12/4/12

SPLH 660

Research Paper

Can Alzheimer's Disease Be Diagnosed Earlier if People are More Aware of Early Signs?

Imagine a family member or loved one slowly starts to slip away and begin to not recognize you or remember your name. The majority of patients tested for cognitive memory loss are often misdiagnosed and symptoms often go untreated because of sparse knowledge of the disease called Alzheimer's. With so many cases going unnoticed for such a long period of time, when it actually progresses at a fast rate the damage is irreversible. Spreading awareness of this debilitating disease can not only help the families to prepare themselves, but also help the diagnosed member slow down the onset with various therapies.

Four articles that I chose to review help back up my research question and raise awareness to dementia and more specifically Alzheimer's (Galvin, J. E., Meuser, T.E, Boise, L., McConnel, C.,2009; Brodaty, H., Moore, C. M.,1998; Kuyumcu, M. E., Yesil, Y., Oztürk, Z. A., Halil, M., Ulger, Z., Yavuz, B. B., . . . Ariogul, S.,2012; Chan, W., Darby, E. J., Doody, R. S., Pavlik, V. N., & Rountree, S. D.,2012). All four of these studies give insight to why Alzheimer's Disease occurs in people, tests that can be given to diagnosis the disease, medications that can be useful, and how to raise more awareness within a population.

Three scoring methods were used in calculating cognitive impairment such as the DSM-III-R (Brodaty, H., Moore, C. M.,1998) while another research covered

which antidementia drugs proved to help cognitive awareness and how it related to life span expectancy based on exposure (Chan, W., Darby, E. J., Doody, R. S., Pavlik, V. N., & Rountree, S. D.,2012).

To first determine how dementia is diagnosed, most families consult within their family physicians that usually don't always have the exact expertise to diagnose the disease because each opinion varies based on the study by Galvin et al., (2009). It also shows that there are various factors that have to be taken into account when a patient with signs of dementia is being evaluated. How are people even supposed to know if their loved ones have dementia when the symptoms are so adverse and barely even talked about? The best way is to educate more people by raising awareness and increasing the knowledge of this disease. Increasing these aspects will then add to funds for research and preparedness within families. So this leads me to the research question: How can awareness of Alzheimer's be increased by looking for concrete symptoms and signs at an early stage to address the problem and get treatment?

Method

Participants. The participants that will be selected at random to retrieve data for statistical analysis will be families that have a family history of the disease and those that have no history or onset. A very large number of families will be selected in the hopes of receiving an equal amount of data that can be helpful for the ending result of awareness. All will be randomly selected in various regions of the nation.

All participants will be native English speakers within different regions of the US. All families will be of normal intelligence and confirmed family history of disease or family member that has had onset or more than a year of known diagnosis.

Measures. To make sure that the data is measureable and useful, a very detailed survey will be mailed to each family. To be more specific, the survey will ask a myriad of questions such as family history, symptoms, age of onset, socioeconomics, medication used, how everyday life is affected, and how much information they know about the said disease. Because this survey is so meticulous, the time it takes to fill it out and consult their family will have to make the study longitudinal before data can be reliable to use. To make it easier for questions to be measured more precisely it will follow the Likert Scale and range from 1-7 based on the each area being asked. It will follow weather they strongly agree, disagree, indifferent, and other measures that will help the validity of the survey. Based on those results we will be more likely to see how much knowledge was known before the onset of the disease and make it a reference point of where to start with actual awareness.

Reliability. This will be tested by inter-rater reliability. Since we are giving the same survey to a mass of families we want to see how similar they are and differ based on the data collected from the survey. The survey will also be assessed by a second observer to determine correlation between the two different groups of families that sent in their answered surveys.

Strengths: Some areas that will help the validity of creating awareness will be how large of scale the survey will be sent out and how detailed the questions will be

asked and rated. Having a large database will only add to the reliability of the results and help understand how much is known about the disease and begin to increase it.

Weaknesses: Areas that may lack support and reliability would be if the survey ended up having results that were biased based on families with vs. families without the disease. It may occur to the families that have no history of the disease that they would find no need to complete the survey. This could possibly limit the amount of data that can be collected and compared on that side of the spectrum.

