Traditional Healing and Medicine in Dementia Care for Indigenous Populations in North America, Australia, and New Zealand: A Scoping Review

by

Hom Lal Shrestha

A Major Paper submitted in partial fulfillment
of the requirements for the degree of
Master of Arts (MA) in Interdisciplinary Health

Graduate Studies
Laurentian University
Sudbury, Ontario, Canada

Abstract

Access to culturally-safe dementia assessment, diagnosis, and care in Indigenous populations worldwide is an emerging challenge. In 2018, the World Health Organization recognized traditional healers as stakeholders in dementia care and prevention. Traditional healers contribute to dementia assessment, diagnosis, and care in unique ways, and play a catalytic role in the process of culturally-safe dementia care planning and assessment with health care providers at the community level. The purpose of this scoping review was to understand the roles and experiences of traditional healers, to evaluate strategies for integration between Indigenous traditional healing and western dementia care approaches, and to examine the policy barriers and research gaps in North America (Canada and United States), Australia, and New Zealand. The scoping review methodology used was the Joanna Briggs Institute (JBI) approach that included six steps: protocol development based on participants, content and context framework, development of a search strategy, selection of relevant studies, charting of relevant data, synthesis, and reporting of results, and conducting stakeholder consultation. We searched English literature in select bibliographic databases, including CINAHL, EMBASE, Medline and PsycINFO. The initial search identified 516 papers published between 2000 and 2020 that met the search criteria. After 164 duplicates were removed, we screened 352 titles and abstracts, excluding the 209 that did not meet the inclusion criteria. Our second stage review of 143 full-text studies resulted in the further exclusion of 141 studies. Only two studies from Canada

met all inclusion criteria for this scoping review and explored the potential integration of traditional healing in dementia care and the roles and perceptions of traditional healers. The two studies were conducted in Southwestern Ontario in an urban First Nations community and Saskatchewan with Cree, Salteaux, and Metis populations in rural and remote communities. The studies indicated that the inclusion of traditional healers, Elder knowledge-holders, Grandmother groups, and emerging Indigenous scholars and researchers can contribute to building an evidence-based dementia care decision-making process for Indigenous people with dementia. Hence, integrating Indigenous traditional healing and medicine in dementia care is a path to culturally-safe dementia care and social support systems for people with dementia.

Keywords: Cultural Safety, Dementia Care, Indigenous Populations, Integration, Policy Barrier, Research Gap, Traditional Healer

Acknowledgments

I am so grateful to everyone for their generous support throughout my journey in the Interdisciplinary Health Master's program, especially, Dr. Nancy Lightfoot, Dr. John Lewko, Dr. Nancy Young and Dr. Elizabeth Wenghofer (Professors and Graduate Coordinators). I would also like to thank Dr. Diana Urajnik and Dr. Darrel Manitowabi (my distinguished professors) for their excellent support and encouragement. I am indebted to my supervisor Dr. Jennifer D. Walker, for her generosity and inspirational mentoring helping to make my dream of master's research come true. I want to thank my supervisory committee members Dr. Joey-Lynn Wabie and Dr. Marion Maar, for their compassionate, academic support and kindness throughout my learning. I greatly acknowledged the researchers who had published the 143 research studies for my scoping reviews for Indigenous communities in Canada, the United States, Australia, and New Zealand. I am so grateful to the Northern Ontario School of Medicine (NOSM) Access Services Librarian Michael MacArthur, for his expertise and painstaking support for the databases search for this scoping review, to Robyn Rowe, Ph.D. scholar for the independent review of the full-text literature, to Andrew Forbes for constructive feedback, and, to Jody Tverdal for collegial support. I wish to thank my graduate classmates and the administrative staff members Casey Sigurdson and Lise McGlade in the School of Rural and Northern Health for their commendable support.

I am blessed and incredibly honoured to have had many learning opportunities from Laurentian's Indigenous programs and the Indigenous Mentorship Network Ontario Summer Program, webinars, and annual gatherings. This gave me opportunities to learn about the field of

Indigenous Health Research. In addition, I was able to meet and interact with amazing scholars and Elder knowledge-holders. Thanks go to Elders and knowledge-holders Joe and Rosalinda Peltier, Karen Pitawanakwat (Registered Nurse and Community Researcher) from Manitoulin Island, Art Petahtegoose, and H. Neil Monague for their valuable guidance. Their knowledge and experiences as Indigenous community stakeholders greatly helped to complete this scoping review.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction

1.1 Background

The Global Alzheimer's and Dementia Action Alliance (2018) has declared dementia to be one of the biggest global health crises of the 21st century, with a new case arising every three seconds. Dementia has become a serious health and social concern for Indigenous populations and continues to increase in magnitude as there are almost 400 million Indigenous people worldwide. In addition, health outcomes in Indigenous populations are generally poorer than non-Indigenous populations (WHO, 2007; Flicker & LoGiudice, 2015).

In 2014, a systematic review showed that the prevalence of dementia among Indigenous populations ranges from 0.5 to 20% across five countries (Australia, Brazil, Canada, Guam, and the United States) and is higher than that of respective non-Indigenous populations (Warren et al., 2015). In Canada, the rates of dementia for First Nations people over the age of 60 are projected to increase 4-fold compared to a 2.3-fold increase in the non-First Nations population by 2031 (Walker & Jacklin, 2019). Indigenous perceptions of this emerging condition are diverse. Some Indigenous Peoples view dementia and memory loss as an accepted part of the normal ageing process, as a spiritual phenomenon, or as a "second childhood" on the circle of life's continuum (Jacklin & Walker, 2019; Hulko et al., 2010; Lanting et al., 2011). In some cases, dementia has evoked fear and mistrust, causing people with dementia to be accused of witchcraft (Zeilig, 2014; Brooke & Ojo, 2020). In some parts of the world, such as Congo, dementia is perceived as a mysterious disease that requires treatment and care through traditional and faith or religious healers (Kehoua, 2019). The World Health Organization (WHO) Dementia

Plan Guide, published in 2018, indicated that people with dementia are sometimes abused and even murdered in Togo due to a lack of awareness about dementia or memory loss in family and community (WHO, 2018; p.10).

1.2 Rationale

Numerous studies have indicated that the inclusion of traditional healing and medicine in dementia care can be an important aspect of culturally safe dementia care in Indigenous communities in Canada (Canadian Academy of Health Science, 2019). The concept of cultural safety was coined by Dr. Irihapeti Ramsden in Aotearoa-New Zealand to address inequalities in the health care system experienced by Indigenous peoples and to affirm their rights, drawing on the strengths of Indigenous culture in the health system (Smye & Browne, 2002), which can be relevant to dementia care.

Access to culturally safe geriatric care and dementia assessment in Indigenous populations is an emerging challenge. The WHO Dementia Plan Guide recognizes that traditional healers, community, and religious leaders are important stakeholders for the care and prevention of dementia worldwide (WHO, 2018; p.17). However, little existing research has been explicitly dedicated to traditional medicine and healing options that focus on dementia care and prevention for Indigenous populations. Traditional healers may contribute to dementia assessment, diagnosis, and care in unique ways. They possess the potential to play a catalytic role in the process of dementia care planning and assessment with health care providers at the community level. Traditional healers may offer an affordable and trusted enhancement for culturally safe dementia care among diverse Indigenous communities and populations.

A study from Africa shows a model of integration, revealing that the involvement of both health care providers and traditional healers in dementia care is significant (Hindley et al., 2016). A study on "The role of traditional and faith healers in the treatment of dementia in Tanzania and the potential for collaboration with healthcare services" by Hindley and his research team presented the role, perception, and involvement of traditional and faith healers in dementia care (Hindley et al., 2016). The paper also revealed the potential collaboration between healthcare services and traditional and faith healers. Another study in the Hai district of Tanzania found that 19% and 41% of people with dementia were visited by traditional healers and faith healers (Mushi et al., 2014) for traditional medicine for dementia care and treatment.

This scoping review evaluates past and current interventions, policies, and strategies of traditional healing and medicine in dementia care. It aims to understand and explore the research gap for the integration of traditional healing medicine into dementia care and assessment at a community level. This scoping review also identifies policy barriers to inform policymakers, Indigenous health care providers, community researchers, and emerging Indigenous scholars to fill the knowledge and research gaps through national and community-level pilot interventions for the traditional healers.

1.3 Reflexivity and Positioning Myself

I belong to the Indigenous Newar community from the native land of Nepal Mandala (Kathmandu valley) in Nepal, South Asia. Nepal Mandala is approximately five-thousand years old and is the native sacred land of Newar civilization. I am culturally blessed to worship and have a profound respect for grandparents or older adults. I consider them to have divine status and the glory of life. The celebrations of older adulthood in Newar culture enhance self-esteem, improve cognitive impairment, and reduce memory loss or mild cognitive impairment or dementia (Shrestha & Molohon, 2017). Notably, American anthropologist Steven M. Parish (1991), admired the Newar in his research article "The sacred mind: Newar cultural representations of mental life and the production of moral consciousness." The article states:

> For the Newars of Nepal, mind, self, and emotion are sacred and moral; the "inner" world is absorbed in a religious ethos. This sacralization of mental life in Newar culture is consistent with the way religious forms-sacred beings and symbols and moral order based on a religious worldview—provide the fundamental groups for the Newar construction of reality. (Parish, 1991)

I am male, a first-generation Canadian citizen and a mature student at Laurentian University since 2016. I earned an Honors B.A. Specialized in Gerontology with a Minor in Medical Anthropology, which included an Aboriginal Health and Wellness course. My undergraduate thesis included an autoethnography on "*An Ancient Ritual Celebration Honoring Older Adults in Newar (Indigenous) Culture in Nepal and the United States.*" As a compassionate dementia caregiver and volunteer, as well as a filmmaker, creator, writer, and actor of the dementia therapy-based movie "*Dancing for a Cure"* (Shrestha et al., 2020), I have a dream to serve: to dedicate and honor the diversity of human experiences with dementia on this

planet. In October 2016, I had the opportunity to travel to the world's first dementia village in Amsterdam to observe and be exposed to the lifestyle of 110 residents with dementia.

I am an emerging Indigenous scholar from Nepal living in Sudbury on the sacred land of the Robinson-Huron Treaty territory and the traditional territory of the Atikameksheng Anishinabek. I strive to present myself with courtesy, humility, and commitment to academic integrity. This scoping review will be meaningful and challenging for me because I was also diagnosed with mild cognitive impairment and have been a caregiver for my mother-in-law, who was diagnosed with vascular dementia. As such, this project is near and dear to my heart.

Within my capacity as a researcher, an Indigenous dementia care policy advocate, and a Steering Committee Member (Elect) for Health Policy Executive Committee of the Alzheimer's Association International Society to Advance Alzheimer's Research and Treatment (ISTAART). I am fully committed to protect and promote human rights, compassion, resilience, dignity, and social justice for older adults with dementia and Alzheimer's Disease. I am also committed to amplifying the voices and experiences of traditional and faith healers who are engaged in dementia care, diagnosis, and treatment in both Indigenous ad non-Indigenous ageing populations around the world.

Chilisa's Indigenous Research Methodologies explains that the researcher needs to critically reflect on the self (Chilisa, 2012). As such, I need to recognize the connections between traditional healing medicine in dementia care to reflect my lived experiences as a dementia caregiver, navigator, collaborator, and advocate in my journey of academic life (Chilisa, 2012). I fully honor the Indigenous worldview and focus on decolonizing approaches that make reflexivity crucial (Russel-Mundine, 2012). This scoping review is a meaningful reflection of my

life and an eternal passion and dedication as a role model and advocates for dementia prevention and as a symbol of honor for Indigenous traditional healers.

This project is my learning passion and life-long journey to advocate, recognize, validate, and promote traditional healers' long-standing experiences and roles in dementia care and prevention for Indigenous communities in North America, Australia, and New Zealand.

1.4 Why Conduct a Scoping Review?

The Canadian Institutes of Health Research (CIHR) defines a scoping review as an "exploratory project that systematically maps the literature available on a topic, identifying key concepts, theories, sources of evidence, and gaps in the research" (CIHR, 2019). This scoping review focused primarily on the role and experiences of traditional healers in dementia care as an important element of Indigenous health. Arksey & O'Malley (2005) list four reasons to carry out a scoping review: "(1) to examine the extent, range and nature of available research on a topic or question; (2) to determine the value of undertaking a full systematic review; (3) to summarize and disseminate research findings across a body of research evidence (i.e., heterogeneous, and or complex); and (4) to identify research gaps in the literature to aid planning and commission of future research" (Arksey & O'Malley, 2005).

1.5 Objectives

The aim of this scoping review is to understand and explore what is known about traditional healers' roles and experiences in dementia care for Indigenous populations in North America (Canada and the United States), Australia, and New Zealand. This key question has

been divided into two sub-questions: (1) what strategies have been recommended and evaluated to integrate traditional healing and medicine into culturally safe dementia care? (2) what are the barriers and research gaps in traditional healing and medicine in dementia care? This scoping review also investigates the role and experience of traditional healers in dementia care and examines barriers, strategies, and research gaps in dementia care for Indigenous communities in North America, Australia, and New Zealand in particular. In addition, this scoping review explored approaches to the integration of traditional healing and medicine in dementia care. This scoping review evaluates the roles, experiences of traditional healers, strategies, policy barriers, and research gaps for the potential integration of Indigenous and Western dementia care approaches.

This scoping review summarizes existing research on the experiences of traditional healers who are involved in dementia care. The general aim of a scoping review is to map the key concepts that underpin a research area (Arksey and O'Malley, 2015). Thus, the aim of this scoping review is to investigate the traditional healers' roles, experiences, strategies, and barriers to providing dementia care for diverse Indigenous older adults in these four post-colonial nations (Canada, USA, Australia, and New Zealand). In doing this, this scoping review identifies knowledge gaps and informs health care providers, policy and decision-makers who desire to work with traditional healers in dementia care.

The core objectives of the scoping review are to:

1) Summarize the evidence on integrating traditional healing and medicine in dementia care interventions and culturally safe practices.
2) Highlight the strategies and experiences of traditional healers; and

3) Identify policy barriers that can inform further research and dementia care strategies.

A preliminary search of MEDLINE, the Cochrane Database of Systematic Reviews, and the JBI Evidence Synthesis was conducted. No existing scoping reviews or systematic reviews on the topic were identified. As such, this scoping review is the first to explore and summarize the complex and heterogeneous literature on the integration of traditional healing and medicine in dementia care for Indigenous populations in North America (Canada and the United States), Australia and New Zealand.

1.6 Research Questions

i) What is known about traditional healers' roles and experiences surrounding dementia care within Indigenous populations in North America, Australia, and New Zealand? This question broadly outlined the roles and experiences of traditional healers in dementia care and memory care rather than mental disorders. Traditional healers included faith-healer, Elder knowledge-holders and Grandmother groups extensively involved in care and treatment of dementia or memory care through healing, pray, plant-based medicine, spiritual ceremonies included music and dance.

ii) What strategies have been recommended and evaluated to integrate traditional healing and medicine into culturally safe dementia care? Very limited strategies have been identified to integrate traditional healing in dementia care into existing health care providers at the local or community and national levels.

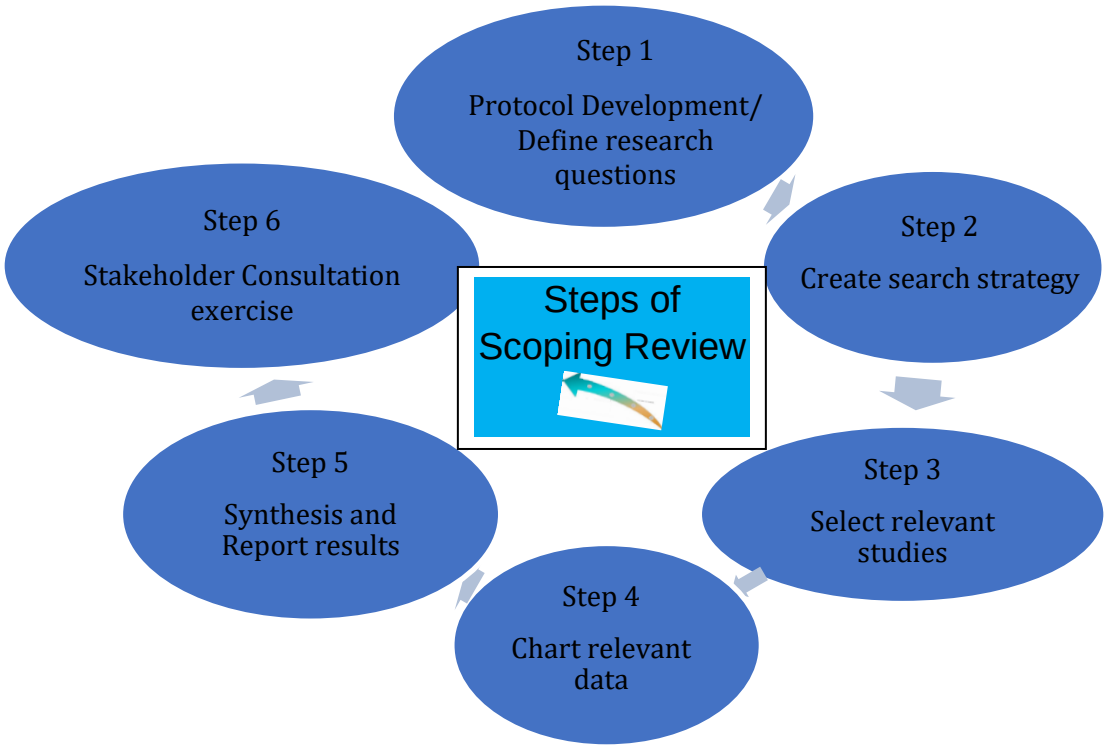
iii) What are the policy barriers and research gaps? There are unique policy barriers and research gaps due to lack of adequate research and intervention, and ignorance of traditional healing and medicine in dementia care.

