Multi-Morbidity and Behavioral and Psychological Symptoms in Individuals with Alzheimer's Disease (AD) in South Carolina

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# Outline



#### Background



Purpose of the Study



#### Literature Review



Methodology

# Background



Alzheimer's Disease and Related Dementias

- AD/ADRDs



Multi-morbidity



Behavioral and psychological symptoms in dementias (BPSD)



SC Alzheimer's Disease Registry Sub-sample

Literature Review: Alzheimer's Disease

#### Prevalence

\*5.6 million Americans  $\geq$  65 and older living with AD

\*92,000 persons  $\geq$  65 and older living with AD in SC; projected to increase to 120,000 by the year 2025

#### Burden

\*Increase use of healthcare services and systems by patients \*Increase cost for treating AD \*Older African Americans are about twice as likely to have AD as older Whites Literature Review: Alzheimer's Disease

#### **Studies and Reports:**

\*Alzheimer's Association 2019 Facts and Figures

\*Babulal et al., 2018 (expected growth of in numbers of AD cases.

\*Cerejeira, Lagarto & Mukaetova-Ladinska, 2012 (indicated that AA more likely to have ADRD.

\*Mayeda et al., 2016 (found noticeable racial disparities in dementia incidence, with highest rates among AA, American Indians, and Alaska Natives

\*Happ et al. 2018 (indicated the burden of AD)

### Literature Review: Multi-morbidity Studies

## MM Prevalence

**M** Burden



Literature Review: Behavioral and Psychological Symptoms in Dementias (BPSD)

### M Prevalence

Burden



Frequency & Severity



Importance in AD

# Purpose of the Study

To explore multimorbidity and BPSD factors associated with Alzheimer's Disease in older adults by race. To contribute to the study of ADRD by investigating factors associated with Alzheimer's Disease in older persons by race.

# Hypothesis

 We predict that there will be more cases of multi-morbidity and behavioral and psychological symptoms among African Americans than Whites living with Alzheimer's Disease in South Carolina using a sub-sample from the South Carolina Alzheimer's Disease Registry.



# **Research Questions**



To what extent do clusters of multi-morbidity associated with Alzheimer's Disease differ by race?



To what extent do BPSDs associated with Alzheimer's Disease differ by race?



Are clusters of multi-morbidity associated with the frequency and severity of BPSDs? Are there differences by race?

#### Methodology

Research Design and Sample







### Behavioral Factor Study- Interviewer Introduction Questions NPI Instrument



#### A. DELUSIONS

Does the patient have beliefs that you know are not true (for example, insisting that people are trying to harm him/her or steal from him/her)? Has he/she said that family members are not who they say they are or that the house is not their home? I'm not asking about mere suspiciousness; I am interested if the patient is convinced that these things are happening to him/her.

☐ Yes (If yes, please proceed to subquestions)

□ No (If no, please proceed to next screening questions)

🗆 N/A

	Statement	Yes	No
	Does the patient believe that he/she is in danger - that others are planning to hurt him/her?		
2.	Does the patient believe that others are stealing from him/her?		
3.	Does the patient believe that his/her spouse is having an affair?		
	Does the patient believe that unwelcome guests are living in his/her house?		
	Does the patient believe that his/her spouse or others are not who they claim to be?		
6.	Does the patient believe that his/her house is not his/her home?		
7.	Does the patient believe that family members plan to abandon him/her?		
	Does the patient believe that television or magazine figures are actually present in the home? (Does he/she try to talk or interact with them?)		
9.	Does the patient believe any other unusual things that I haven't asked about?		

## Behavioral Factor Study- Interviewer Introduction Questions NPI Instrument

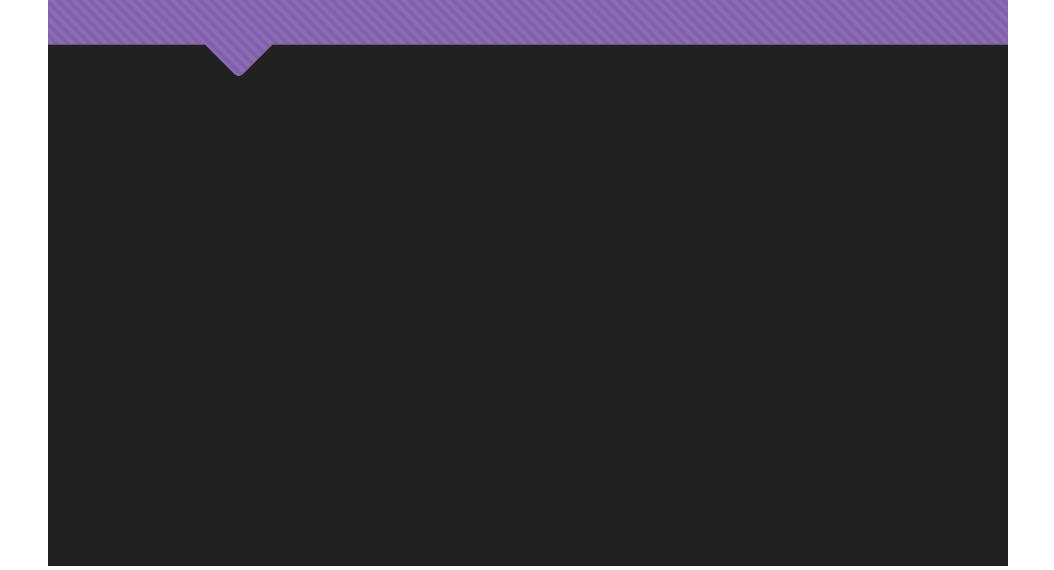
If the screening question is confirmed, determine the frequency and severity of the delusions.			
Frequency:	Rarely - less than once per week		
	Sometimes - about once per week		
	Often - several times per week but less than every day		
	□ Very often - once or more per day		
Severity:	Mild - delusions present but seem harmless and produce little distress in the patient.		
	Moderate - delusions are distressing and disruptive.		
	Severe - delusions are very disruptive and are a major source of behavioral disruption. (If PRN medications are prescribed, their use signals that the delusions are of marked severity.)		
Distress: How emotionally distressing do you find this behavior?			
	□ Not at all		
	Minimally (almost no change in work routine)		
	Mildly (almost no change in work routine but little time rebudgeting required)		
	Moderately (disrupts work routine, requires time rebudgeting)		
	Severely (disruptive, upsetting to staff and other residents, major time infringement)		
	Very Severely or Extremely (very disruptive, major source of distress for staff and other residents, requires time usually devoted to other residents or activities)		
7 00004			

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# **Future Direction**

- Provide preliminary findings that will...
  - Improve quality of life for older adults living with AD/ADRD
- Future research
  - Expand analyses into a larger sample
  - Planning of public and community health programs, facilities

# Thank You



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