Data Analysis. Once the data has been obtained and scored, the statistics hopefully depict a certain level of awareness that can be improved on. After finding the level of current knowledge of the population it will then give a concrete idea of where the starting point will be to begin a campaign of awareness for the disease. Within this campaign, information on the symptoms and prognosis will reach out to more people, thus attracting more money for research and creating better resources to test this disease that we still do not fully understand.

Works Cited

Galvin, J. E., Meuser, T.E, Boise, L., McConnel, C. (2009). Predictors of physician referral for patient recruitment to Alzheimer's disease clinical trials. Alzheimer's Dis Association Disorder Manuscript, 23, 352-356.

Brodaty, H. & Moore, C. M. (1998). The clock drawing test for dementia of the alzheimer's type: A comparison of three scoring methods in a memory disorders clinic. International Journal of Geriatric Psychiatry, 12 (6), 619-627.

Kuyumcu, M. E., Yesil, Y., Oztürk, Z. A., Halil, M., Ulger, Z., Yavuz, B. B., . . . Ariogul, S. (2012). Alzheimer's disease is associated with a low prevalence of hypertension. Dementia and Geriatric Cognitive Disorders, 33(1), 6-10.

Chan, W., Darby, E. J., Doody, R. S., Pavlik, V. N., & Rountree, S. D. (2012). Factors that influence survival in a probable Alzheimer disease cohort. Alzheimer's Research & Therapy, 4, 16.

SPLH 660 Grading Rubric

Studen _____ _____ **Grader** _____ **Brady** _____ **Assignment: Final Paper** **75/100**

Trait	Skills	Course Specific Notes	Grader Comments	Grade			
				Mastered	*Emerging*	*Basic*	*Absent*
Content /30	Content is appropriate for topic/question/ assignment	review is a synthesis of information and not merely a string of abstracts	not a string of abstracts which is good, but they do not seem to be related to each other	All skills present	Most skills present	Few skills present	All skills absent
	Content is accurate	major trends and commonalities in the research are pointed out	the articles reviewed don't appear to mention awareness, so they don't lead to the research question				
		gaps in the literature are pointed out	not really				
	Content is complete/sufficient in scope	review ends with a stated research problem that can be addressed through research	yes				
		Methods includes description of participants, recruitment, and instruments/measures	yes- good!				
		Descritipn of research desgn is included	no, but this is a descriptive study without a real design				
Critical Thinking /30	Appropriate critique/critical evaluation of content	review discusses strengths and weaknesses in sampling, instrumentation, and/or experimental controls	this area is weak, needs more critical evaluation	All skills present	Most skills present	Few skills present	All skills absent
	Accurate interpretation/conclusions from content	validity and reliability of measures described	description of inter-rater reliability is inaccurate				
	Appropriate integration between topics/articles or with content from course	plan is described for analyzing results to determine if outcomes are significant	no, but this is a descriptive study so should have just talked about describing the results				
Clarity/ Organization /30	Logical flow/sequencing. Organized and cohesive.	Review begins with statement of prolem aea, statistics or a conceptual derinition	yes, very good	All skills present	Most skills present	Few skills present	All skills absent
	Writing is easy to understand upon first reading.	references are grouped together according to a common topic	Not sure, they don't seem related to the research question				
	Writing is appropriate to the type of audience (e.g., professional) and level of audience (e.g., advanced vs. naïve).	review moves from subtopic to subtopic	not really				
		Methods are described in sufficeint detail for replication	no, how many participants? How will results be summarized?				
Mechanics 10	Puctuation and spelling are error free.	quotations are used sparingly or not at all		All skills present	Most skills present	Few skills present	All skills absent
	Word choice and sentence structure are appropriate (i.e., no awkward phrasing or word use).	transition terms such as however, as a consequence, etc. are used					
	Professional conventions are adhered too (e.g., appropriate citation conventions).	references are cited in text using APA style Reference list is formatted correctly according to APA style	incorrect in text citatios				

Instructor's grade	
Content	24/30
Critical Thinking	22/30
Clarity organization	20/30
Mechanics	9.00
Total	75