Chapter 2: Methods

"Scoping reviews are exploratory projects that systematically map the literature available on a topic, identifying key concepts, theories, sources of evidence, and gaps in the research" (CIHR, 2020). The scoping review methodology is used to map existing published literature systematically to identify key barriers, strategies, and gaps in research on this topic. This scoping review examines the breadth of existing evidence from a diverse array of sources, search strategies and local or community stakeholder consultation exercises with key stakeholders. In addition, the research questions are well-defined. The scoping review methodology allows a complex topic such as traditional healers' role and experience in dementia care, to be rigorously explored by ensuring that each step and decision is taken systematically and transparently (Arksey, 2005; Levac, 2010; Colquhoun, 2014).

The methodology and guidance for conducting scoping reviews were developed and advanced by members of the Joanna Briggs Institute (JBI) and members of five Joanna Briggs Collaborating Centers (Peters et al., 2015), including the following six steps: (1) Identify and define research questions (protocol development), (2) Create a search strategy (3) Select relevant studies (4) Chart relevant data (5) Synthesis and report results, and (6) local or community stakeholder consultation exercises to validate findings for knowledge synthesis and dissemination. The proposed scoping review was conducted following the latest 2020 JBI Guide (Peters et al., 2020) methodology, which aligned the six crucial steps, protocol, and the Population/Participants, Concept and Context (PCC) Framework simultaneously.

Figure 1. Six Steps of Scoping Review (Peters et al., 2020)



2.1 Protocol Development

The protocol is the plan or method of a scoping review which describes definition, objectives, rationale and justification, and eligibility criteria (conceptualization and rationalization). In addition, the protocol defined the research questions and aligned them to the PCC Framework of JBI Guide 2020 and JBI System for the Unified Management, Assessment and Review of Information (SUMARI) (Peters et al., 2020).

The protocol is developed as a priori in collaboration with Indigenous scholars and community members to refine research questions that reflect Indigenous community priorities. The protocol also aligns with the PCC (participant, concept, and context) Framework according to the recently published JBI Manual for Evidence Synthesis (Peters et al., 2020) and the

PRISMA extension for scoping reviews (PRISMA-ScR) (Tricco et al., 2018). The protocol is registered with the registered number osf.io/pn9at (https://www.osf.io/bz3xf) on the Open Science Framework based in Montreal, Canada to make it freely available. The research question was rigorously reviewed and modified by the mutual consensus between researcher and supervisor.

2.1.1 Inclusion and Exclusion Criteria

The inclusion and exclusion criteria are based on the Population/Participants, Concept and Context (PCC Framework) developed and advanced by JBI (JBI, 2017) that are presented in table 1.

Table 1. Inclusion/Exclusion Criteria of PCC Framework

PCC Framework	Inclusion	Exclusion	Justification for Exclusion
Population/ Participants	Traditional and faith healers, religious leaders, spiritual practitioners of all ages, genders, Indigeneity and Grandmother groups, who are integrating traditional Indigenous dementia care practices into the medical system through traditional medicine, plant-based medicine, spiritual and religious healing practices (prayers, meditation, various ceremonies including dance and music) Grandmother groups are considered traditional healers themselves and providers of traditional wellness support and care for loved ones or persons with dementia in families and communities.		

PCC Framework	Inclusion	Exclusion	Justification for Exclusion
Concept	**Concept 1** Perspectives, knowledge, or data from traditional healers Dementia including, Alzheimer's disease, senile dementia, memory loss and related head or brain injury. **Concept 2** - The involvement of traditional healers in dementia care - The role of traditional healers including Grandmothers Group in dementia, and perceptions of Indigenous healers on dementia care - Aspects of culturally safe dementia care, and the unique aspects of assessing, diagnosing, treating, and supporting dementia in Indigenous populations.	Studies that focused on mental and psychiatric disorders, Parkinson's disease, schizophrenia, and epilepsy were excluded.	Focused on traditional healing and medicine in dementia-related diseases through traditional healers and Grandmother Groups.
Context	Indigenous communities of North America, i.e., Canada and the United States (First Nations, Metis, Inuit, Cree, American Indian/Native Indian, Alaska Native and Hawaii Native), Australia (Aboriginal and Torres Strait Islander), and New Zealand (Maori)	Excluded studies from geographical regions of Asia, Africa, Europe, and South America	Such related studies were not found in databases search (CINAHL, EMBASE, Medline and PsycINFO)

Table 2. Population/Participants, Concept and Context (PCC) for the scoping review.

PCC Mnemonic	Definition (per JBI Reviewer's Manual Ch.11)	Example
Population/ Participants	*"Important characteristics of participants, including age and other qualifying criteria."* You may not need to include this element unless your question focuses on a specific condition or cohort.	Traditional healers (age group 18 and over), and Grandmother Groups
Concept	*"The core concept examined by the scoping review should be clearly articulated to guide the scope and breadth of the inquiry. This may include details that pertain to elements that would be detailed in a standard systematic review, such as the "interventions" and/or "phenomena of interest" and/or "outcomes."* Use the ideas from your primary questions to determine your concept.	Indigenous healing and medicine through culturally safe dementia care practices Role and experience of traditional healer and Grandmothers Group in dementia care
Context	*"May include... cultural factors such as geographic location and/or specific racial or gender-based interests. In some cases, the context may also encompass details about the specific setting."*	First Nations, Cree, Inuit, and Metis (Canada), American Indian, Alaska and Hawaii Natives (the United States), Aboriginal and Torres Strait Islander (Australia), and Maori (New Zealand) in urban, rural, and remote areas of Indigenous communities WHO definition of Indigenous populations and Traditional Medicine will be applied.

The definition of traditional healing or traditional medicine is interchangeable. According to Struthers and colleagues (2004), Dr. Alvord, the first Navajo female surgeon, defines a traditional healer, in her Navajo culture medicine, as someone who sees a person not simply as a body, but as a whole being. Mind and spirit are seen as connected to other people, to families, to communities, and even to the planet and universe. Indigenous men and women traditional healers, also known as medicine men/women, practice the art of traditional healing within their communities and may also provide services across tribes and to non-native people (Alvord et al., 1999, p. 3; Struthers et al., 2004).

Traditional healing has been defined as "practices designed to promote mental, physical and spiritual well-being that is based on beliefs which go back to the time before the spread of western 'scientific' bio-medicine" by the Royal Commission on Aboriginal Peoples (1996). When Aboriginal Peoples in Canada talk about traditional healing, they include a wide range of activities, from physical cures using herbal medicines and other remedies, to the promotion of psychological and spiritual well-being using ceremony, counselling, and the accumulated wisdom of elders (Royal Commission on Aboriginal Peoples, 1996, p. 325).

Similarly, the World Health Organization (WHO) definition of Indigenous populations is significant and validated:

> "Indigenous populations are communities that live within, or are attached to, geographically distinct traditional habitats or ancestral territories, and who identify themselves as being part of a distinct cultural group, descended from groups present in the area before modern states were created and current borders defined. They generally maintain cultural and social identities, and social, economic, cultural, and political institutions, separate from the mainstream or dominant society or culture." (WHO, 2007)

Also, Shawn Wilson (2008) stated that a distinct way of viewing the world and of being is an integral part of Indigenous identity. For identifying themselves as Indigenous, it is essential for Indigenous People to incorporate their cosmology, world view, epistemology, and ethical beliefs in their everyday lives as well as academic activities. This holistic and relational attitude is at the same time cultural and collective (nation, clan, etc.) as well as individual and subjective (a single member of a nation and his or her relations). According to Wilson (2008), in an Indigenous paradigm, relational accountability is the ethics and moral guide for seeking knowledge and judging information. Thus, relational accountability is an integral part of Indigenous identity. Wilson adopts the three R's to describe an Indigenous researcher's guidelines: "Respect, Reciprocity and Relationality."

2.1.2 Types of Sources

The scoping review has considered published literature of all types of studies. This includes experimental and quasi-experimental study designs, randomized controlled trials, non-randomized controlled trials, analytical observational studies (prospective and retrospective cohort studies), case-control studies, and analytical cross-sectional studies. This review also considers descriptive observational study designs (case series, individual case reports and descriptive cross-sectional studies), quantitative, qualitative, and mixed methods studies. They must focus on qualitative data, but are not limited to designs such as phenomenology, grounded theory, ethnography, qualitative description, and action research for inclusion, and systematic reviews that meet the inclusion criteria. The published English literature from 2000 to 2020 and

the database-specific filter is considered. Editorial, commentary articles and unpublished gray literature, are not included in this scoping review.

2.2 Search Strategy

The search strategy aims to identify published literature. An initial limited search of CINAHL, EMBASE, Medline, PsycINFO, and JBI Evidence Synthesis was undertaken to identify articles on this broad topic. The resulting titles and abstracts of relevant articles, as well as the index terms used to describe them, were utilized to develop a full search strategy for all databases. An example of the comprehensive search method for the MEDLINE databases is shown in Appendix A (Search Strategy). The search strategy included all identified keywords and was adapted for each information source. For this purpose, the expertise of the Northern Ontario School of Medicine (NOSM) Access Services Librarian was requested to search such database, providing information to the Search Submission Form for NOSM Access Services Librarian and with the unanimous consensus of the supervisory committee.

2.3 Selection of Relevant Studies

Following the search, all identified citations were collated and uploaded into Zotero (reference, bibliography, and citation management) software for extraction before going to Covidence software for screening with duplicates removed. The Covidence is an online tool to streamline the systematic review process. It makes it easy to screen references (both title/abstract and full text) before creating and filling data extraction forms and tables. Through Covidence, the titles and abstracts of literature were screened by two independent reviewers for assessment

against the inclusion and exclusion criteria for the review. The potentially relevant studies were retrieved in full, and their citation details were imported into the JBI System for the Unified Management, Assessment and Review of Information (JBI SUMARI; JBI, Adelaide, Australia, 2020; and Peters et al., 2020) through Covidence software. The full texts of selected citations were assessed in detail against the inclusion criteria by two independent reviewers. The specific reasons for excluding full-text studies that did not meet the inclusion criteria were recorded and reported in the scoping review. Any disagreements that arose between the independent reviewers at each stage of the study selection process were resolved through mutual discussion and consensus. The results of the search were reported in full upon reaching the final scoping review and presented in the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) flow diagram and checklist (Tricco et al., 2018; Moher et al., 2016).

2.4 Extraction of Data

Data were extracted from papers included in the scoping review by the primary researcher with the guidance of the supervisor and supervisory committee members, creating and using data extraction forms. The primary researcher extracted data and information including details about the study population, participants, intervention type, aims, methods, key findings, and knowledge gaps to validate the scoping review questions and objectives. A data extraction tool (charting table) is provided in Appendix B.

2.4.1 Inclusion and Exclusion Criteria for Screening and Full-text Review

According to the JBI PCC framework, participant refers to traditional healers and Grandmother groups as per inclusion criteria. Dementia, including senile dementia and Alzheimer's diseases, and head injuries were referred to as Concept 1. The role of traditional healers and integrating culturally safe practices into the health care system (including Grandmother Group) with medicines, spiritual and religious practices (prayer, various ceremonies including dance and music) were referred to as Concept 2, respectively. Context referred to the geographical regions (urban, rural, and remote) of Indigenous communities and populations in North America (Canada and the United States), Australia, and New Zealand.

The editorial articles, commentary articles and gray literature were considered for the exclusion criteria. In terms of geographical regions, Asia, Africa, Europe, and South America were also considered for the exclusion criteria.

At the screening titles and abstracts stage, the researcher reviewed 352 studies independently, the supervisor reviewed 343 studies, and the remaining nine studies were reviewed by supervisory committee members independently. In terms of the full-text article review, there were conflicts on seven articles that had to be resolved with mutual consensus to include in the extraction for the scoping review between researcher, supervisor, and her Ph.D. student associate researcher at the School of Rural and Northern Health.

2.5 Synthesis and Results Report

2.5.1 Data Presentation

The data were presented in a graphical or tabular form. These include a comprehensive overview of the target participants, the traditional healers' experiences, methods of assessment, types of studies and the context of each research paper. A narrative summary includes the tabulated and/or charted results and describes how the results are relevant and aligned to the objectives and research questions.

2.6 Local Community Stakeholder Consultation

For this scoping review, the local Indigenous stakeholder consultation is a pragmatic step to disseminate and share among Indigenous community advisors and Indigenous scholars for contextual interpretation and validation. The feedback and validation from the local stakeholder are crucial. Additionally, the knowledge that comes from ancestral, oral history, and non-scriptural knowledge and guidance from Elders, knowledge-holders, community members, and leaders for the studies under this scoping review are greatly acknowledged and recognized with humble gratitude and honor.

The local or community stakeholder consultation Zoom circle gathering was held on May 18, 2021, with Joe and Roselinda Peltier, Art Petahtegoose and H. Neil Monague, Elder knowledge holder and teacher; and Karen Pitawanakwat, Registered Nurse (RN), and Community Researcher on dementia care on Manitoulin Island. The purpose of this gathering was to guide the interpretation and meaning of the results of the scoping review. I presented the rationale and preliminary findings of the scoping review "*Traditional healing and medicine in dementia care for Indigenous populations in North America, Australia and New Zealand.*"

The presentation focused on: 1) what important questions did this review set out to answer? 2) what answers did we find and what questions remain? and 3) why are the results important and how can they be used at a community level? Each of the Elder and knowledge-holders shared their perspectives on the results are important, and what would be the best use or practices for dementia care, assessment, and treatment in First Nations Anishinaabe communities in Northern Ontario. They reviewed the proposed two community-based culturally safe dementia care models, as a framework for the integration of traditional healers in dementia care, and the five key steps to establishing culturally safe dementia care by health care providers, traditional healers, and community members.

2.7 Ethical Considerations

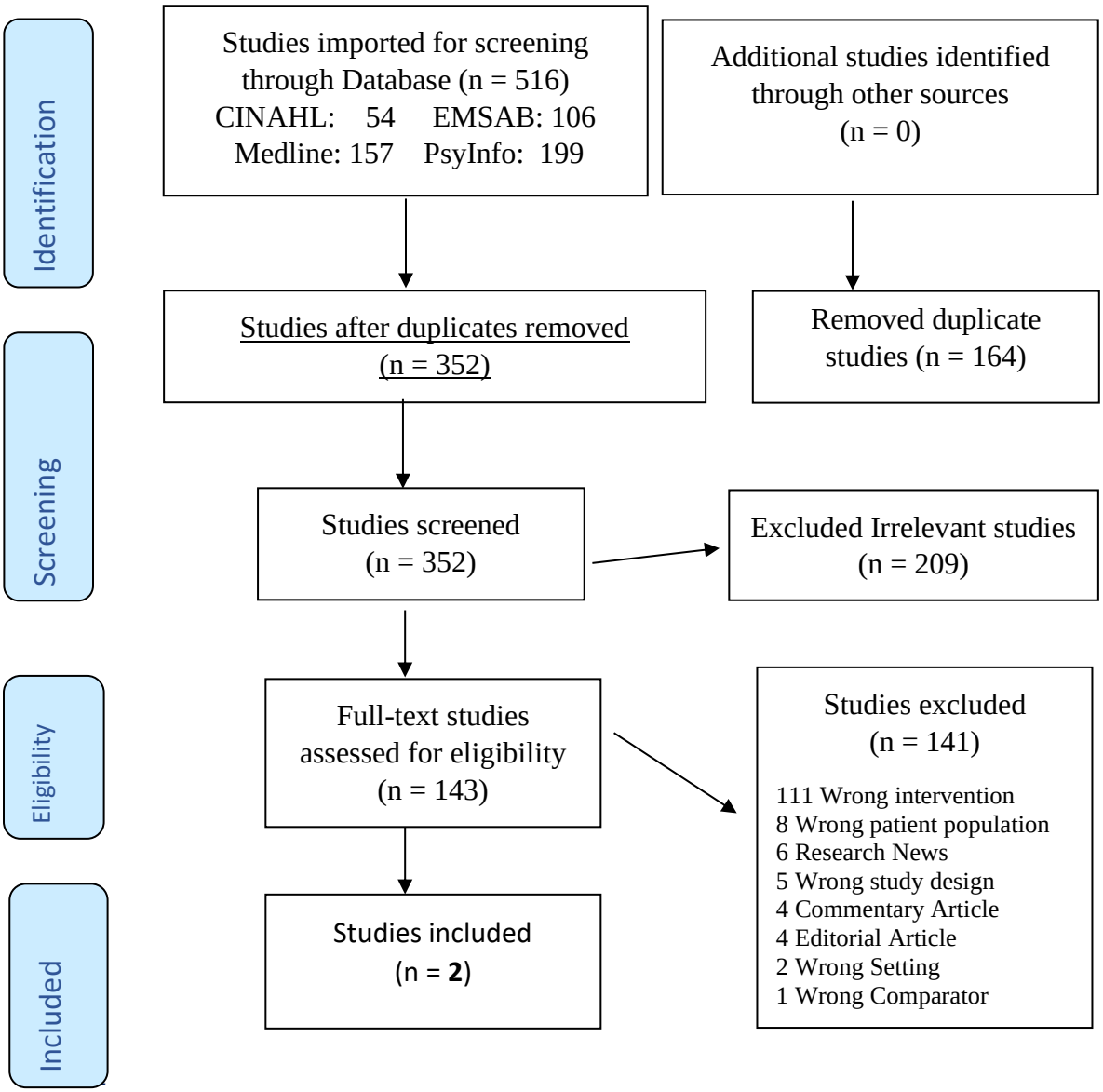
For a scoping review, no primary data collection is undertaken, and a Research Ethics Board's approval is not needed. To ensure ethical involvement of Indigeneous people in the scoping review, substantial consultations were conducted in December 2019 and 2020 for the proposed development and to refine methodologies before the pandemic. This included two Elders who are knowledge-holders and members of an established Community Advisory Council from across Manitoulin Island Anishinaabe communities, Wiikwemikoong Health Center's Dementia Community-based Researcher and Laurentian University Elder Knowledge-Holder.

