A Brain Anatomy Visual Tool in the Education of Patients with Cognitive Disorders and Their Caregivers



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Introduction

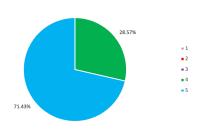
- As the aging population rises, so does the prevalence of dementia and mild cognitive impairment (MCI).
- Poor general understanding of cognitive disorders have been found to cause stress on family members and caregivers.
- Visual tools have been used in patient education to improve health literacy amongst patients and caregivers but has yet to be explored in patients with cognitive disorders and memory loss.
- The Aging Brain Clinic (ABC) aims to help patients better understand their diagnosis, possible symptoms, retained cognitive abilities, and how to adapt to cognitive changes in their everyday lives.

Methods

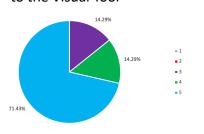
- Design a visual representation of the brain's functional areas based on Brodmann Areas, specifically in the left hemisphere
- The visual tool is used in already-scheduled clinic visits to guide discussions about diagnoses
- After discussions, consented patients and caregivers respond to a paper-pencil survey on the effectiveness of the visual tool
- Questions gauge perceived stress and anxiety pre and post appointment and the overall helpfulness of the tool

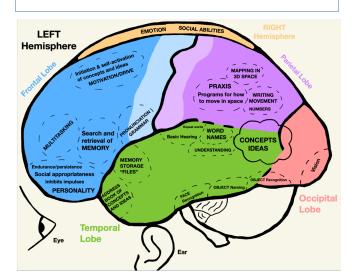
Results

Scores on How Helpful Caregivers Found the Visual Tool



Scores on How Likely Caregivers will Refer Back to the Visual Tool





Discussions

Caregiver Quotes

- · "It helped my understanding."
- "This is the thing that helped me more than anything."

Limitations and Future Directions

- Patients with certain cognitive impairments (e.g. aphasia) have a harder time answering the survey.
 - A modified version with fewer questions and a visual scale using faces alongside numbers and words has been created
- Limited time during already-scheduled visits hinder the administration of the survey and data collection, resulting in a small sample size
 - Stated is preliminary findings of a positive relationship between the use of a visual tool in the education of patients with cognitive disorders and their caregivers
 - Continue data collection to grow sample size to establish a relationship and address confounding variables
 - Response bias could be present in survey responses

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