Cultural Inaccuracy: Misidentification of Alzheimer's Disease Indicators in the American Indian Population

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Background

√ The American Indian/Alaska Native are the original inhabitants of North America and represent 1% of the Unites States population which just represent federally recognized tribes with a number of 567.

√ The mayor health care provider is the Indian health services with an approximately expenditure of $2,849 per capita which is less than 60% in comparison with the national budget.

√ The phenomenon in this study is the Alzheimer's which is a progressive disease categorized as a cognitive impairment with characteristic such as: Aphasia, Dyspraxia and memory loss.

√ The biggest problem is that there is not enough up to date data related to the American Indian community. Besides, there are not sufficient efforts in studding this community because they represent a small group. Therefore, there has been little culturally-informed and targeted research representing a health disparity gap for American Indians/Alaska Natives (AI/AN) that grows in this area of inquiry.
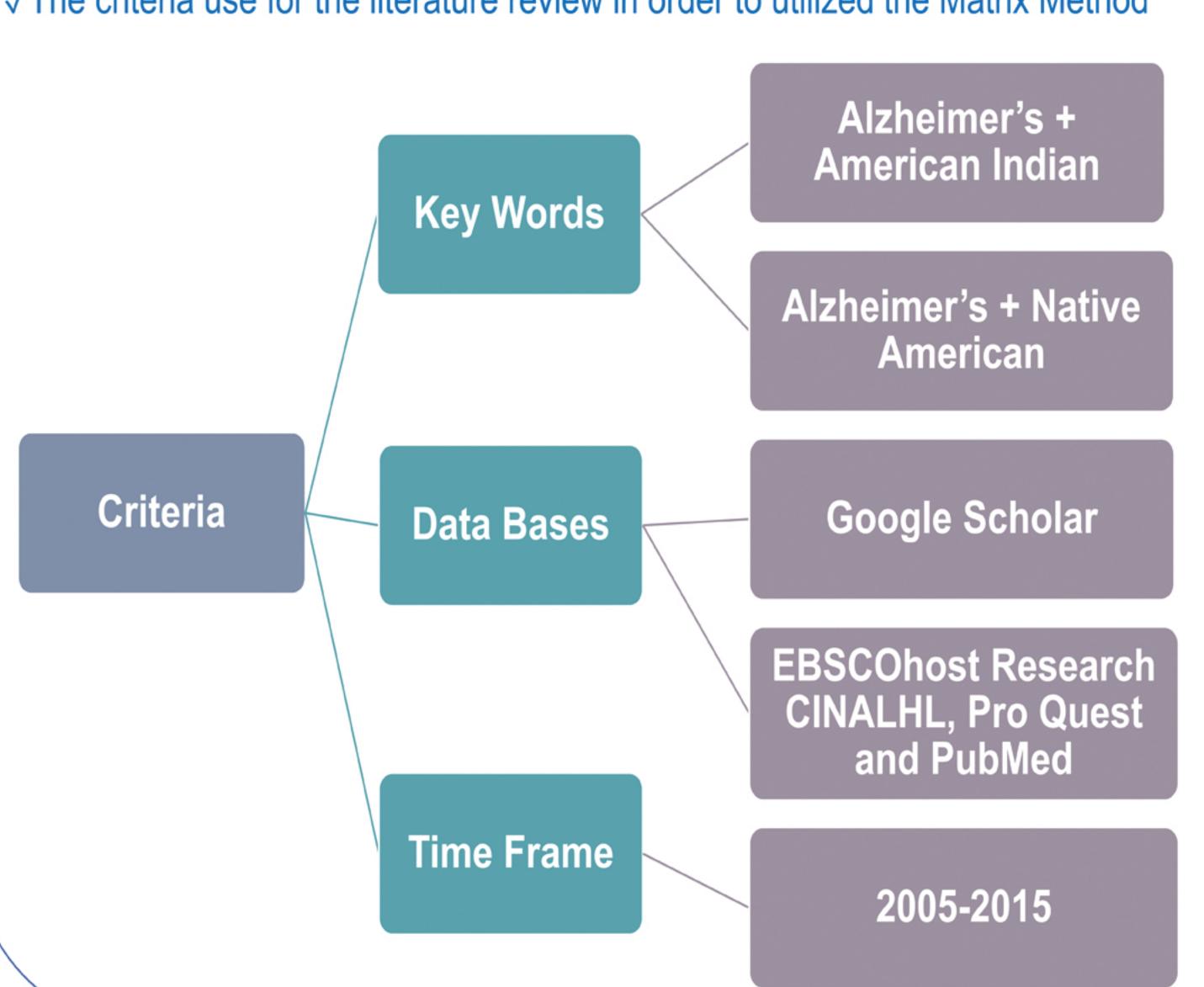
Aims