Chapter 3: Results

3.1 Selection of Sources of Evidence

The initial search of the CINAHL, Embase, Medline and PsycINFO databases identified 516 records published between 2000 and 2020 that met the scoping review project's search criteria. After 164 duplicates were removed, 352 titles and abstracts were screened, 209 of which were excluded because they did not meet the inclusion criteria. The second stage review of the remaining 143 full-text studies resulted in the further exclusion of 141 studies. Of these, 111 studies did not include roles, experiences, engagement, and participation of traditional healers for the integration of traditional healing and medicine into dementia care, and 30 did not involve Indigenous populations or meet study design criteria. After full-text review, only two studies met the eligibility criteria and were included for data extraction. The information and results were extracted from the two eligible and relevant studies that were included in the final scoping review. A Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) flow diagram (Figure 2) describes the selection of studies and depicts the 141 studies excluded out of 143 full-text studies with specific reasons.

Figure 2. PRISMA 2020 Flow Diagram for Traditional Healing and Medicine in Dementia Care for Indigenous Populations in North America (Canada and the United States), Australia and New Zealand



Based on the various aspects of rigorous reviews of 141 eligible studies for the full texts, only two (2) studies from Canada met the inclusion criteria for this scoping review and PCC Framework as envisaged by JBI Guide 2020 (Peters et al., 2020).

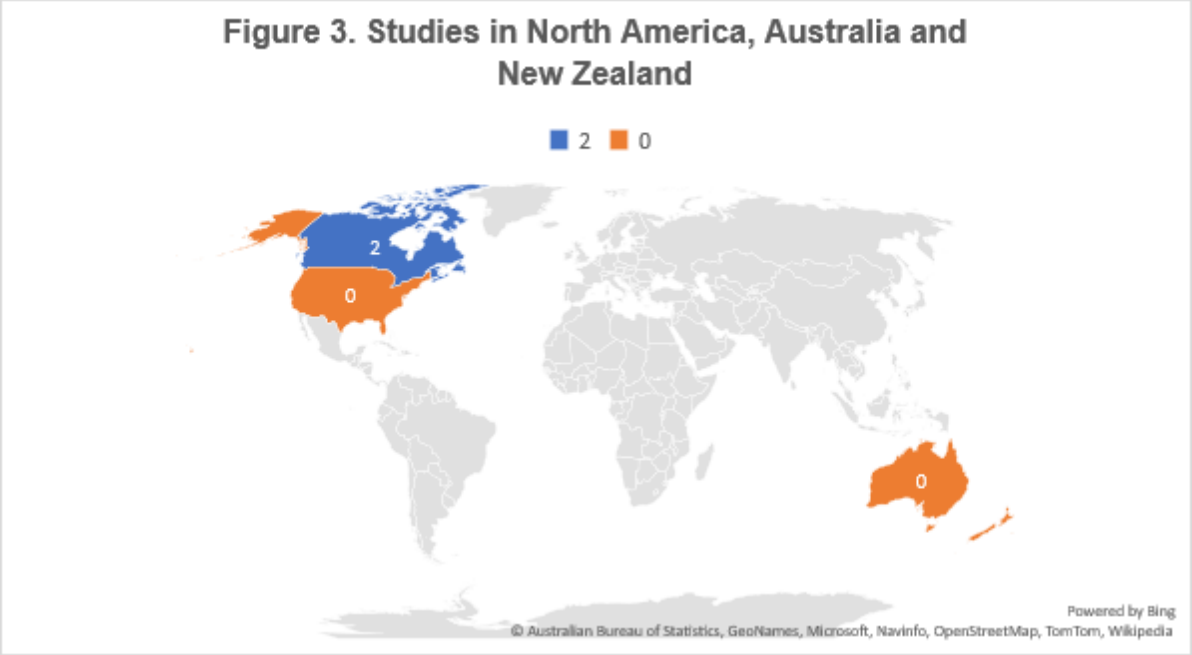
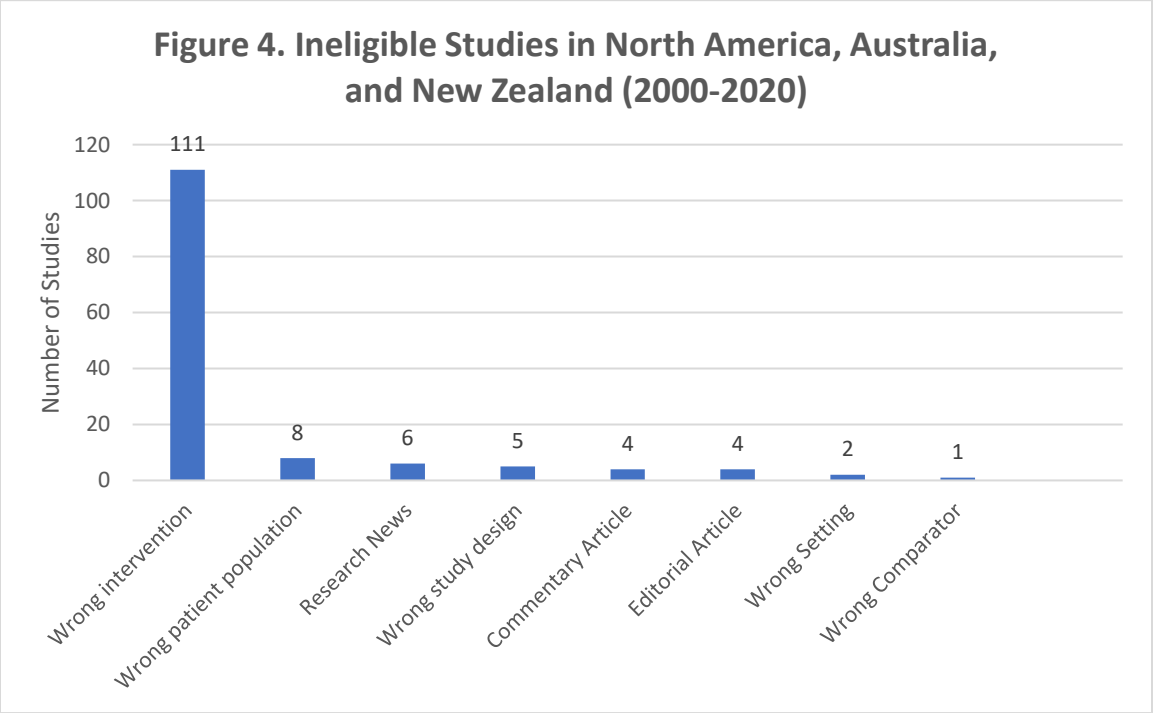


Figure 4 highlights the reasons why the 141 full-text articles were excluded. Almost 80 percent (n=111) of the studies were excluded because they did not include an explicit exploration of roles, experiences, and engagement of traditional healers for the integration of traditional healing and medicine in dementia care. These articles were considered as “wrong interventions”, which did not explore the traditional healers. Similarly, six percent (n= 8) of the articles were excluded due to the wrong patient population because they did not focus on Indigenous people. In addition, six percent (n = 8) of the articles were published as editorial and commentary articles and four percent (n = 6) of the articles were published as research news were excluded. The

remaining articles (n = 8) were excluded due to “wrong study design”, “wrong setting” and “wrong comparator” respectively.



3.2 Characteristics of Included Studies

Only two studies met all the inclusion criteria. These were Canadian studies that were undertaken in 2011 in Saskatchewan and 2012 in Ontario. Both studies were undertaken with the community-based participatory action research framework. The first study was based in Southwestern Ontario in an urban First Nations community. The research team applied constructive grounded theory with semi-structured interviews and thematic analysis (Finkelstein et al., 2012). The second study was conducted in Saskatchewan with Cree, Salteaux, and Metis populations in rural and remote communities. It was an applied qualitative study design that also

employed semi-structured interviews and thematic analysis (Lanting et al., 2011). These studies were published as peer-reviewed articles original papers in the Canadian Journal of Aging in 2012 and Journal of Cross-Cultural Gerontology in 2011. The summary details of the two included studies are presented in Table 3.

Table 3. Characteristics of Sources of Evidence (Citations, Country, Context, Content and Population/Participants aligned to PCC Framework and Research Questions)

Details	**Ontario (Canada)**	**Saskatchewan (Canada)**
Title	Formal dementia care among first nations in southwestern Ontario.	Aboriginal experiences of ageing and dementia in a context of sociocultural change: a qualitative analysis of key informant group interviews with Aboriginal seniors.
Author and Year	Finkelstein, S.A., Forbes, D.A, and Richmond, C.A.M. (2012)	Lanting, S., Crossley, M., Morgan, D. and Cammer, A. (2011).
Journal volume, issue, and pages	*Can J Aging* 31(3):257-70	*J Cross Cult Gerontol* 26(1):103-17
Type of article	Original article (peer-reviewed)	Original article (peer-reviewed)
Context (C) Geographical Region Indigeneity Community	First Nations persons with dementia in urban Southwestern Ontario	Saskatchewan Saskatoon Community Clinic Grandmothers Group in remote regions
Population/ Participants (P) (age/sex/number) Sample size	Seven participants Female: 6 Male: 1 ***traditional healer***	Three Aboriginal Grandmothers (**Female**) who had extensive experience as healthcare providers in rural and remote regions of the province. **Considered as traditional healers** (PCC Framework **Concept 2 and eligibility criteria**) Age from 59 to 73 years.
Purpose	Explore and describe the experiences of health professionals in providing care for persons with dementia	Understanding the cultural perceptions of ageing and dementia and unique experiences in dementia caregiving, and modification of the culturally appropriate assessment protocol through consultation with members of an Aboriginal Grandmothers Group who had experiences in providing care to Aboriginal seniors living in rural and remote regions.
Design/ Method Duration	CBR-based Qualitative Constructivist Grounded Theory approach semi-structured interview Thematic analysis Snowball sampling	Qualitative study and semi-structured questions about caregiving experiences, perceptions of ageing and conceptions of dementia within Aboriginal communities with the Saskatoon Community Clinic Grandmothers Group in Saskatchewan and thematic analysis

Details	Ontario (Canada)	Saskatchewan (Canada)
Intervention (if any)	Project on local Aboriginal health access center	Project on "Strategies to Improve the Care of Persons with Dementia in Rural and Remote Areas" A monthly meeting with three Grandmothers and researchers for six months (six meetings).
Key Findings	Two interrelated frameworks for understanding dementia care were identified: a care delivery framework and a knowledge framework. Designed to overcome barriers that encompassed elements of knowledge sharing.	Identified three themes that highlighted the Grandmothers experiences of ageing, caregiving, and dementia within their communities. Perceptions of normal ageing and dementia as "going back to the baby stage", and a fear of dementia. A second theme "big change in culture" pervaded the Grandmothers descriptions of Aboriginal health, illness (including dementia), and culturally grounded healthcare was identified as the third related to the review of assessment tools.
Research Question 1 ***Concept (C) 1*** Research Area (Dementia AD and Memory Loss)	Dementia care plan	Memory clinics assessment tool
Research Question 1 Concept (C) 2 Role, Perception and Experience of Traditional Healer	One Traditional healer Traditional healer's role additionally recognizes investigating and determining the cause of dementia and treating symptoms. Traditional healer investigates that client with dementia does know how to smile, how to communicate, how to express words, how to speak. Need to work with client, family member or caregiver closely and spend much more time to build mutual trust for collaboration and partnership. Lack of cognitive assessment training.	Three Grandmothers group (considered as Traditional healer) The Grandmothers as traditional healers (inclusion criteria) from diverse backgrounds, including Cree, Salteaux, and Métis, appropriately reflect the heterogeneity of Aboriginal populations in Saskatchewan. Participants also varied in the languages they spoke fluently. One Grandmother spoke Plains Cree, Mitchif Cree, French, and Salteaux. All Grandmothers were fluent in English. Lack of cognitive assessment training.
Research Question 2 Strategies for integration of culturally safe dementia care	Creating Culturally Appropriate Dementia Resources and Care The traditional healer encouraged his clients to seek out Western medicine and strove to work in partnership with Western health care practitioners. Similarly, the personal support worker, collaborated with traditional healers for her client with dementia and whatever the traditional healer said, she must do. For example, if the client wants their house cleaned out with a seed of the sage, she goes in and cleans their houses out.	No strategy recommends the integration of culturally safe dementia care. Focused on traditional and culturally grounding health care for the ageing illness and dementia. Emphasized visual communication and culturally appropriate translation.

Details	Ontario (Canada)	Saskatchewan (Canada)
Research Question 3 Policy barriers and research gaps	The traditional healer described how physicians might not accept the validity of traditional healing and alternative medicines, making it difficult to have collaborative client care. Even though traditional healer tries to transform clients' initial fears and negative emotions towards a dementia diagnosis, because these negative reactions only helped feed the disease. There is a research gap and policy barrier to integrating traditional healer into the mainstream health care system	Research gaps on relationships between the healthcare providers and members of Grandmother Groups for culturally safe dementia care in their community. The notion of culturally competent healthcare. The Grandmothers strongly urged the importance of language in creating comfort in the healthcare environment due to research gaps and policy barriers.
Suggestions/ Recommendation (If any)	Honour and respect both traditional healing and Western medicine as a culture of living the life of a person with dementia	Promote culturally competent ageing and dementia care in the remote landscape.

Table 3 also presents summary results extracted from each of the included papers.

3.3 Extracted Results

3.3.1 Research Question 1: Role and Perception of Traditional Healers in Dementia Care

Finkelstein, Forbes, and Richmond (2012) identified the interdisciplinary role of the traditional healer as an investigator, collaborator, navigator, and evaluator involved in searching and determining the cause of dementia, treating symptoms in the community of Southwestern Ontario First Nations community. In this study, data was collected through in-depth interviews and analyzed using a constructivist grounded theory methodology. The analysis presents two frameworks, such as the care delivery framework and the knowledge framework that revealed the process of providing health care to First Nations people with dementia (PWD). The healthcare providers' participants included traditional healers, social workers, personal support

workers, registered practical nurses, community health workers, health educators, and registered nurses. In terms of identifying elements of care and participant roles, "the traditional healer's role additionally comprised investigating and determining the cause of dementia and treating symptoms" (p.260).

In terms of the severity of dementia symptoms in clients who failed to share information by hiding or denying signs and symptoms to provide everyday care, traditional healer used investigation in his traditional healing to determine the cause of a dementia condition and to formulate a care plan:

> "So, it [dementia] stems for somewhere, you know … we got to go back and start to unravel: where did it start, how did it start, what does it need to do? … It stems from what we take in and we get affected by it." (p.263)

In this study, two frameworks were recognized: a care delivery framework and a knowledge framework. The care delivery framework included four groups of knowledge stakeholder persons with dementia, formal and informal care providers, and the First Nations community. The role of the traditional healer is instrumental to articulate the balanced and seamless synergetic involvement with RN, RPN, PSW, Community Health Worker, Health Educator, Social Worker for the dementia care connected to the First Nations members and community. This study concluded that lack of knowledge or failure to share knowledge among stakeholders and health care professionals are key barriers that negatively impact dementia care and recommends appropriate knowledge-sharing strategies.

