Samantha Rinehart Post

For this week's discussion, I chose to talk about a type of memory impairment: Alzheimer disease. This disease is a cause of dementia. What exactly is dementia? Dementia is when an individual loses at least two cognitive domains which include the ability to process language, memory, personality, behavior, etc. "The definitive diagnosis of AD requires post-mortem evaluation of brain tissue, though cerebrospinal fluid (CSF) and positron emission tomography (PET) biomarkers combined with several relatively new clinical criteria can aid diagnosis in living patients (Weller, 2018)." The DSM-5 was actually reclassified and added more specific diagnostic criteria for an individual to be diagnosed with Alzheimer's disease. A least invasive technique was developed to help diagnose Alzheimer's by using a PET scan on individuals in order to detect amyloid-β peptides. Studies showed that these were accurate, especially after more post-mortem autopsies were conducted (Weller, 2018).

What are some causes of Alzheimer's? Discovering a cause still baffles many scientists to this day; however, some say that sever Alzheimer's could be the result of a severe genetic mutation. Brain imaging allows scientists to track the progression of Alzheimer's disease to see how fast it progresses as well as how bad it progresses. Studies show that if an individual has a form of the apolipoprotein E (APOE) gene, they are more likely to be at risk for developing the disease (U.S., 2019). What type of treatments are available for Alzheimer's? Cholinesterase inhibitors donepezil, rivastigmine, and galantamine are all types of therapies that are recommended for those who have mild or severe Alzheimer's. Individuals are also encouraged to manage their cardiovascular system. Most recently, in the last decade, omega-3 fatty acid supplements (example: fish oil) have been utilized due to the benefits they provide the cardiovascular system (Weller, 2018).

U.S. Department of Health and Human Services. (2019, May 22). Alzheimer's Disease Fact Sheet. Retrieved from https://www.nia.nih.gov/health/alzheimers-disease-fact-sheet

Weller, J., &Budson, A. (2018). Current understanding of Alzheimer's disease diagnosis and treatment. *F1000Research*, *7*, F1000 Faculty Rev-1161. https://doi.org/10.12688/f1000research.14506.1