Home Depot who is a church member but I couldn't remember her name."



15/Assessing Cognitive Change

- What are the early signs of possible dementia in someone who is age 65 or older? Research has identified these signs:
 - 1. Memory loss that disrupts daily life: forgetting recently learned information (a nephew getting engaged), important dates or events, asking for the same information over and over; relying on others to take over or complete tasks.



16/Assessing Cognitive Change

- 2. Problems in planning and execution: difficulty in following a plan or working with numbers, confusion in following a familiar recipe or keeping track of monthly bills, taking much longer to do routine task, confusion in following the rules of a familiar game.
- 3. Repeatedly losing track of dates, seasons, and the passage of time.



17/Assessing Cognitive Change

- 4. Problems following/joining a conversation: stopping in the middle of a conversation, repeating the same information, problems finding the right word or calling things by the wrong name (e.g., calling a wrench a "turn tool").



18/Assessing Cognitive Change

- 5. Losing or misplacing things: putting things in unusual places (e.g., wallet in bathroom cabinet), losing something and not being able to retrace steps to find the object, accusing others of stealing.
- 6. Poor judgment: giving large amounts of money to telemarketers, paying less attention to grooming or hygiene.



19/Assessing Cognitive Change

- 7. Withdrawal: decreased participation in social activities or sports, trouble keeping up with a favorite sports team, stopping a hobby or interest without a good reason.
- 8. Changes in mood/personality: episodes of confusion, suspiciousness, depression, fearfulness; easily upset at home, work, with friends or in places when out of comfort zone.



20/Some Considerations

- Sudden onset of confusion, disorientation, or behavioral change is not a feature of dementia or normal aging at any age and should trigger a medical evaluation.



21/Other Factors

- There are a few factors that accelerate the age of onset of dementia. The most important of these is significant head trauma producing solid evidence of substantial brain injury or repeated minor incidents of head trauma (e.g., as is seen in professional boxers and football players).



22/ Other Factors

- A history of common head injury is reported by most older adults and the large majority of individuals with alcohol use disorder. In homeless populations, history of head injury reports run from 60-98%. There is no evidence that these minor injuries are related to earlier onset of late onset dementia.
- Alcohol abuse over long periods of time has a small effect on increase in risk for AD.



23/ Other Factors

- PTSD has a small but significant impact on risk for dementia.
- Reliable assessment of cognition should be done after at least 30 days of sobriety, after stabilization on psychiatric medications, and after acute medical problems have been resolved.



24/Onset Age—Homeless Veterans?

- The research on age of onset for late onset Alzheimer's disease and other dementias is very consistent in establishing age 65 as the beginning of the risk period.
- However, many clinicians working with homeless Veterans have reported dementia occurring in late 50s.
- Is there any reason to suspect that homelessness may be a risk factor that lowers age of onset?



25/Onset Age—Homeless Veterans?

- We do know from recent studies that both older (age 55+) and younger (age 30-45) Veterans with history of homelessness have significantly reduced lifespans.
- Notably, the large majority of these Veterans die from the same diseases as Veterans without any history of homelessness.
- These results suggest that homeless Veterans are especially vulnerable to the fatal effects of these diseases.



26/Onset Age—Homeless Veterans?

- It has been hypothesized that this susceptibility is due to “accelerated biological aging” – aging in all physiologic systems—produced by a variety of stressors, including nutritional deficits, depleted immune systems, poor dental hygiene, psychological stressors.



27/Onset Age—Homeless Veterans?

- Recent studies have examined geriatric conditions (e.g., falls, cognitive impairment, frailty, sensory impairment, urinary incontinence) in homeless adults age 50+.
- The prevalence of these conditions was found to be higher than that of housed adults 20 years older and was associated with vulnerability factors common to homelessness and biological aging—medical comorbidities, and alcohol/drug use problems, poor health care.



28/Onset Age—Homeless Veterans?

- In summary, limited research indicates that homeless individuals are at risk to show cognitive impairments and functional problems in their 50s.
- Research hypothesis #1: homeless Veterans are vulnerable to early development of dementia.
- Research hypothesis #2: the prevalence of dementia in homeless Veterans age 65 and older is much higher than that of the Veterans without a history of homelessness.