The second research team (Lanting et al., 2011) undertook a project entitled "Strategies to Improve the Care of Persons with Dementia in Rural and Remote Areas" in a remote

Saskatchewan community clinic in the province of Saskatchewan of Canada and proved to be instrumental. The three Aboriginal Grandmothers were recruited for six monthly key informants group interviews. These meetings were held at the Saskatoon Community Clinic as the participants were Aboriginal seniors who regularly met for education sessions and social gatherings. The Grandmothers were from diverse backgrounds, including Cree, Salteaux, and Métis, which appropriately reflected the heterogeneity of Aboriginal populations in Saskatoon. Participants also varied in the languages they spoke fluently. One Grandmother spoke Plains Cree, Mitchif Cree, French, and Salteaux. All the members of Grandmothers Group were fluent in English. In the meantime, the three Grandmothers (key informant participants) were considered to be traditional healers for this scoping review inclusion criteria based on their extensive experiences as community health care providers and their regular involvement in the educational session and social gatherings in the areas of ageing, dementia, cognitive decline, and caregiving in the remote Saskatoon Community Memory Clinic for senior Aboriginal peoples. The roles and perception of Grandmothers on the notion of dementia, ageing and caregiving provide a holistic insight.

The Grandmothers reflected that there is no specific Cree word or term for dementia but described it as "losing your memories" and "back to the baby stage" as the metaphors that capture dementia in the Cree language. One Grandmother described it as someone who later recognized as having dementia as "not with her mind." One Grandmother described wandering behaviour in an older male in her community and hoarding behaviour in an older woman, who continuously made bannock and then hid this under her mattress. The Grandmothers talked of ageing as "going back to the baby stage", thus illustrating the "circle of life" and the importance

of circular symbols within Cree culture. Similarly, one Grandmother described caring for her mother who had dementia and her own fear of the disease, stating, “I sometimes have a feeling that I am picking up what my mother had, and this is a worry for me. I don’t want to be like her” (p. 110).

This study illustrates the holistic understanding of dementia, including the grandmothers who deal with Aboriginal seniors with dementia and memory loss in rural and remote communities. Furthermore, there are multifarious factors to identify and assess dementia and memory loss, including kinship, access to resources and healing support and engaging in cultural and spiritual ceremonies. According to Anderson (2011), Grandmothers play a key role, traditionally, in keeping their communities alive and taking responsibilities and leadership for overseeing the health, wellbeing, and longevity of their communities (Anderson, 2011, p.131). Thus, this scoping review considers the role of the Grandmother as a traditional healer in dementia and/or memory care in their community. Their dynamic leadership role and community-led experiences on memory or dementia care can build a powerful foundation of knowledge and the transfer of teachings from one generation to the next. Also, their participation in this research project inspired researchers to connect with people with dementia or memory loss in the remote memory clinic. This study demonstrated how three members of a Grandmothers Group shared their lived experiences in narratives that are deeply rooted in a holistic understanding of dementia and memory loss, and care for the person with dementia in their families and communities.

3.3.2 Research Question 2: Strategies for Integration of Traditional Healing into Culturally Safe Dementia Care

Finkelstein, Forbes, and Richmond (2012) reveal that culturally appropriate dementia care involves strategically integrating collaborative approaches. For example, the social worker created a bereavement program for families, which drew from both Western and traditional methods of healing. In addition to that, the health educator was in the process of adapting mainstream dementia education resources to make them First Nations-specific and had met with community Elders for suggestions." (p.262)

It is also setting a good example for others that health care providers deliver culturally appropriate care by bringing together Western and traditional medicines in such a way that fulfills the client's needs. In this study, it shows a personal support worker (participant) collaborated with traditional healers:

> "I have two clients working with me… [with their] traditional medicines, and I work with their healers … So, whatever, their healer says, I will do it … if they want their house cleaned out with a seed of the sage, you know, I go in and I clean their houses out." (p.263)

The traditional healer interacts with dementia clients as part of a Western model of care and places significant and importance on taking the time to work with clients to improve health, having open-door policies and being available for crisis support.

> "A lot of them [clients with dementia] don't know how to smile, how to communicate, how to express words, how to speak, nut we work with them. Yeah. We work with them. I spend more time with them." (p.263)

In terms of the positive aspects of potentially undergoing a diagnosis, participants realized they had more success in encouraging clients to get cognitive assessments and treatment

for symptoms. The participant traditional healer viewed the client's initial fears and negative emotions towards a dementia diagnosis because these negative reactions only helped feed the disease.

> "…Not only dementia but [a client's diagnosis] could be diabetes or whatever. As soon as you find that you may have a history of it, or if you are diagnosed with it, you know what happens to people when they hear that they are diagnosed with whatever? Once you hear that from a doctor, how does it make most people feel?" (p.264)

The response to the interviewer's concern of fears of most people was like this one:

> "Yeah. And that makes a lot of things happen after that. Once they leave here, their self-esteem goes down, they kind of want to give up. So, what happens there – it is funny how it works: when you allow yourself to feel down a lot, you are feeding that sickness, a lot. So, what we teach our people is, hey it is ok if you are diagnosed with this, you know. [and] here is how we should receive that; accept it. accept it, for now, you know, and then find a solution. But if you are going to get angry, upset about it, or even down about it, you're going to feed that more – it's going to make it worse for you." (p.264)

These approaches and strategies of traditional healers facilitate and fill the gaps for the potential integration between traditional healing and medicine for culturally safe dementia care, and geriatrics care and therapeutic services for the PWD in the First Nations Community.

The study of Lanting team (2011) describes the context of culturally appropriate healthcare and the significance of sensitivity in communication. The visual images convey information while ensuring familiarity and relevance to improve the care of persons with dementia in rural and remote areas through the assessment of Grandmothers group. Additionally, the importance of language translation services, as well as the prominence of humour in language enhanced the culturally appropriate in developing rapport and in conducting an accurate assessment. An illustration of the importance of sensitivity in communication was

provided by one Grandmother as an exemplar of the strategy of integration to culturally appropriate dementia assessment and care.

> There was a male nurse from New Zealand who had never seen an Aboriginal from Canada and asked, 'What do I expect, how do I approach people in the community?'
>
> The Grandmother instructed the male nurse, "be yourself, do your work well, be honest with the people, do what you are supposed to, and people will respect you." The nurse stayed for 7 years" (p.112).

The Grandmothers emphasized that color images are necessary for evoking an older adult's interest and engaging them in the assessment process. In describing her own successes as a healthcare provider, one Grandmother described the need for creativity and visual images:

> And we would have a picture of the anatomy in colour, and it is eye-catching and it really draws you in too. Catches the interest. We used lots of things with animals– and there are lots of words, even in diabetes, that you do not have a word for in Cree, so you need to come up with something. (p.112)

The Grandmothers underlined the importance of language in creating comfort in the healthcare environment. One Grandmother described,

> You know when it comes to assessment, I think this is where the language comes in handy–to be specific so that this person you are assessing will understand and be relaxed. (p.112)

This study documented the positive impact on people with dementia for the potential integration of traditional and culturally grounding health care for the ageing illness and dementia.

3.3.3 Research Question 3: Policy Barriers and Research Gaps

To address research question 3, the study of Finkelstein, Forbes, and Richmond (2012) illuminate the experience of a traditional healer who faced a critical problem. They describe "how a physician might not accept the validity of traditional healing and alternative medicine,

making it difficult to have collaborative client care" (p.261) due to research gaps and policy barriers at the community level. Despite that, traditional healers are trying to transform clients' initial fears and negative emotions towards a dementia diagnosis, because these negative reactions only help feed the disease. Access to combined geriatrics care and therapeutic supports, and traditional healing, medicine, and ceremonies for the treatment of people with dementia promote wellness.

The study of Lanting (2011) emphasizes the importance of visual language and translation services within healthcare settings, providing stories that describe a breakdown in communication and quality of healthcare because of language barriers between a patient and a healthcare provider. These issues should be addressed at the community level. The need for translation or language services in healthcare is often addressed humorously as said one of the participants of Grandmother groups:

> "I think it is very important to have a translator. This elderly man went to the doctor. and when he went home, he said to his son that a horse was on his liver. The son phoned the nurse and asked what his diagnosis was, and she said it was cirrhosis of the liver. Close but you need a translator."

The same Grandmother later told another humorous story about miscommunication between a healthcare provider and a patient due to language barriers:

> "Some nurses get careless and maybe they are overworked...and they will send in a 12-year-old boy to translate for grandpa. Like the one who had prostate cancer...they told the boy to tell the grandpa that they were going to give him two shots right away. and the boy did not know the words, so he told his grandpa that they were going to shoot him twice right now. So, the grandpa says that 'I guess there is no hope then'!"

This study reflects services or communication gaps on relationships between the health care providers and members of Grandmother Groups for culturally safe dementia care in their community. On the notion of culturally competent healthcare, the members of Grandmothers

Group strongly urged the importance of language in creating comfort in the healthcare environment due to research gaps and policy barriers. However, the cultural perceptions of ageing and dementia, impact ageing and improve culturally grounded healthcare that is visually engaging and comfortable. This study contributes to change the appropriateness of the assessment process and the accuracy of diagnosis within the Rural and Remote Memory Clinic to facilitate interventions that incorporate a culturally based understanding of dementia in Canadian Indigenous people. Additionally, the extensive interaction on the cultural-friendly assessment tools through the six-monthly rigorous interaction between researchers and Grandmothers have facilitated modifications of the existing screening instruments and neuropsychological testing protocols to enhance their cultural appropriateness for Aboriginal older adults (Lanting et al., 2011). As a result, the new screening tool was developed for use by frontline care providers (Morgan et al., 2014). For this purpose, Grandmothers were also involved with the researchers on some home visits to pilot test the assessment protocols with Aboriginal seniors. These visits were conducted in partnership with a family physician and Aboriginal homecare staff and managers (Morgan et al., 2014). This is an exemplar pragmatic integration between frontline health care workers and Grandmothers to fill the policy and research gaps at the local community level for dementia and memory care in a rural memory clinic.

3.4 Impact of Local Community Stakeholder Consultation

The messages from all of those (Elder knowledge-holders) who shared their knowledge at the gathering/meeting are important to guide and to locally conceptualize the interpretation and validation of this scoping review. These include the importance of:

1. acknowledging the ways that people have moved away from traditional teachings and ways of life and how this has resulted in increased dementia in younger people. These changes include food, diet, technology distractions, and use of Anishinaabemowin language.
2. community organizations to facilitate social interaction, communication, and connection between the traditional healer and local community health care providers (primary physicians, nurses, geriatricians, therapists, personal support workers), caregivers, families, Elders, knowledge holders, local stakeholders, and leaders.
3. Anishinaabemowin language strengthening to maintain a connection to traditional practices as well as to communicate with those who have dementia.
4. policy dialogue and advocacy within the existing health care system to eliminate institutional racism and discrimination.
5. developing a community-based culturally safe dementia care model to promote integration between traditional healers and local health care providers. They considered, validated, and endorsed the proposed model 1 and 2 in holistic aspects for the integration roadmap of culturally safe dementia care for traditional healers, local health care providers and their community advisory group or council and stakeholders.
6. developing and implementing a diversity, equity, and inclusivity (DEI) framework at a community level to promote anti-racism, ethical reciprocity, resilience, humility and culture to create a dementia-equity and inclusive community.

The consolidated report of the local or community stakeholder consultative Zoom circle gathering is appended in Appendix C.

Chapter 4: Discussion

Traditional healing and medicine have endured for many thousands of years as in Indigenous Nations around the globe. However, traditional medicine practices in a clinical, health center setting and in cooperation with biomedical treatment methods are challenging. The World Health Organization (WHO) Traditional Medicine Strategy (2014-2023) emphasized that traditional medicine is an important but often underestimated part of health services worldwide which have a long history of practice in health care, disease prevention and treatment, specifically chronic disease (WHO, 2013). According to the WHO, Indigenous traditional medicine is defined as the total of knowledge and practices, whether appropriate or not, used in diagnosing, preventing, or eliminating physical, mental, and social diseases (WHO, 2019). This knowledge or practice may rely exclusively on experience and observation handed down orally or in writing from generation to generation. Most Indigenous traditional medicine has been practiced at the primary health care level (WHO, 2019). This may also include memory loss, mild cognitive impairment, dementia, and early familial onset Alzheimer's disease, but there is a need to recognize the role of traditional healers in dementia care and assessment (WHO, 2018).

In Ontario, Canada, traditional healing, and medicine practices in dementia care are under-valued in Indigenous communities even though the Aboriginal Health Policy for Ontario of 1994 affirms:

> "Traditional Aboriginal approaches to wellness, including the use of traditional resources, traditional healers, medicine people, midwives, and elders, are recognized, respected, and protected from government regulation. They enhance and complement healing as well as programs and services throughout the health system." (Principles 4, Aboriginal Health Policy for Ontario, p.4) (Ministry of Health Ontario, 1994).

In this scoping review, only two peer-reviewed originals published articles in 2011 and 2012 from Canada that met all inclusion criteria out of 143 studies from North America, Australia and New Zealand that published between 2000 and 2020. These two studies exclusively revealed the role, perception, engagement, the potential integration of traditional healing and medicine into the existing health care system (biomedicine) for dementia care and policy barriers and research gaps. It also reflected how the combination of biomedical and traditional healing and care is a unique example of the medical pluralism in dementia and memory care within the First Nation community in Ontario (Finkelstein, et al. 2012) and Cree, Salteaux, and Metis communities in rural and remote Saskatchewan (Lanting et al., 2011) in Canada. The remaining 141 studies were excluded in this scoping review due to the lack of role and engagement towards traditional healers and the potential integration of traditional healing in dementia care. This highlights important research and knowledge gaps at the community, national and international levels, despite the recognition of traditional healer as a stakeholder for dementia care and prevention globally by the World Health Organization (WHO) in 2018.

Furthermore, there is no minimum requirement for the number of studies included. Thus, this scoping review demonstrates two studies eligible for inclusion which is important evidence for knowledge synthesis. For example, researcher Janet Jull and her team screened 1,769 citations of literature or studies and found only one study that was eligible for inclusion for the systematic review (Jull et al., 2013). Even systematic reviews have zero studies that are important findings on their own (Huessin, 2015).

Critically, both studies (Finkelstein et al., 2012; Lanting et al., 2011) reflect the finding that Indigenous ways of knowing are being marginalized in the healthcare system, including

cognitive assessment training for traditional healers and Grandmother groups. In turn, Indigenous people with dementia are not having access to culturally safe dementia care and treatment. Thus, it is a poignant challenge for Indigenous healthcare professionals, policymakers, and traditional healers to promote or advocate for Indigenous self-determination in the healthcare systems in North America, Australia, and New Zealand.

The study of the Finkelstein team (2012) explored dementia care in First Nations communities in southwestern Ontario. The in-depth interviews with seven health care providers included one traditional healer and were analyzed through the constructivist grounded theory methodology. Two interrelated frameworks for understanding dementia care were recognized: a care delivery framework and a knowledge framework. The care delivery framework included care goals, elements of care, barriers of care and strategies and solutions to deliver care and eliminate barriers. The knowledge framework delineated four groups of knowledge stakeholders: persons with dementia, informal care providers, formal care providers, and the First Nations community. However, this knowledge was integrated into the biomedical model to be a culturally safe integration of care delivery and knowledge frameworks. This study defined the knowledge of each stakeholder needed and processes of sharing – or failing to share – knowledge in dementia care through integrating care delivery and knowledge framework. However, health care professionals use effective strategies for providing care and overcome barriers by creating culturally appropriate dementia resources and consultation among health care providers and the First Nation community members.

The second study by Lanting and team (2011) examined the role of cultural perceptions of ageing and dementia in the recognition, diagnosis, and treatment of age-related cognitive

impairment. This qualitative study describes a study based on a series of six key informant group interviews with three Aboriginal Grandmothers Group in the province of Saskatchewan, who are considered traditional healers based on the inclusion criteria. Thematic analysis was used to explore Aboriginal perceptions of normal ageing and dementia and an investigation of issues related to the development of culturally appropriate assessment techniques. Three related themes were delineated that highlighted Aboriginal experiences of ageing, caregiving and dementia within the health care system: (1) cognitive and behavioural changes were perceived as a normal expectation of the ageing process and a circular conception of the lifespan was identified, with ageing seen as going back "back to the baby stage", (2) a "big change in culture" was linked by Grandmothers to Aboriginal health, illness (including dementia), and changes in the normal ageing process, and (3) the importance of culturally grounded healthcare to review of assessment tools. The theme of sociocultural changes leading to lifestyle changes, disturbance of the family unit and community caregiving practices and viewing memory loss and behavioural changes are seen as a normal part of the ageing process. However, this research did not address the Aboriginal perceptions of integration ageing and dementia regarding informing appropriate assessment and treatment of age-related cognitive impairment and dementia in Aboriginal seniors. Grandmothers in Saskatchewan talked about the 'big change in culture' occurring in their communities (Lanting et al., 2011). However, they did discuss the increased pace of life and changing family structures as being related to less community helping and more isolation for elders (Lanting et al., 2011).