√ To systematically review all relevant literature on American Indian/ Alaska Natives (AI/AN) and Alzheimer's (AD) in the last 10 years, using the matrix method.

√ To identify when misidentification of Alzheimer's indicators occurs in the AI/AN population using current A and why D screening tools

Question

√ What are the sources of discrepancy in the use of Alzheimer's assessment tools in the American Indian Population?
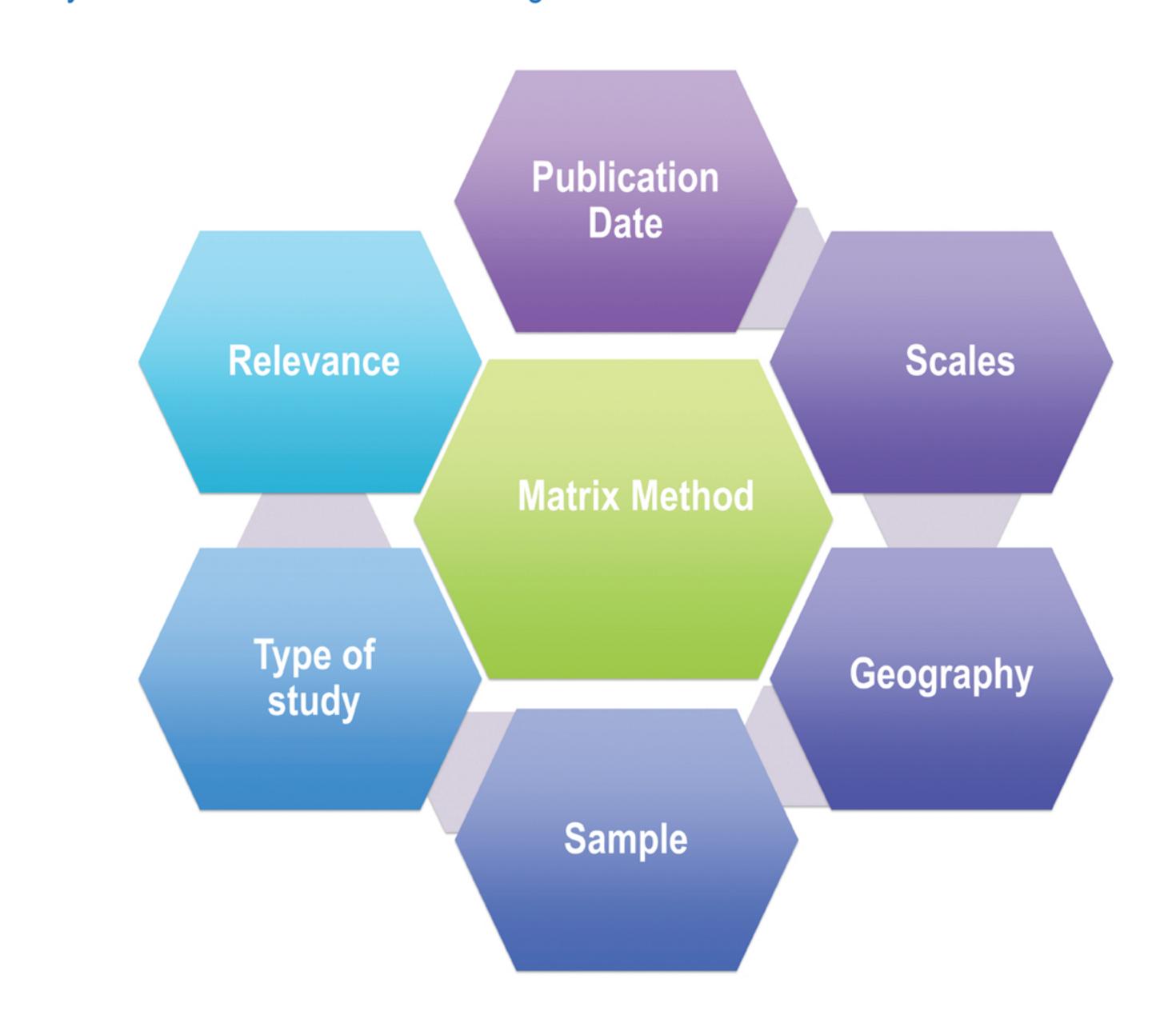
Methods