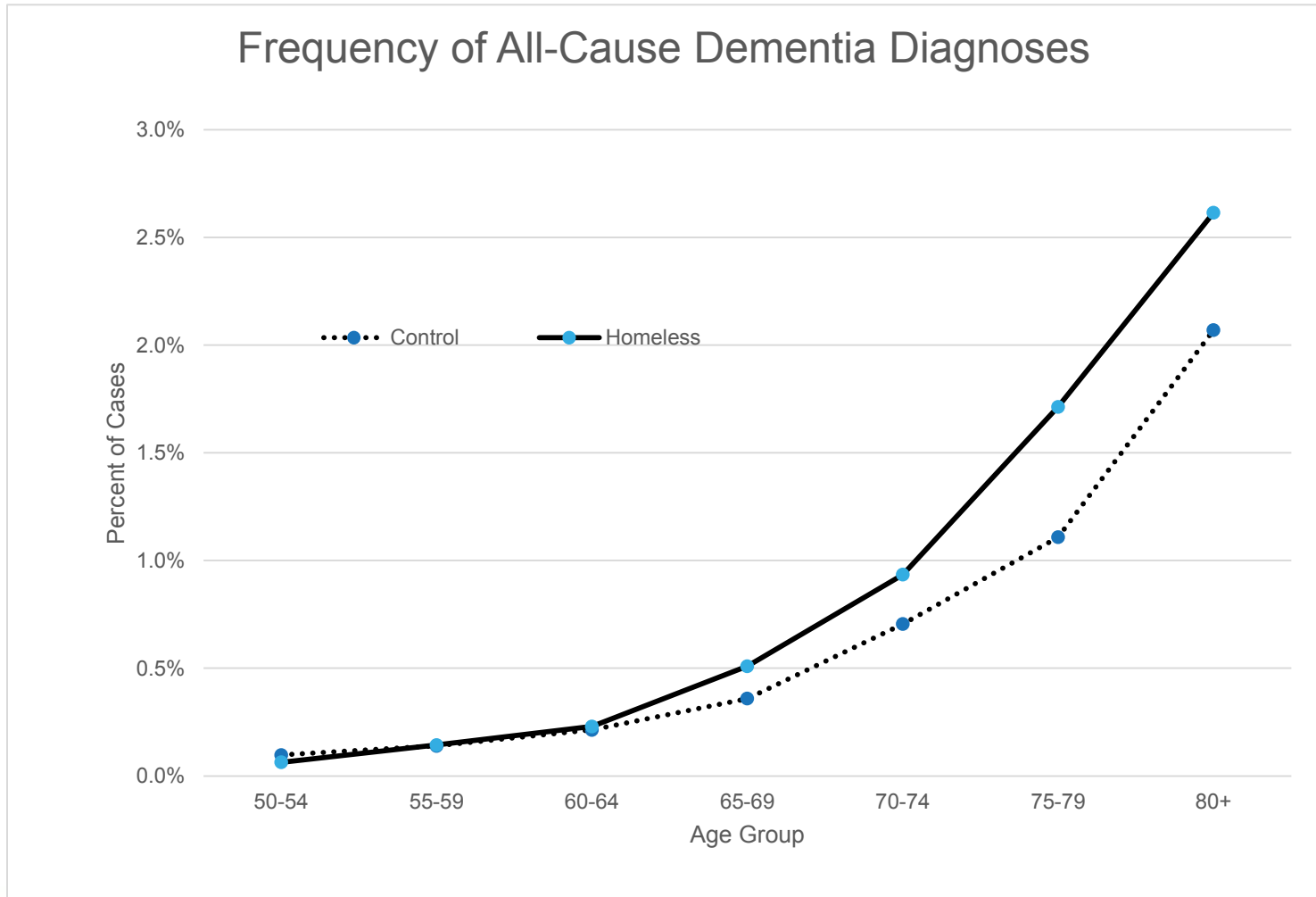


29/Onset Age—Homeless Veterans?

- We examined the medical records of 221,000 Veterans with a history of homelessness from 2000 through 2016 and 273,000 randomly selected non-homeless Veterans receiving VA care during the same time period.
- We reviewed medical records for visits through 2016.
- We specifically looked at diagnoses at their latest OPT visit, recording diagnoses of different types of dementia (e.g., Alzheimer's disease, vascular, frontotemporal).



30/Onset Age—Homeless Veterans?



31/Onset Age—Homeless Veterans?

- There are very few cases of dementia prior to age 65 and no differences between homeless and nonhomeless veterans.
- Homeless veterans have a small, but significantly higher rate of dementia, beginning at age 65 and increasing especially after age 75.



Contact Info

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- “Early Cognitive Decline and Dementia in Homeless Veterans”: Brief available at National Center on Homelessness Among Veterans website under the Research Publications tab-- Research and Model Implementation Briefs section



Additional Slides on Screening

Will be presented if time allows.



How to Assess and Refer

- The VA does not recommend routine screening of older Veterans.
- If clinical assessment of a Veteran age 65+ reveals cognitive problems that affect IADLs, a quick screening will help to focus a consult request.
- The most reliable and efficient of the screening instruments for dementia is the Montreal Cognitive Assessment (MOCA).



How to Assess and Refer

- The MOCA has been widely studied and used in VA settings. It is easy to learn to administer and can be completed and scored in about 15 minutes. There is no fee/charge.
- The MOCA form and instructions for administration/interpretation for the English version can be obtained at <http://www.mocatest.org/>. See MOCA tutorials on YOUTUBE (ACTonALZ site).



How to Assess and Refer

- MOCA consists of 13 mini-tests:
 - Trail-Making, Copying, Clock Drawing
 - Animal Naming
 - List Learning (Immediate Recall)
 - Digit Span, Letter ID, Serial 7s
 - Sentence Repetition, Letter Fluency
 - Abstractions
 - List Recall (Delayed Recall)
 - Orientation



How to Assess and Refer

- If your MOCA screen is positive, you want to refer the Veteran for a full dementia workup.
- Check with your local VA hospital/clinic Neurology and/or Psychology Services to see which clinics handle these referrals.
- Your referral should briefly state the clinical reason for concern and the result of the MOCA evaluation.



Sample Consult Request

This is a 68 y/o homeless Veteran with HS educ, previously employed as a store sales manager. He is sober X 2 mos., medically stable, has no acute health problems. In our program, he has difficulty organizing his day, becomes confused following even simple instructions, forgets appts, asks same questions about appointment, tasks, etc. repeatedly. A MOCA administered yesterday revealed a score of 21. Please evaluate for cognitive decline/dementia.