Numerous studies suggest the inclusion of traditional healers and ceremonies in Alzheimer's diseases and related dementia (Henderson & Henderson, 2002; Hulko et al., 2010;

Jervis & Manson, 2002; Keightley et al., 2011; Segal & Smith, 2004) because Indigenous traditional healing and medicine is an important source of culturally appropriate care that promote wellness. Also, First Nations Elders in Canada seek spiritual, emotional, physical, and mental balance in preventing dementia and empowering First Nations people to live healthy lives through traditional healing and medicine practice (Halseth, 2018). Due to these facts, health care providers need to collaborate with traditional healers or Elder-knowledge holders to enhance holistic aspects of physical, mental, spiritual, emotional, and intellectual wellness to support improvements in cognitive function for Indigenous people with dementia. Additionally, a U.S. study on the experience of an Anishinaabe man healer in a modern world by Struthers, Eschiti, and Patchell (2008), emphasized the importance of educating Western health care practitioners, nurses, and physicians about Indigenous healing to foster respect and trust between the Indigenous patient and Western practitioner. In this scenario, communication and wellness for Indigenous people may improve in a holistic approach (Struthers, Eschiti & Patchell, 2008).

Several studies have been undertaken in Canada including 11 research articles based on rigorous research and studies on the Indigenous ageing and cultural aspects of dementia care and caregiving for the last decade (2010-2020) (Webkamigard et al. 2019, 2020; Pace, J. 2020; Cornet-Benoit et al. 2020; Jacklin et al., 2015 and 2020; Jacklin and Walker, 2020; Cabrera, et al. 2015; Finkelstein, Forbes, Richmond, 2012; Lanting et al., 2011; Hulko, et al. 2010). This scoping review draws some cohesive themes for knowledge sharing to create interest for scholars and researchers in the academic arena.

Besides that, there are numerous studies interrelated to the concept of dementia, Alzheimer’s disease, memory care and aging, informal caregiving, evidence to engagement and

participation of community Elders' knowledge-holders and community members, Indigenous carers, and workers instinctively and culturally appropriate dementia care in multi-diverse inclusive Indigenous groups and communities in North America (Webkamigard et al. 2019 and 2020; Pace, J. 2020; Cornet-Benoit et al. 2020; Jacklin et al., 2015, 2020; Jacklin & Walker, 2020; Cabrera, et al. 2015; Hulko, et al. 2010 in Canada and Browne et al. 2017; Griffin-Pierce et al. 2008, Jervis & Mansion, 2002; Kane, 2000 in the United States), Australia (Arkles et al. 2020; White et al. 2019; Cox et al. 2019; Hocking et al. 2019; Akhtar et al. 2016; Radford et al. 2015 and 2019; Tayler et al. 2012; McLeod, Nolan & Dewing 2012; and Smith et al. 2011) and New Zealand (Dudley et al. 2019; Dyall, L. 2014; Martin and Paki, 2012 and Dyall et al. 2011 in New Zealand). However, these studies neither discussed nor focused on the role and engagement of traditional healers of dementia care in diverse Indigenous groups and populations due to a lack of relevant research or intervention in the last two decades (2000-2020). The US study of Buchwald et al. emphasized that traditional healers are not omitted from the research, as they play a vital role in many Native communities but for four US studies underestimated the role and engagement of traditional healers (Browne et al. 2017; Griffin-Pierce et al. 2008, Jervis & Mansion, 2002; Kane, 2000) respectively.

In Canada, most of the studies in 2010 to 2020, reflect the perception of caregiving roles for the people with dementia among diverse Indigenous groups and communities and culturally appropriate dementia care strategies in British Columbia (Hulko, et al. 2010) and in Ontario (Pace, J. 2020; Cornet-Benoit et al. 2020; Jacklin et al., 2015, 2020; Jacklin & Walker, 2020; Cabrera, et al. 2015). Two studies reflect the two-eyed seeing approaches on dementia care-related educational and promotional materials that incorporate Indigenous knowledge, respecting

Indigenous languages and recognizing Indigenous resilience (Webkamigard et al. 2019, 2020). Besides that, the first Canadian Indigenous Cognitive Assessment (CICA) tool was developed by the adaptation of the Australian Kimberly Indigenous Cognitive Assessment (KICA) tool. Based on CICA tool, the first pilot survey study was carried out in 2018-2019 to adapt and validate in the First Nation Anishinaabe community in Northeastern Ontario by Jacklin and her team (Jacklin et al., 2020). This is the first CICA study that has been undertaken in North America that accomplished over 22-months of consultation with an 11-member expert Anishinaabe language group, bringing the investigators and consultation with an Indigenous Elder and members of the Community Advisory Council. Unfortunately, there was no involvement or participation of the traditional healers in the process. It might be surprising that Indigenous traditional healers are neglected and isolated in the process of Indigenous Cognitive Assessment Tools adaptation, validation and implementation in Australia and Canada.

For the first time in Canada, about Indigenous research on dementia, the research team of Hulko (2010) welcomed and honoured the inclusivity of Elders as researchers, advisors, knowledge-holders, and participants in the British Columbia First Nations community (Hulk et al., 2010). The Elders shared unique insights about memory loss's relation to the full circle of life and the Shema (white) way of "your dementia" to enhance Secwepemc culture, bringing back traditional lifestyle for culturally safe dementia care for First Nation Elders with memory loss by respectfully integrating specific knowledge of Secwepemc Nation with the content on cultural traditions (respect for Elders), history (residential schools) and values (supporting one another) into direct care practices (Hulko et al., 2010). The lessons from this study were important, but not included in this scoping review due to the lack of role and engagement of

traditional healers and potential integration of traditional healing medicine into dementia care exclusively.

The scoping reviews in the United States reflect an underdeveloped relationship with Indigenous populations and their Indigenous ways of understanding dementia that needs to describe a process of gathering knowledge for a meaningful way of life for Indigenous people with dementia (Brown et al., 2017, Griffin-Pierce, et al., 2008, Jervis & Manson, 2002; Kane, 2000). According to the 2021 national surveys of the Alzheimer's Association about the experience of barriers to access dementia care in the United States, two in five Native Americans (40%) believe their race or ethnicity makes it harder to get care, and 47% feel confident that they have access to providers who understand their ethnic or racial background and experiences (Alzheimer's Association, 2021). Similarly, 92% of Native Americans emphasized the importance of Alzheimer's and dementia care providers to understand their ethnic or racial background and experiences (Alzheimer's Association, 2021; p.75). Thus, the Alzheimer's Association began promoting cultural competence and cultural sensitivity in dementia care more than a decade ago and this effort remains a priority (Alzheimer's Association, 2021). Traditional healers are ignored and marginalized in the process of dementia care and prevention in their Native American communities (Indian American, Alaska and Hawaii natives) respectively.

In Australia, researchers carried out the modified Kimberly Indigenous Cognitive Assessment (mKICA) screening and data collection through recruiting local Aboriginal research assistants for dementia and mild cognitive impairment in the urban regional Aboriginal and Torres Strait Islander under the guidance of local Aboriginal community leaders (Radford et al.,

2015). Participation of community members in an Aboriginal community in rural Tasmania (Cox, et al. 2019) illustrated the valued contributions made by their Indigenous ways of screening, assessment, and care for Indigenous elders with dementia. Thus, diversity, equity and inclusivity are essential for the traditional healers into dementia care in Indigenous groups and communities. The importance and role of traditional healers and their Indigenous knowledge have historically been devalued compared to Western scientific knowledge and the practice of medical knowledge which has never been documented and published yet. The first Indigenous Cognitive Assessment tool was developed for Indigenous people in remote communities of the Kimberly Region in Australia to screen and assess dementia and cognitive impairment. The three quantitative studies used the mKICA (Radford et al., 2015) as a good alternative for dementia screening in the case of language, literacy, and cultural consideration. The KICA method used by Hocking's research team (Hocking et al., 2019) is significant to validate the link between alcohol, traumatic brain injury, and Alzheimer's disease. The KICA-Cognitive method was used for the study in Far North Queensland to improve the cognitive impairment among homeless Aboriginal Torres Strait Islander people (White et al., 2019). However, no traditional healers were involved. The study of McLead and colleagues (2012) revealed that Aboriginal carers involved in the New South Wales Kuranya/'Rainbow Indigenous community provide culturally sensitive or appropriate community-based services to enable older Aboriginal people with dementia to remain in their communities with support the unique needs of Aboriginal carers for caring for the custodian (people with dementia).

In a key study that examined the support of plant-based medicine knowledge-holders, researcher Akhtar and his team collected leaf materials of 17 *Eucalyptus* species in August 2015

in Mount Annan, New South Wales of Australia under the teaching and guidance of Botanist and Aboriginal Elder, known as "Aunty Fran". Aunty Fran, wrote a handbook entitled "*Dharwal Pharmacopeia*" which was a compilation of the thousands of medicinal plants and species used by Aboriginals Peoples in Australia for anti-inflammatory purposes, including the prevention and care of dementia and Alzheimer's diseases (Akhtar et al., 2016). Such collaboration of researchers and Indigenous plant-based medicine knowledge-holders in Australia is a unique example to carry out similar research in North America and New Zealand.

In New Zealand, researchers nurtured a harmonious relationship with Elders, community members, and leaders in the Maori community as participants and advisors for their study (Dudley et al., 2019). The bi-cultural model of dementia care through extended family members (Martin and Paki, 2012), and a group of Maori elders formed to support the study for the biomarkers of AD and dementia (Dyall, et al., 2011) are the best examples of honouring reciprocity of knowledge exchange and synthesis.

The role and experiences of traditional healers in dementia care are guided by their Indigenous knowledge, land, language, culture, and ancestral and sacred teachings, and cosmic spirit. However, the Indigenous Determinants of Health (IDH) theoretical framework is best explained by Charlotte Reading, using the metaphor of a tree (de Leeuw, Lindsay & Greenwood, 2018). The IDH theoretical framework recognizes the historical legacies within settler-dominated societies that have distal, deeply rooted, influences that have led to complex interconnected impacts to intermediate (trunk), and proximal (crown and leaves) determinants of Indigenous peoples' health (Reading, 2018). According to Reading (2018), the deeply embedded roots of Indigenous worldviews, spirituality, and self-determination are reflected

through the historical and contemporary structures of the distal determinants as well as employing an Indigenous framework to recognize the importance of relationships, kinship, language, and cultural traditions that lead to the direct impact on the proximal determinants of the individual (Reading, 2018; Webkamigad et al., 2020). This framework can also guide multifarious dementia care practices regarding spiritual and emotional wellness by traditional healers. The grounding of the IDH as theoretical lens in this scoping review can validate and empower the voices and genuine concerns of Indigenous traditional healers to engage in traditional healing practice and research that aim to revitalize and enhance traditional healers' knowledge in dementia care.

4.1 Power of Relationship between Biomedicine and Traditional Healing in Dementia Care

4.1.1 Power Dynamics

Traditional healers and health care providers have power dynamics in terms of equitable partnerships, humility collaboration, and ownership, yet possess a shared vision towards dementia care. This can be used to integrate traditional healing medicine in dementia care to recognize and honour the knowledge and experiences of traditional healing medicine practitioners and Elder knowledge-holders and to improve efforts to decolonize dementia and dementia care through access to traditional healing medicine in dementia care. Also, the power dynamics construct a pathway to bring together emerging Indigenous researchers, and traditional healing medicine practitioners to promote valuing the diversity of traditional healing medicine as land-based medicine knowledge and practices in a combined form of biomedical and traditional

medicine in dementia care. It relies on the relational dimension of healing within mind, body, and spirit.

Redvers (2019) concludes that traditional medicine and science can coexist with mutual respect and understanding for the benefit of Indigenous and non-Indigenous patients worldwide (Redvers, 2019).

According to the study of Liu, Wang, and Tian (2012), dementia was recognized and investigated in traditional Chinese medicine (TCM). The Chinese word "dementia" was coined by a famous Chinese Physician Hua Tuo (140-208 AD) in his book *Hua Tuo Shen Yi Mi Zhuan (Hua, 1994)* in Han Dynasty and prescribed a treatment for dementia. During the period of Ming and Qing dynasties, the pathogenesis and therapy of dementia were investigated and developed as an independent subject with advanced knowledge in memory impairment, speech difficulty, sleep disorders, neuropsychiatric syndromes, and pathologic brain atrophy. These observations were renowned by Chinese physicians in ancient times (Liu, Wang & Tian, 2012).

Another study by Baloyannis (2014) illustrated that dementia occurs in the final stages of Alzheimer's disease and other degenerative processes of the brain cortex and subcortical centers that characterize a gradual cognitive impairment that affects mostly memory and judgment. The person with dementia is still a person, who deserves to be treated with respect and dignity, respecting his/her inner life. In the viewpoint of neurophilosophy, dementia should be considered under two different dimensions: (1) dementia as a disease, namely as a medical problem, and (2) dementia as a composite of bio-social psychological factors that affect the quality of life of the suffering human being (Baloyannis, 2014).

Baloyannis further explained the importance of self-knowledge. Socrates and Plato (5th century BCE) as well as, many centuries later, by Kirkegaard and other existential philosophers shared similar opinions. Additionally, Alcmaeon of Croton was the first philosopher and physician who declared that mind and soul were in the brain, which is the seat of cognition and reasoning (Beare, 1906; Doty, 2007; Baloyannis, 2014).

4.2 Power of Relationship between Traditional Healing and Medicine, and Indigenous Knowledge in Dementia Care

In terms of the power in the relationship between traditional healing and Indigenous knowledge in dementia care, Jacklin and Pitawanakwat (2019) explained the circle of life embodied as Indigenous knowledge about dementia among Anishinaabe First Nations in Canada. This reflects how traditional healing and medicine cultural practice cannot be separated and isolated for dementia care in Canadian Indigenous communities. Pitawanakwat, a community health researcher expressed her strong message in this way:

> "I want to introduce the concept of the circle of life as it related to four of our seven grandfather teachings. Our Elders are living in their seventh stage of life. They have a lifetime of wisdom that is respected. Interactions with an elder instinctively show kindness and love. We are a humble people who value our time walking here upon the earth as a spiritual collective to learn and share for the benefit of seven generations who will walk the same earth ahead of us. In an elder last stage, they are transitioning back into the spiritual world, part of the continuum of life." (Alzheimer Disease International, 2019)

The heart-touching article by Kevin Berube, "Mental Health and Addictions Program Director, Sioux Lookout Meno Ya Win Health Centre" conveys a true story on "why traditional healing has a place in modern health care" and how traditional treatment for cancerous tumors would be found helpful, both the healers (doctor and traditional healer) having openness and

respect for each other's discipline (Berube, 2015). This kind of mutual respect serves to provide the best health outcomes for any patient, including a person with dementia care in the same spirit of respect and openness by both traditional healers and dementia health care providers.

According to Hart (2007), Indigenous knowledge and ways of connecting to all of creation are deeply relational. Indigenous knowledge is holistic, personal (subjective), social (dependent upon inter-relations), and highly dependent upon local ecosystems. It is also inter-generational, incorporates the spiritual and physical, and is heavily reliant on Elders to guide its development and transmission (Hart, 2007, p. 85).

4.3 Strength of the Study

Strengths of this scoping review include the comprehensive search strategy developed in collaboration with an academic librarian, involvement of three eminent independent reviewers at each screening stage, and the iterative and ongoing consultation with an interprofessional team of researchers having expertise and experiences in Indigenous health research in terms of scoping and systematic reviews and qualitative evidence synthesis methods.

4.4 Limitations of the Study

The scoping review is limited only to North America, Australia, and New Zealand as we do not have the expertise required for adequate and respectful inclusion of sub-Saharan African cultures and traditions. It was a great challenge to document adequate representation and include the diverse cultures in sub-Saharan African places despite our efforts to develop inclusive search strategies. However, the supervisory committee members considered such limitations and

decided excluded sub-Saharan African countries. Another limitation of searching published literature is that many traditional healers, Elders, Knowledge-holders, Grandmothers Group and Medicine People do not communicate their knowledge in academic publications and may not be included by researchers since this is a newer area of inquiry. There are many stories, information, and teachings within communities that do not find their way into academic literature but may be honoured and acknowledged with gratitude through qualitative community-based research.

A key limitation of this study was the exclusion of grey literature. This scoping review did not present data on critical appraisal and the risk of bias was a limitation of this study.

Chapter 5: Conclusion

This scoping review has explored the traditional healing and medicine in dementia care and the role of traditional healers through published literature between two decades (2000-2020) for Indigenous populations in North America, Australia, and New Zealand. Only two peer-reviewed published studies in Canada were available to inform the potential integration of traditional healing in dementia care and the roles, and perceptions of traditional healers. This scoping review also evaluated the strategies for potential integration of traditional healers in culturally safe dementia care into existing health care practice and explored the policy barriers and research gaps to inform policymakers and stakeholders to policy practice. The existing health care system (medical) alone cannot deliver care support and treatment. Thus, the WHO introduced and developed a Guide for Dementia Plan to provide inclusion and recognition of traditional and faith healers, and community leaders as stakeholders for dementia care and prevention worldwide (WHO, 2018). Hence, the combined health care system and Indigenous traditional healing and medicine in dementia care are most viable to deliver care and social support for people with dementia. Additionally, both policymakers and health-care providers play a pivotal role in policy dialogue to create an environment for the engagement, education, and empowerment of traditional healers for the assessment of cognitive function, including dementia and mild cognitive impairment at the community level that was envisaged by WHO Guide for the Dementia Plan worldwide. However, while there might be a long history of traditional healing and medicine in dementia care and prevention, there are not many investigations or research by medical historians, anthropologists, and scholars.