√ The criteria use for the literature review in order to utilized the Matrix Method

Criteria
- **Key Words**
  - Alzheimer's + American Indian
  - Alzheimer's + Native American
- **Data Bases**
  - Google Scholar
  - EBSCOhost Research CINALHL, Pro Quest and PubMed
- **Time Frame**
  - 2005-2015

Methods

√ Systematic literature review utilizing the Matrix Method.

Matrix Method — Publication Date, Scales, Geography, Sample, Type of study, Relevance

Results

Table 1 Number of revised articles with the year of publication and the geographic area of research

Articles	Publication Year	Region
1	2003	UT Southwestern data base
2	2007	North region of the USA
3	2007	Oklahoma
4	2008	Southern Arizona
5	2008	National Alzheimer's Coordinating Center
6	2012	National Alzheimer's Coordinating Center
7	2014	C-Path Online Data Repository
8	2015	C-Path Online Data Repository

Results

Table 2 Number of revised articles with the distribution of the population by race or ethnicity.

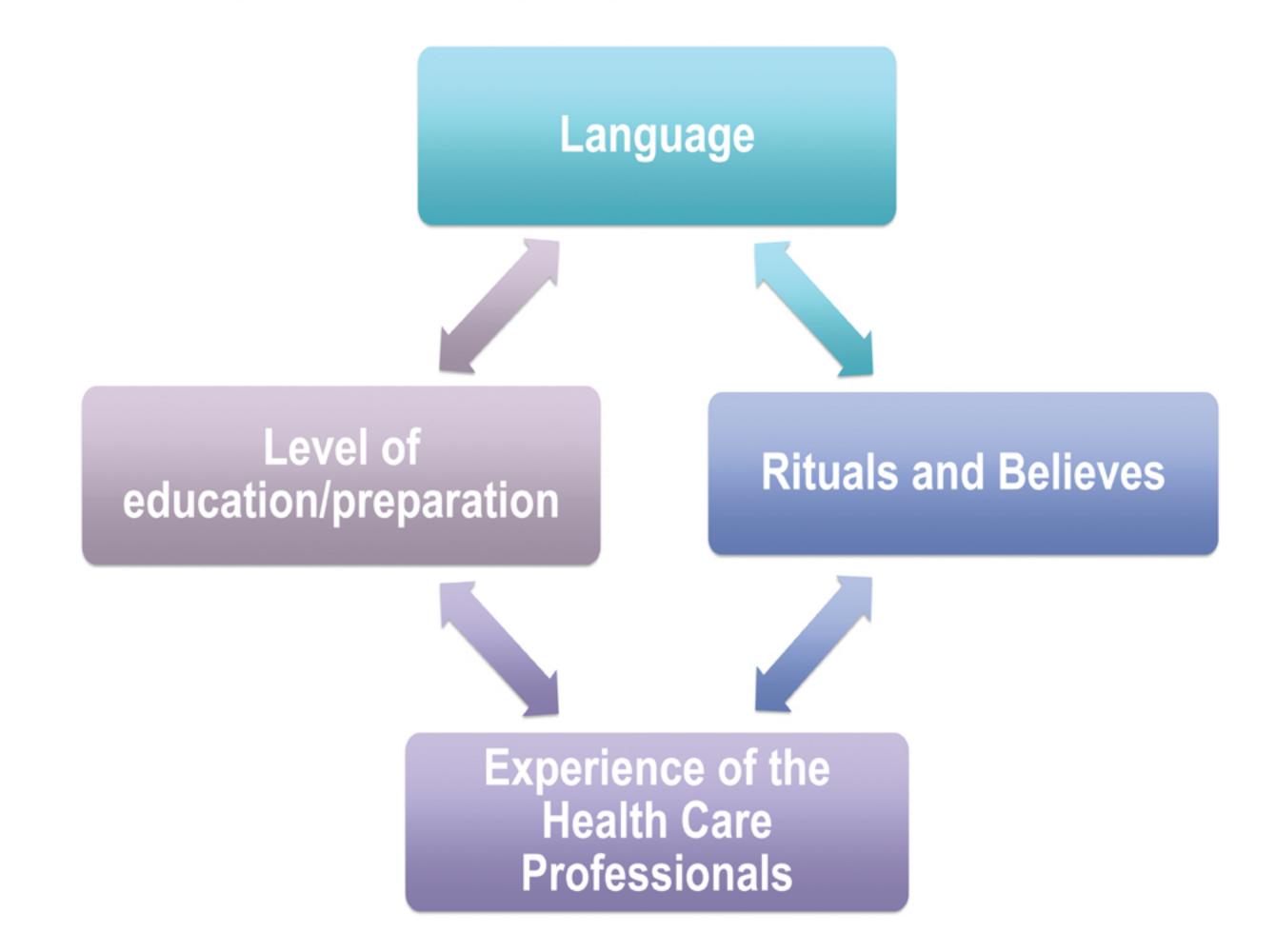| Articles	American Indian/Alaska Native	African American	Caucasian	Asian	Other Race/ Ethnicity or Unknown Origin	Sample Total
1	15%	-	85%	-	-	599
2	100%	-	-	-	-	140
3	0.6%	11.9%	87.5%	-	-	30,993
4	100%	-	-	-	-	80
5	0.8%	2.3%	81.0%	8.6%	7.3%	30,916
6	0.06%	8.2%	88.7%	2.1%	0.9%	7,093
7	1.7%	1.2%	92.5%	4.6%	-	3,747
8	1.2%	4.3%	89.0%	5.2%	0.4%	6,500

Table 3 Scales used to identified the signs and symptoms of Alzheimer's disease throughout the literature review

Most Used Scale
Mini Mental State Examination (MMSE)
Mattis Dementia Rating Scale (MDRS)
Uniform Parkinson's Rating Scale
National Institute of Neurological and Communicative Disorders and Stroke and the Alzheimer's Disease and Related Disorders Association (NINCDS-ADRDA)

Conclusions

√ The challenges in the identification, assessment and diagnostic of Alzheimer's disease in American Indian is related to factors as:

Language → Rituals and Believes → Experience of the Health Care Professionals ← Level of education/preparation

√ Most of this assessment tools have not been developed culturally sensitive which means that a given score may not reflect an accurate level of impairment.

√ There is opportunity for more research in this area of inquiry which will facilitate the modification of assessment tools in a culturally way allowing a better understanding of Alzheimer's in the American Indian population.

Future Works

√ Because this is a pilot project as part of our future works we want to create a National Research in the American Indian population using assessment tools that already had been culturally adapted.

√ Reach tribes leaders in order to provide additional education to their population regarding Alzheimer's Disease.

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