This scoping review identified a pragmatic gap in the literature and evaluated strategies for the potential integration of culturally safe dementia care. The inclusion of traditional healers, Elder knowledge-holders, Grandmother groups, and emerging Indigenous researchers can contribute to building an evidence-based dementia care decision-making process for Indigenous people with dementia.

This scoping review also provides an ample opportunity to understand and explore the roles, perceptions, and experiences of traditional healing in dementia care within the context of North America, Australia, and New Zealand. The findings of this scoping review suggest the need for policymakers and health care stakeholders engage, educate and train traditional healers in dementia care with community health care providers and expert dementia care teams. Similarly, traditional healers also educate and train health care providers, offering valuable feedback for policymakers and health care stakeholders to promote wellness and compassionate care. This also includes advocating, amplifying, and empowering the role of traditional healers in the integration of traditional healing medicine in dementia care within family and community in a seamless environment.

This scoping review creates an interest in the academic arena for an emerging Indigenous youth traditional healer and scholar. The systematic scoping review method can be used to validate the reproducibility of the results. The knowledge translation will be supported to enhance collaboration between researchers and knowledge users (Arksey & O'Malley, 2005). Through these results, partnership initiatives with traditional healers, Indigenous community leaders, policymakers, stakeholders, and researchers of public health, brain health and cognitive health can take the lead to innovative and culturally sensitive research proposals on Indigenous

dementia care and prevention (Viscogliosi et al., 2020) in the future. This scoping review supports the need for evidence-based intervention research on cognitive assessment and training for traditional healers at the community level. Additionally, the involvement of Elder knowledge-holders and teachers in the scoping review was important to guide and to locally conceptualize the interpretation and validation of this scoping review. They graciously reviewed, validated, and adopted the proposed community-based integration models 1 and 2 for culturally-safe dementia care; and offered insightful and valuable input and suggestions about best practices for dementia care, assessment, and treatment in Anishinaabe communities in Northern Ontario, Canada.

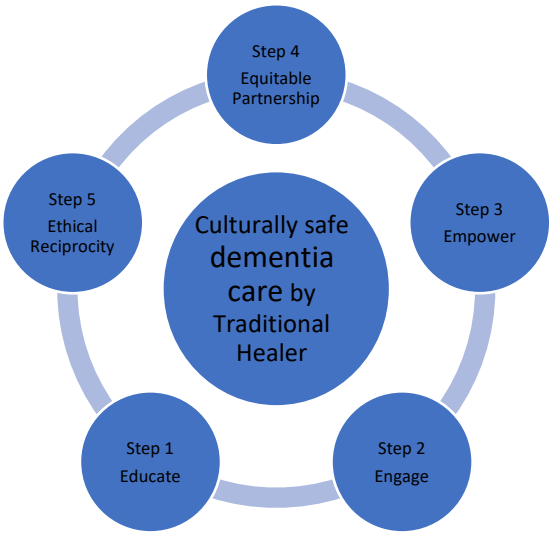
4.1 Future Direction

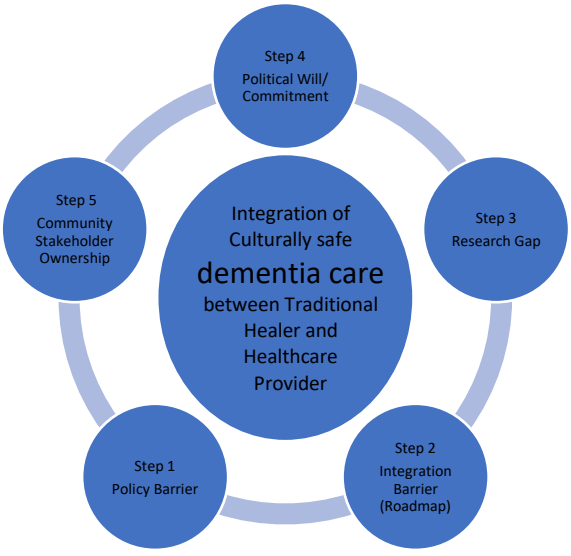
The rich, yet limited, information derived from two published studies showed a substantial lack of understanding of the roles of traditional healers in culturally safe dementia care in the existing health care system. Nevertheless, traditional healing in the spirit of the Indigenous way of life can promote culturally safe dementia care. In addition, there is a need for more open spaces for mutual dialogue and learning to validate the use of Indigenous traditional healings of dementia care in diverse medical settings. Prioritizing engagement with Indigenous scholars and/or their scholarship, community leaders and Elder knowledge holders are meaningful in the academic arena. This scoping review suggests optimal communication for Indigenous dementia care with local community health centers, caregivers, social workers, health educators, personal support workers, medicine lodge managers, and members of the local advisory council to set a collaborative support system.

Further research on knowledge synthesis in terms of how knowledge and experiences of traditional healers in dementia care integrate into existing dementia care clinical or health care practices (geriatrics, nursing, therapeutic services) at the local health centers is vital. It could be possible if financial support were provided as reciprocity or generosity (rewards/gifts or honorarium) for traditional healers who work towards the healing and care of people with dementia in family and community frequently.

4.2 Call to Action

The following two local/community models on cultural safety in dementia care are what I envisioned to describe five key steps to establishing culturally safe dementia care by traditional healers and the mechanisms for integrating traditional healers and healthcare providers for Indigenous populations using interdisciplinarity approaches at the community level.





Model 1 presents five steps to create a structure of culturally safe dementia care for the traditional healer. The first step is to educate traditional healers about dementia and cognitive assessment. The second step is to engage them in community health care center or their community. Empowering traditional healers through the local community advisory group or council is the third step. Creating an environment to work together with a community health care provider, a primary physician, a geriatrician is the fourth step as an equitable partnership. Finally, engaging in ethical reciprocity by providing an honorarium or gift for the traditional healer is the fifth step to ensure their meaningful contribution to cognitive assessment and traditional healing through plant-based medicine, sweat-lodge, ceremonies, sun dance, sacred fires, and sacred music (drum).

Meanwhile, model 2 presents five steps to build an integration modality of culturally safe dementia care between traditional healers and health care providers by eliminating numerous barriers and obstacles. These include removing the policy and integration barriers in the first and second steps to create an integration roadmap or pathways so that the third step may provide investigations meant to fill the gaps of research. The local political will and commitment are the fourth step to streamline the integration process. This step opens the path to establish a local stakeholder ownership role and responsibility for the community advisory group/council and community members/stakeholders as the fifth significant step. This notion generates an integration of culturally safe dementia care and prevention for Indigenous populations in interdisciplinarity approaches.

References

Akhtar, M.A., Raju, R., Beattie, K.D., Bodkin, F. and Munch, G. (2016). Medicinal Plants of the Australian Aboriginal Dharawal People Exhibiting Anti-Inflammatory Activity. *Evid Based Complement Alternat Med* (101215021):2935403.

Alvord, L.A &Van Pelt, E.C. (1999). *The scalpel and the silver bear: the first Navajo woman surgeon to combine Western medicine and traditional healing*. New York: Bantam Books.

Alzheimer's Association. (2021) Alzheimer's Disease Facts and Figures. *Alzheimer's Dement* 2021;17(3).

Alzheimer's Association. (2021). Cultural Competency and Dementia Care. http://www.dmh.ms.gov/pdf/Cultural%20Competency.pdf.

Anderson, K. (2011). Life stages and Native women: Memory, teachings, and story medicine. Winnipeg, MB: University of Manitoba Press).

Arkles, R., Jankelson, C., Radford, K., Jackson Pulver, L. (2020). Family caregiving for older Aboriginal people in urban Australia: Disclosing worlds of meaning in the dementia experience. *DEMENTIA* 19(2):397-415.

Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International journal of social research methodology*. 8(1), 19-32.

Armstrong, R., Hall, B. J., Doyle, J., & Waters, E. (2011). 'Scoping the scope' of a Cochrane review. *Journal of Public Health*, 33(1), 147-150.

Baloyannis, S.J. (2014). The philosophy of dementia. In: L.M. Popescu, A.R. Hargens and P.K. Singal (Eds.). *Adaptation Biology and Medicine, 7, New Challenges.* New Delhi: Narosa Publishing House

Beare, J.I. (1906). *Greek Theories of Elementary Cognition from Alcmaeon to Aristotle*. Oxford, Clarendon Press.

Berube, K. (2015 April 25). Why traditional healing has a place in modern health care. *The Globe and Mail.* https://www.theglobeandmail.com/life/health-and-fitness/health/why-traditional-healing-has-a-place-in-modern-health-care/article24126195/

Brooke, J. & Ojo, O. (2020). Contemporary views on dementia as witchcraft in sub-Sahara Africa: A systematic literature review. *Journal of Clinical Nursing.* 29 (1-2), 20-30.

Browne, C.V., Ka'opua, L.S., Jervis, L.L., Alboroto, R., Trockman, M.L. (2017). United States Indigenous Populations and Dementia: Is There a Case for Culture-based Psychosocial Interventions? *Gerontologist* 57(6):1011-1019.

Brunton, G., Stansfield, C., & Thomas, J. (2012). Finding relevant studies. In: D. Gough, S. Oliver, and J. Thomas. (Eds.). *An introduction to systematic reviews*. SAGE.

Buchwald, D.S, Beals, J. Manson, S.M. (2000). Use of traditional healing among Native Americans in a primary care setting. *Med Care* 38:1191–9.

Cabrera, L.Y., Beattie, B. L., Dwosh, E. and Illes, J. (2015). Converging approaches to understanding early onset familial Alzheimer disease: A First Nation study. SAGE Open Medicine 3: 2050312115621766. DOI: 10.1177/2050312115621766smo.sagepub.com.

Cammer, A. (2006). Negotiating culturally incongruent healthcare systems: The process of accessing dementia care in northern Saskatchewan. Unpublished master's thesis, University of Saskatchewan, Saskatoon, Saskatchewan, Canada.

Campbell, S., Dorgan, M. and Tjosvold, L. (2016). Filter to Retrieve Studies Related to Indigenous People of Canada the OVID Medline Database. *John W. Scott Health Sciences Library*, University of Alberta. Rev. http://guides.library.ualberta.ca/ld.php?content_id=14026803

Canadian Academy of Health Sciences. (2019). Improving the quality of life and care of persons living with dementia and their caregivers. Ottawa (ON): The Expert Panel on Dementia Care in Canada, *CAHS*. https://www.cahs-acss.ca/wp-content/uploads/2019/01/Report.pdf

Canadian Institute Health Research [CIHR] (2020). http:/www.cihr-irsc.gc.ca/e/41382.html https://cihr-irsc.gc.ca/e/documents/knowledge_synthesis_chapter_e.pdf (p.34)

Catania K, Panegyres PK (2017) Dementia in Indigenous Populations. *J Neurol Disord* 5, 362.

Chilisa, B. (2012). *Indigenous Research Methodologies*. California: Los Angeles, SAGE Publication.

Colquhoun, H.L., Levac, D., O'Brien, K.K., Straus, S., Tricco, A.C. & Perrier, L. et al. (2014). Scoping reviews: time for clarity in definition, methods, and reporting. *J Clin Epidemiol.* 67 (12), 1291–4.

Cornect-Benoit, A., Pitawanakwat, K., Walker, J., Manitowabi, D. and Jacklin, K. (2020). Nurturing Meaningful Intergenerational Social Engagements to Support Healthy Brain Aging for Anishinaabe Older Adults. *Can J Aging* 39(2):263-283.

Cox, T., Hoang, H., Goldberg, L.R. and Baldock, D. (2019). Aboriginal community understandings of dementia and responses to dementia care. *Public Health* 172(qi7, 0376507):15-21

Daudt, H.M., van Mossel, C. & Scott, S.J. (2013). Enhancing the scoping study methodology: a large, inter-professional team's experience with Arksey and O'Malley's framework. *BMC Med Res Methodol*. 13, 48.

Davis, K., Drey N. & Gould, D. (2009). What are scoping studies? A review of the nursing literature. *Int J Nurs Stud.* 46(10) 386-400.

de Leeuw, S., Lindsay, N.M. & Greenwood, M. (2018). Introduction to the Second Edition: Rethinking (Once Again) Determinants of Indigenous peoples' health. In: Margo Greenwood, Sarah de Leeuw and Nicole Marie Lindsay. (Editors). *Determinants of Indigenous Peoples' Health: Beyond the Social*. (pp. xvii–xxviii). Toronto/Vancouver: Canadian Scholars' Press Inc.

Dobbins, M., Hanna, S.E., Ciliska, D., Manske, S., Cameron, R., Mercer, S.L., O'Mara, L., DeCorby, K., & Robeson, P. (2009). A randomized controlled trial evaluating the impact of knowledge translation and exchange strategies. *Implementation Science*. 4 (1), 61.

Doty, R.W. (2007). Alkmaion's discovery that brain creates mind: A revolution in human knowledge comparable to that of Copernicus and of Darwin. *Neuroscience* 147: 561-568.

Dudley, M., Menzies, O., Elder, H., Nathan, L., Garrett, N., and Wilson, D. (2019). Mate wareware: Understanding 'dementia' from a Maori perspective. *N Z Med J* 132(1503):66-74.

Dyall, L. (2014). Dementia: continuation of health and ethnic inequalities in New Zealand. *N Z Med J* 127(1389):68-80.

Dyall, L., Kerse, N., Hayman, K. and Keeling, S. (2011). Pinnacle of life—Maori living to advanced age. New Zealand Medical Journal. 124(1331);11758716:1-12. http://www.nzma.org.nz/journal/124-1331/4582/

Finkelstein, S.A., Forbes, D.A., and Richmond, C.A.M. (2012). Formal dementia care among first nations in southwestern Ontario. Can J Aging 2012;31(3):257-70.

Flicker L, LoGiudice D (2015) What can we learn about dementia from research in Indigenous populations? *Int Psychogeriatr* 27: 1957-1958.

Griffin-Pierce, T., Silverberg, N., Connor, D., Jim, M., Peters, J., Kaszniak, A., and Sabbagh, M.N. (2008). Challenges to the recognition and assessment of Alzheimer's disease in American Indians of the southwestern United States. *Alzheimer's & Dementia: The Journal of the Alzheimer's Association* 4(4):291-299.

Hall, K. S., Gao, S., Emsley, C. L., Ogunniyi, A. O., Morgan, O., & Hendrie, H. C. (2000). Community Screening Interview for dementia (CSI 'D'); Performance for dementia in five disparate study sites. International Journal of Geriatric Psychiatry, 15, 521–531.

Halseth, R. (2018). Overcoming barriers to cultural safe and appropriate dementia care services and supports for Indigenous peoples in Canada. National Collaborating Center for Aboriginal Health. https://www.nccah-ccnsa.ca/docs/emerging/RPT-Culturally-Safe-Dementia-Care-Halseth-EN.pdf

Hart, M. (2007). Indigenous knowledge and research: The míkiwáhp as a symbol for reclaiming our knowledge and ways of knowing. *First Peoples Child & Family Review*, *3*(1), 83-90.

Henderson, J. N., & Henderson, L. C. (2002). Cultural construction of disease: a "supernormal" construct of dementia in an American Indian tribe. *Journal of Cross-Cultural Gerontology* 17: 197–212.

Herbert, C. P. (2001). Cultural aspects of dementia. *Canadian Journal of Neurological Sciences*, 28, S77–S82.

Hindley, G. *et al*. (2016). The role of traditional and faith healers in the treatment of dementia in Tanzania and the potential for collaboration with allopathic healthcare services. *Age and Ageing* 46, 130-137. https://academic.oup.com/ageing/article/46/1/130/2605681

Hocking, B., Lowe, M., Nagel, T., Phillips, C., Lindeman, M., Farthing, A., Jensen, H., Cass, A., and Dingwall, K. (2019). Dementia in Aboriginal people in Residential Aged Care Facilities in Alice Springs: A Descriptive Study. *Brain Impairment* 20(2):171-179. https://doi.org/10.1017/BrImp.2019.23.

Hulko, W., Camille, E., Antifeau, E., Arnouse, M., Bachynski, N., and Taylor, D. (2010). Views of First Nation elders on memory loss and memory care in later life. *J Cross Cult Gerontol* 25(4):317-42.

Huessin, H. (2015). What is the minimum number of studies to be included in a systematic review? University of Illinois at Chicago. https://www.researchgate.net/post/What-is-the-minimum-number-of-studies-to-be-included-in-a-systematic-review#view=54d7d652d039b1046b8b46d1

Hua, T., 1994. Huo Tuo Shen Yi Mi Zhuan. Liaoning Science and Technology Press, Shenyang, China.

Indigenous Cognition & Aging Awareness Research Exchange [I-CARRE] (2015). What is dementia? Indigenous perspectives and cultural understanding. Factsheets. https://docs.wixstatic.com/ugd/ae19eb_908c1ffb075d391746d9e666101945d39f792.pdf

Jacklin, K., Pace, J.E. and Warry, W. (2015). Informal Dementia Caregiving Among Indigenous Communities in Ontario, Canada. *Care Manag J* 16(2):106-20. http://dx.doi.org/10.1891/1521-0987.16.2.106.

Jacklin, K. and Pitawanakwat, K. (2019). The circle of life: Indigenous knowledge about dementia in Canada. 2019 World Alzheimer Report—Attitudes to Dementia. Alzheimer's Disease International.

,

Jacklin, K. and Walker, J. (2020). Cultural Understandings of Dementia in Indigenous Peoples: A Qualitative Evidence Synthesis. Can J Aging 2020;39(2):220-234.

Jacklin, K., Pitawanakwat, K., Blind, M., O'Connell, M., Walker, J., Lemieux, A.M., and Warry, W. (2020). Developing the Canadian Indigenous Cognitive Assessment for Use with Indigenous Older Anishinaabe Adults in Ontario, Canada. *Innov Aging* 4(4):igaa038.

Jervis, L.L., and Manson, S.M. (2002). American Indians/Alaska Natives and Dementia. *Alzheimer Disease and Associated Disorders* 16(2): S89–S95.

Joanna Briggs Institute [JBI] (2015). The Joanna Briggs Institute Reviewers' Manual 2015: Methodology for JBI Scoping Reviews. University of Adelaide: The Joanna Briggs Institute.

Janet Jull, J., Crispo, J., Welch, V., MacDonald, H., Brascoupe, S., Boyer, Y. and Stacey, D. (2013). Interventions for Indigenous Peoples Making Health Decisions: A Systematic Review. *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health* 11(3):539-554.

Kane, M.N. (2000). Ethnoculturally-sensitive practice and Alzheimer's disease. *Am. J. Alzheimer's Dis*. 15(2):80-86.

Kehoua, *et al*. (2019). People with dementia in Sub-Saharan Africa: from support to abuse by caregivers: results of EPIDEMCA-FU program in Congo. *Dement Geriatr Cogn Disord Extra.* 9, 163-175. Doi: 10.1159/000489846.

Keightley, M. L., King, G. E., Jang, S., White, R. J., Colantonio, A., Minore, J. B., Longboat-White, C. H. (2011). Brain injury from a First Nations' perspective: Teachings from elders and traditional healers. *Canadian Journal of Occupational Therapy, 78*(4), 237-245.

Langas-Larsen, A. & *et al*. (2017). There are more things in heaven and earth!" How knowledge about traditional healing affects clinical practice: interviews with conventional health personnel. International Journal of Circumpolar Health, 76, 1-12. https://doi.org/10.1080/22423982.2017.1398010 https://journals- scholarsportal-info.librweb.laurentian.ca/pdf/12399736/v76i0001/nfp_amtihapiwchp.xml

Lanting, S., Crossley, M., & Morgan, D. (2007). The grasshoppers and geese test: a modified neuropsychological measure for assessing semantic memory in a rural and remote memory clinic. Journal of the International Neuropsychological Society, 13(S1), 212.

Lanting, S., Crossley, M., Morgan, D. and Cammer, A. (2011). Aboriginal experiences of aging and dementia in a context of sociocultural change: qualitative analysis of key informant group interviews with Aboriginal seniors. *J Cross Cult Gerontol* 26(1):103-17

Levac, D., Colquhoun, H. and O'Brien, K.K. (2010). Scoping studies: advancing the methodology. Implement Sci 5:69.

Liu, J., Wang, L. & Tian, J. (2012). Recognition of dementia in ancient China. Neurobiology of Aging 33 (2012) 2948.e11–2948.e13.

Lorna, D., Ngaire, K., Karen, H., and Sally, K. (2011). Pinnacle of life--Maori living to advanced age. *N Z Med J* 124(1331):75-86

Manitowabi, D. & Shawande, M. (2011). The meaning of Anishinaabe Healing and Wellbeing on Manitoulin Island. *A Journal of Aboriginal and Indigenous Community Health*, 9 (2) 441-1455.

Manitowabi, D. & Shawande, M. (2013). Negotiating the clinical integration of traditional aboriginal medicine at Noojmowin Teg. *The Canadian Journal of Native Studies* 33 (1), 97-124. **(**https://search.proquest.com/docview/1498366033/fulltextPDF/809FD6CE82914854PQ/1?accountid=12005**)**

Marion, M. & Shawande, M. (2010). Traditional Anishinaabe Healing in a Clinical Setting: The Development of an Aboriginal Interdisciplinary Approach to Community-based Aboriginal Mental Health Care. *International Journal of Indigenous Health* 6 (1) 18-27. https://journals.uvic.ca/index.php/ijih/article/view/12342

Martin, R. and Paki, P. (2012). Towards inclusion: The beginnings of a bicultural model of dementia care in Aotearoa New Zealand. Dementia 11(4):545-552.

McLeod, T., Nolan, J., and Dewing, J. (2012). The Kuranya/'Rainbow' service for indigenous Australians, in New South Wales: Innovative practice. Dementia: The International Journal of Social Research and Practice 2012;11(5):703-706.

Ministry of Health, Ontario. (1994). Aboriginal Health Policy. https://ofifc.org/wp-content/uploads/2020/03/Aboriginal-Health-Policy-for-Ontario-full-document.pdf

Moher, D., Shamseer, L., Clarke. M., Ghersi, D., Liberati, A. and Petticrew, M., et al. (2015). Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) *Statement. Syst Rev.* 4(1), 1.

Morgan, D., Crossley, M., Stewart, N., Kirk, A., Forbes, D., D'Arcy, C., ... & Kosteniuk, J. (2014). Evolution of a community-based participatory approach in a rural and remote dementia care research program. Progress in Community Health Partnerships: Research, Education, and Action, 8(3), 337. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4469481/.

Mushi et al. (2014). Social representation and practices related to dementia in Hai District of Tanzania. *BMC Public Health* 14:260. https://bmcpublichealth.biomedcentral.com/track/pdf/10.1186/1471-2458-14-260.pdf

Nyanchokaa, L. *et al*. (2019). A scoping review describes methods used to identify, prioritize and display gaps in health research. Journal of Clinical Epidemiology. 109, 99-110. https://www.jclinepi.com/action/showPdf?pii=S0895-4356%2818%2930754-6

Pace, J. (2020). "Place-ing" Dementia Prevention and Care in Nunatu Kavut, Labrador. *Can J Aging* 39(2):247-262.

Parish, S.M. (1991). The sacred mind: Newar cultural representations of mental life and the production of moral consciousness. *Ethos* 19(3):313-351. https://www.jstor.org/stable/pdf/640525.pdf?refrqid=excelsior%3A6395e22442d1fa2977873019b7547829

Peters, M. *et al*. (2015). Guidance for conducting systematic scoping reviews. *International Journal of Evidence-Based Healthcare*. 13 (3), 141-146.

Peters, M.D.J., Godfrey, C., McInerney, P., Munn, Z., Tricco, A. and Khalil, H. (2020). Chapter 11: Scoping reviews. In: Aromataris E, Munn Z, editors. JBI Manual for Evidence Synthesis [Internet]. *Adelaide: JBI*. [cited 5 May 2020]. Available from: https:// synthesismanual.jbi.global).

Pham, M.T., Rajic, A., Greig, J.D., Sargeant, J.M., Papadopoulos, A. & McEwen, S.C. (2014). A scoping review of scoping reviews: advancing the approach and enhancing the consistency. *Res Synth Methods*. 5(4), 371–385. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4491356/#b65

Radford, K., Mack, H. A., Draper, B., Chalkley, S., Delbaere, K., Daylight, G., Cumming, R.G., Bennett, H. and Broe, G.A. (2015). Comparison of Three Cognitive Screening Tools in Older Urban and Regional Aboriginal Australians. *Dement Geriatr Cogn Disord* 40(1-2):22-32.

Radford, K., Lavrencic, L.M., Delbaere, K., Draper, B., Cumming, R., Daylight, G., Mack, H.A., Chalkley, S., Bennett, H., Garvey, G., Hill, T.Y., Lasschuit, D. and Broe, G.A. (2019). Factors Associated with the High Prevalence of Dementia in Older Aboriginal Australians. J *Alzheimer's Dis* 70(s1):S75-S85.

Reading, C. (2018). Structural determinants of Aboriginal Peoples' Health. In: Margo Greenwood, Sarah de Leeuw and Nicole Marie Lindsay. (Editors). *Determinants of Indigenous Peoples' Health: Beyond the Social*. (pp. 3-17). Toronto/Vancouver: Canadian Scholars' Press Inc.

Redvers, N. (2019). *The Science of the Sacred: Bridging Global Indigenous Medicine System and Modern Scientific Principles*. California: North Atlantic Books, Berkeley.

Royal Commission on Aboriginal Peoples. (1996). *Report of the Royal Commission on Aboriginal Peoples, Vol. 1: Looking forward, looking back.* Ottawa: Minister of Supply and Services Canada.

Russell-Mundine, G. (2012). Reflexivity in Indigenous Research: Reframing and Decolonizing Research? *Journal of Hospitality and Tourism Management*, *19* (1), 85–90. http://doi.org/10.1017/jht.2012.8

Segal, B., & Smith, S. L. (2004). Establishing Best Practices for Alaska Native Elders. http://elders.uaa.alaska.edu/reports/yr1_3best-practices.pdf

Shrestha, H., Stevens, A., Brown, S., Rewega, S., Shrestha, L. and Cheu, H. (2020). Dancing for a Cure—Healing for Dementia and Mind Loss. 2020 Mind & Life Institute Contemplative Research Conference Online November 5-8, 2020: State of the Field—Discoveries, Opportunities, and Challenges. (https://www.youtube.com/watchY?v=hy6hvvHLk9)

Shrestha, H. and Molohon, K. (2017). Bura Janko – Honoring Old Age in Nepal" (A medieval *Newar* ceremony to celebrate old age in contemporary Nepal). 10th Biennial Association for Anthropology, Gerontology, and the Life Course International Conference, Oxford Brookes University, Oxford, England

Smith, K., Flicker, L., Shadforth, G., Carroll, E., Ralph, N., Atkinson, D., Lindeman, M., Schaper, F., Lautenschlager, N.T., and LoGiudice, D. (2011). 'Gotta be sit down and worked out together': views of Aboriginal caregivers and service providers on ways to improve dementia care for Aboriginal Australians. *RURAL REMOTE HEALTH* 11(2):1650.

Smith, L.T. (1999). Decolonizing methodologies: Research and Indigenous peoples, London, UK: Zed Books.

Smye, V. & Browne, A. (2002). Culture safety and the analysis of health policy affecting aboriginal people. *Nurse Res.* 9 (3) 42-56.

Struthers, R., Eschiti, V.S. & Patchell, B. (2008). The Experience of Being an Anishinaabe Man Healer: Ancient Healing in a Modern World. Journal of Cultural Diversity 15(2): 70-75.

Struthers, R., Eschiti, V.S. & Beverly, P. (2004). Traditional indigenous healing: Part I. *Complementary Therapies in Nursing & Midwifery* 10, 141–149.

Taylor, K.A., Lindeman, M.A., Stothers, K., Piper, K. and Kuipers, P. (2012). Intercultural communications in remote Aboriginal Australian communities: What works in dementia education and management? *Health Sociology Review* 21(2):208-219.

The Global Alzheimer's and Dementia Action Alliance (2018). https://www.gadaalliance.org/

Tricco, A.C., Lillie, E., Zarin, W., O'Brien, K.K., Colquhoun, H., Levac, D. et al. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Ann Intern Med* 169(7):467–73.

Viscogliosi, C., *et al*. (2020). Importance of Indigenous elders' contributions to individual and community wellness: results from a scoping review on social participation and intergenerational solidarity. *Canadian Journal of Public Health*. https://doi.org/10.17269/s41997-019-00292-3

Walker, J. & Jacklin, K. (2019). Current and Projected Dementia Prevalence in First Nations in Canada. In: Wendy Hulk, Danielle Wilson, and Jean E. Baluster (Eds.). I*ndigenous peoples and dementia – New understandings of memory loss and memory care* (pp. 24-40). Vancouver: UBC Press.

Warren, L.A., *et al*. (2015). Prevalence and incidence of dementia among indigenous populations: a systematic review. *International Psychogeriatrics*, 27(12), 1959-1970. https://journals-scholarsportal-info.librweb.laurentian.ca/pdf/10416102/v27i0012/1959_paiodaipasr.xml

Webkamigad, S., Warry, W., Blind, M., and Jacklin, K. (2019). An Approach to Improve Dementia Health Literacy in Indigenous Communities. Journal of Cross-Cultural Gerontology 35:69–83 https://doi.org/10.1007/s10823-019-09388-2

Webkamigad, S. *et al*. (2020). Identifying and understanding the health and social care needs of Indigenous older adults with multiple chronic conditions and their caregivers: a scoping review. *BMC Geriatrics.* 20:145

Webkamigad, S., Cote-Meek, S., Pianosi, B. and Jacklin, K. (2020). Exploring the Appropriateness of Culturally Safe Dementia Information with Indigenous People in an Urban Northern Ontario Community. *Can J Aging* 39(2):235-246.

White, P., Townsend, C., Lakhani, A., Cullen, J., Bishara, J. and White, A. (2019). The prevalence of cognitive impairment among people attending a homeless service in Far North Queensland with a majority aboriginal and/or Torres Strait Islander people. *Australian Psychologist* 54(3):193-201.

World Health Organization [WHO] (2007) Health of indigenous peoples. [online] Available at: http://www.who.int/mediacentre/factsheets/fs326/en/ [Accessed June 17, 2020]. (http://www.who.int/topics/health_services_indigenous/en/)

WHO (2013). WHO Traditional Medicine Strategy: 2014-2023. https://www.who.int/publications/i/item/9789241506096

WHO (2018). Towards a Dementia Plan: a WHO Guide. https://apps.who.int/iris/handle/10665/272642. License: CC BY-NC-SA 3.0 IGO

WHO (2019). WHO global report on traditional and complementary medicine. https://www.who.int/publications/i/item/978924151536

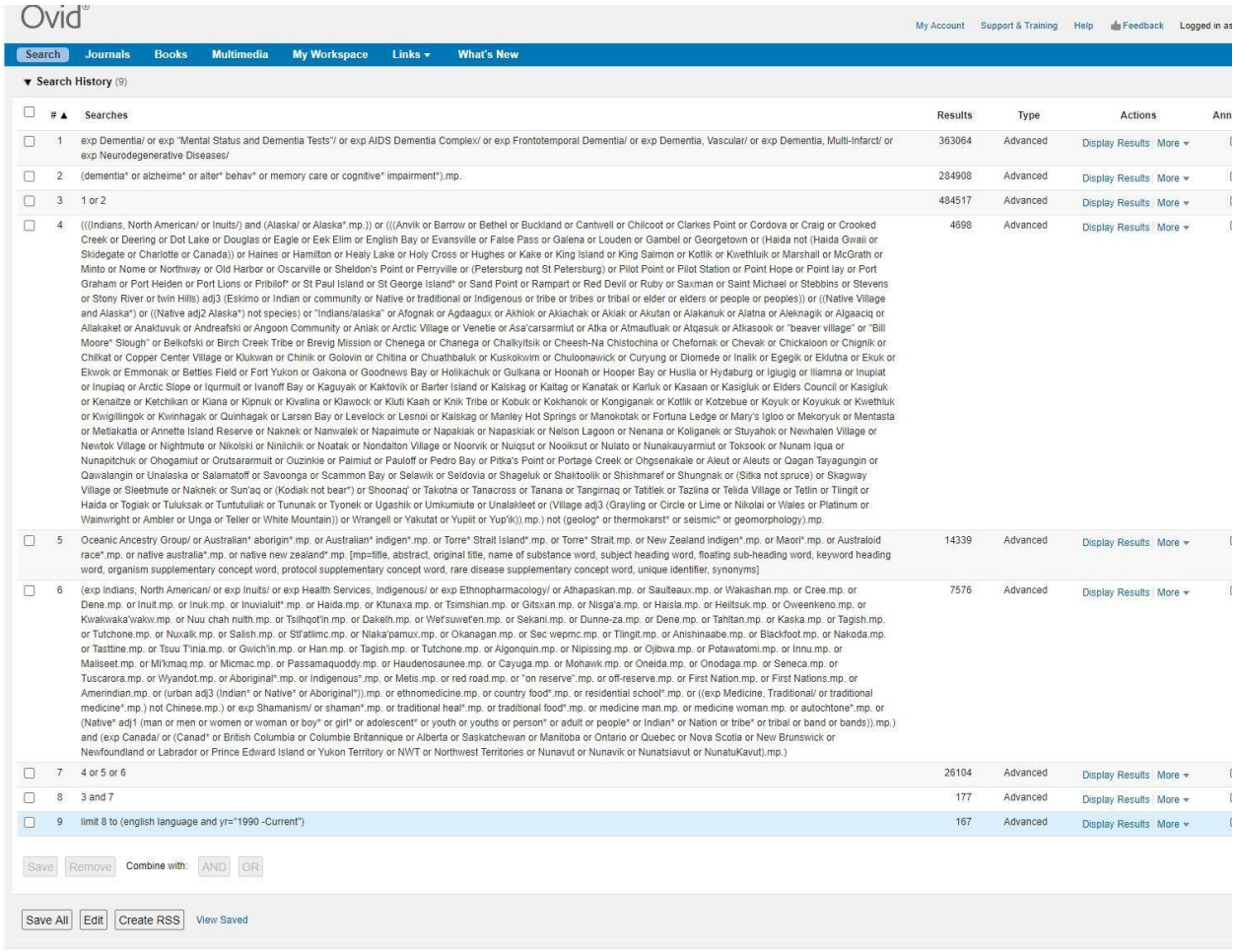
WHO (2020). Dementia Fact Sheet. https://who.int/news-room/fact-sheets/detail/dementia

Wilson, S. (2008). *Research Is Ceremony. Indigenous Research Methods*. Halifax and Winnipeg: Fernwood Publishing.

Zeilig, H. (2014). Dementia as a cultural metaphor. *Gerontologist*. 54 (2) 258-67.

Appendix A. Search Strategy

Database: **Ovid MEDLINE Search**



Ovid

My Account | Support & Training | Help | Feedback | Logged in as

Search | Journals | Books | Multimedia | My Workspace | Links | What's New

▼ Search History (9)

	# ▲	Searches	Results	Type	Actions	Ann
☐	1	exp Dementia/ or exp "Mental Status and Dementia Tests"/ or exp AIDS Dementia Complex/ or exp Frontotemporal Dementia/ or exp Dementia, Vascular/ or exp Dementia, Multi-Infarct/ or exp Neurodegenerative Diseases/	363064	Advanced	Display Results More	
☐	2	(dementia* or alzheime* or alter* behav* or memory care or cognitive* impairment*).mp.	284908	Advanced	Display Results More	
☐	3	1 or 2	484517	Advanced	Display Results More	
☐	4	(((Indians, North American/ or Inuits/) and (Alaska/ or Alaska*.mp.)) or (((Anvik or Barrow or Bethel or Buckland or Cantwell or Chilcoot or Clarkes Point or Cordova or Craig or Crooked Creek or Deering or Dot Lake or Douglas or Eagle or Eek Elim or English Bay or Evansville or False Pass or Galena or Louden or Gambel or Georgetown or (Haida not (Haida Gwaii or Skidegate or Charlotte or Canada)) or Haines or Hamilton or Healy Lake or Holy Cross or Hughes or Kake or King Island or King Salmon or Kotlik or Kwethluik or Marshall or McGrath or Minto or Nome or Northway or Old Harbor or Oscarville or Sheldon's Point or Perryville or (Petersburg not St Petersburg) or Pilot Point or Pilot Station or Point Hope or Point lay or Port Graham or Port Heiden or Port Lions or Pribilof* or St Paul Island or St George Island* or Sand Point or Rampart or Red Devil or Ruby or Saxman or Saint Michael or Stebbins or Stevens or Stony River or twin Hills) adj3 (Eskimo or Indian or community or Native or traditional or Indigenous or tribe or tribes or tribal or elder or elders or people or peoples)) or ((Native Village and Alaska*) or ((Native adj2 Alaska*) not species) or "Indians/alaska" or Afognak or Agdaagux or Akhiok or Akiachak or Akiak or Akutan or Alakanuk or Alatna or Aleknagik or Algaaciq or Allakaket or Anaktuvuk or Andreafski or Angoon Community or Aniak or Arctic Village or Venetie or Asa'carsarmiut or Atka or Atmautluak or Atqasuk or Atkasook or "beaver village" or "Bill Moore" Slough" or Belkofski or Birch Creek Tribe or Brevig Mission or Chenega or Chanega or Chalkyitsik or Cheesh-Na Chistochina or Chefornak or Chevak or Chickaloon or Chignik or Chilkat or Copper Center Village or Klukwan or Chinik or Golovin or Chitina or Chuathbaluk or Kuskokwim or Chuloonawick or Curyung or Diomede or Inalik or Egegik or Eklutna or Ekuk or Ekwok or Emmonak or Bettles Field or Fort Yukon or Gakona or Goodnews Bay or Holikachuk or Guilkana or Hoonah or Hooper Bay or Huslia or Hydaburg or Igiugig or Iliamna or Inupiat or Inupiaq or Arctic Slope or Iqurmuit or Ivanoff Bay or Kaguyak or Kaktovik or Barter Island or Kalskag or Kaltag or Kanatak or Karluk or Kasaan or Kasigluk or Elders Council or Kasigluk or Kenaitze or Ketchikan or Kiana or Kipnuk or Kivalina or Klawock or Kluti Kaah or Knik Tribe or Kobuk or Kokhanok or Kongiganak or Kotlik or Kotzebue or Koyuk or Koyukuk or Kwethluk or Kwigillingok or Kwinhagak or Quinhagak or Larsen Bay or Levelock or Lesnoi or Kalskag or Manley Hot Springs or Manokotak or Fortuna Ledge or Mary's Igloo or Mekoryuk or Mentasta or Metlakatla or Annette Island Reserve or Naknek or Nanwalek or Napaimute or Napakiak or Napaskiak or Nelson Lagoon or Nenana or Koliganek or Stuyahok or Newhalen Village or Newtok Village or Nightmute or Nikolski or Ninilchik or Noatak or Nondalton Village or Noorvik or Nuiqsut or Nooiksut or Nulato or Nunakauyarmiut or Toksook or Nunam Iqua or Nunapitchuk or Ohogamiut or Orutsararmuit or Ouzinkie or Paimiut or Pauloff or Pedro Bay or Pitka's Point or Portage Creek or Ohgsenakale or Aleut or Aleuts or Qagan Tayagungin or Qawalangin or Unalaska or Salamatoff or Savoonga or Scammon Bay or Selawik or Seldovia or Shageluk or Shaktoolik or Shishmaref or Shungnak or (Sitka not spruce) or Skagway Village or Sleetmute or Naknek or Sun'aq or (Kodiak not bear*) or Shoonaq' or Takotna or Tanacross or Tanana or Tangirnaq or Tatitlek or Tazlina or Telida Village or Tetlin or Tlingit or Haida or Togiak or Tuluksak or Tuntutuliak or Tununak or Tyonek or Ugashik or Umkumiute or Unalakleet or (Village adj3 (Grayling or Circle or Lime or Nikolai or Wales or Platinum or Wainwright or Ambler or Unga or Teller or White Mountain)) or Wrangell or Yakutat or Yupiit or Yup'ik)).mp.) not (geolog* or thermokarst* or seismic* or geomorphology).mp.	4698	Advanced	Display Results More	
☐	5	Oceanic Ancestry Group/ or Australian* aborigin*.mp. or Australian* indigen*.mp. or Torre* Strait Island*.mp. or Torre* Strait.mp. or New Zealand indigen*.mp. or Maori*.mp. or Australoid race*.mp. or native australia*.mp. or native new zealand*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	14339	Advanced	Display Results More	
☐	6	(exp Indians, North American/ or exp Inuits/ or exp Health Services, Indigenous/ or exp Ethnopharmacology/ or Athapaskan.mp. or Saulteaux.mp. or Wakashan.mp. or Cree.mp. or Dene.mp. or Inuit.mp. or Inuk.mp. or Inuvialuit*.mp. or Haida.mp. or Ktunaxa.mp. or Tsimshian.mp. or Gitsxan.mp. or Nisga'a.mp. or Haisla.mp. or Heiltsuk.mp. or Oweenkeno.mp. or Kwakwaka'wakw.mp. or Nuu chah nulth.mp. or Tsilhqot'in.mp. or Dakelh.mp. or Wet'suwet'en.mp. or Sekani.mp. or Dunne-za.mp. or Dene.mp. or Tahltan.mp. or Kaska.mp. or Tagish.mp. or Tutchone.mp. or Nuxalk.mp. or Salish.mp. or Stl'atlimc.mp. or Nlaka'pamux.mp. or Okanagan.mp. or Sec wepmc.mp. or Tlingit.mp. or Anishinaabe.mp. or Blackfoot.mp. or Nakoda.mp. or Tasttine.mp. or Tsuu T'inia.mp. or Gwich'in.mp. or Han.mp. or Tagish.mp. or Tutchone.mp. or Algonquin.mp. or Nipissing.mp. or Ojibwa.mp. or Potawatomi.mp. or Innu.mp. or Maliseet.mp. or Mi'kmaq.mp. or Micmac.mp. or Passamaquoddy.mp. or Haudenosaunee.mp. or Cayuga.mp. or Mohawk.mp. or Oneida.mp. or Onodaga.mp. or Seneca.mp. or Tuscarora.mp. or Wyandot.mp. or Aboriginal*.mp. or Indigenous*.mp. or Metis.mp. or red road.mp. or "on reserve".mp. or off-reserve.mp. or First Nation.mp. or First Nations.mp. or Amerindian.mp. or (urban adj3 (Indian* or Native* or Aboriginal*)).mp. or ethnomedicine.mp. or country food*.mp. or residential school*.mp. or ((exp Medicine, Traditional/ or traditional medicine*.mp.) not Chinese.mp.) or exp Shamanism/ or shaman*.mp. or traditional heal*.mp. or traditional food*.mp. or medicine man.mp. or medicine woman.mp. or autochtone*.mp. or (Native* adj1 (man or men or women or woman or boy* or girl* or adolescent* or youth or youths or person* or adult or people* or Indian* or Nation or tribe* or tribal or band or bands)).mp.) and (exp Canada/ or (Canad* or British Columbia or Columbie Britannique or Alberta or Saskatchewan or Manitoba or Ontario or Quebec or Nova Scotia or New Brunswick or Newfoundland or Labrador or Prince Edward Island or Yukon Territory or NWT or Northwest Territories or Nunavut or Nunavik or Nunatsiavut or NunatuKavut).mp.)	7576	Advanced	Display Results More	
☐	7	4 or 5 or 6	26104	Advanced	Display Results More	
☐	8	3 and 7	177	Advanced	Display Results More	
☐	9	limit 8 to (english language and yr="1990 -Current")	167	Advanced	Display Results More	

Save | Remove | Combine with: AND | OR

Save All | Edit | Create RSS | View Saved

MEDLINE Search for Concept

Concept 1. Dementia

MeSH

exp Dementia/ or exp "Mental Status and Dementia Tests"/ or exp AIDS Dementia Complex/ or exp Frontotemporal Dementia/ or exp Dementia, Vascular/ or exp Dementia, Multi-Infarct/ or exp Neurodegenerative Diseases/

Keyword

(dementia* or alzheime* or alter* behav* or memory care or cognitive* impairment*).mp.

Concept 2. Role of traditional healers and integrating these practices into the medical system

North American/ Inuit and Alaska

(((Indians, North American/ or Inuits/) and (Alaska/ or Alaska*.mp.)) or (((Anvik or Barrow or Bethel or Buckland or Cantwell or Chilcoot or Clarkes Point or Cordova or Craig or Crooked Creek or Deering or Dot Lake or Douglas or Eagle or Eek Elim or English Bay or Evansville or False Pass or Galena or Louden or Gambel or Georgetown or (Haida not (Haida Gwaii or Skidegate or Charlotte or Canada)) or Haines or Hamilton or Healy Lake or Holy Cross or Hughes or Kake or King Island or King Salmon or Kotlik or Kwethluik or Marshall or McGrath or Minto or Nome or Northway or Old Harbor or Oscarville or Sheldon's Point or Perryville or (Petersburg not St Petersburg) or Pilot Point or Pilot Station or Point Hope or Point lay or Port Graham or Port Heiden or Port Lions or Pribilof* or St Paul Island or St George Island* or Sand Point or Rampart or Red Devil or Ruby or Saxman or Saint Michael or Stebbins or Stevens or Stony River or twin Hills) adj3 (Eskimo or Indian or community or Native or traditional or Indigenous or tribe or tribes or tribal or elder or elders or people or peoples)) or ((Native Village and Alaska*) or ((Native adj2 Alaska*) not species) or "Indians/alaska" or Afognak or Agdaagux or Akhiok or Akiachak or Akiak or Akutan or Alakanuk or Alatna or Aleknagik or Algaaciq or Allakaket or Anaktuvuk or Andreafski or Angoon Community or Aniak or Arctic Village or Venetie or Asa'carsarmiut or Atka or Atmautluak or Atqasuk or Atkasook or "beaver village" or "Bill Moore* Slough" or Belkofski or Birch Creek Tribe or Brevig Mission or Chenega or Chanega or Chalkyitsik or Cheesh-Na Chistochina or Chefornak or Chevak or Chickaloon or Chignik or Chilkat or Copper Center Village or Klukwan or Chinik or Golovin or Chitina or Chuathbaluk or Kuskokwim or Chuloonawick or Curyung or Diomede or Inalik or Egegik or Eklutna or Ekuk or Ekwok or Emmonak or Bettles Field or Fort Yukon or Gakona or Goodnews Bay or Holikachuk or Gulkana or Hoonah or Hooper Bay or Huslia or Hydaburg or Igiugig or Iliamna or Inupiat or Inupiaq or Arctic Slope or Iqurmuit or Ivanoff Bay or Kaguyak or Kaktovik or Barter Island or Kalskag or Kaltag or Kanatak or Karluk or Kasaan or Kasigluk or Elders Council or Kasigluk or Kenaitze or Ketchikan or Kiana or Kipnuk or Kivalina or Klawock or Kluti Kaah or Knik Tribe or Kobuk or Kokhanok or Kongiganak or Kotlik or Kotzebue or Koyuk or Koyukuk or Kwethluk or Kwigillingok or Kwinhagak or Quinhagak or Larsen Bay or Levelock or Lesnoi or Kalskag or Manley Hot Springs or Manokotak or Fortuna Ledge or Mary's Igloo or Mekoryuk or Mentasta or Metlakatla or Annette Island Reserve or Naknek or Nanwalek or Napaimute or Napakiak or Napaskiak or Nelson Lagoon or Nenana or Koliganek or Stuyahok or Newhalen Village or Newtok Village or Nightmute or Nikolski or Ninilchik or Noatak or Nondalton Village or Noorvik or Nuiqsut or Nooiksut or Nulato or Nunakauyarmiut or Toksook or Nunam Iqua or Nunapitchuk or Ohogamiut or Orutsararmuit or Ouzinkie or Paimiut or Pauloff or Pedro Bay or Pitka's Point or Portage Creek or Ohgsenakale or Aleut or Aleuts or Qagan Tayagungin or Qawalangin or Unalaska or Salamatoff or Savoonga or Scammon Bay or Selawik or Seldovia or Shageluk or Shaktoolik or Shishmaref or Shungnak or (Sitka not spruce) or Skagway Village or Sleetmute or Naknek or Sun'aq or (Kodiak not bear*) or Shoonaq' or

Takotna or Tanacross or Tanana or Tangirnaq or Tatitlek or Tazlina or Telida Village or Tetlin or Tlingit or Haida or Togiak or Tuluksak or Tuntutuliak or Tununak or Tyonek or Ugashik or Umkumiute or Unalakleet or (Village adj3 (Grayling or Circle or Lime or Nikolai or Wales or Platinum or Wainwright or Ambler or Unga or Teller or White Mountain)) or Wrangell or Yakutat or Yupiit or Yup'ik)).mp.) not (geolog* or thermokarst* or seismic* or geomorphology).mp.

North American – Canada/US

(exp Indians, North American/ or exp Inuits/ or exp Health Services, Indigenous/ or exp Ethnopharmacology/ or Athapaskan.mp. or Saulteaux.mp. or Wakashan.mp. or Cree.mp. or Dene.mp. or Inuit.mp. or Inuk.mp. or Inuvialuit*.mp. or Haida.mp. or Ktunaxa.mp. or Tsimshian.mp. or Gitsxan.mp. or Nisga'a.mp. or Haisla.mp. or Heiltsuk.mp. or Oweenkeno.mp. or Kwakwaka'wakw.mp. or Nuu chah nulth.mp. or Tsilhqot'in.mp. or Dakelh.mp. or Wet'suwet'en.mp. or Sekani.mp. or Dunne-za.mp. or Dene.mp. or Tahltan.mp. or Kaska.mp. or Tagish.mp. or Tutchone.mp. or Nuxalk.mp. or Salish.mp. or Stl'atlimc.mp. or Nlaka'pamux.mp. or Okanagan.mp. or Sec wepmc.mp. or Tlingit.mp. or Anishinaabe.mp. or Blackfoot.mp. or Nakoda.mp. or Tasttine.mp. or Tsuu T'inia.mp. or Gwich'in.mp. or Han.mp. or Tagish.mp. or Tutchone.mp. or Algonquin.mp. or Nipissing.mp. or Ojibwa.mp. or Potawatomi.mp. or Innu.mp. or Maliseet.mp. or Mi'kmaq.mp. or Micmac.mp. or Passamaquoddy.mp. or Haudenosaunee.mp. or Cayuga.mp. or Mohawk.mp. or Oneida.mp. or Onodaga.mp. or Seneca.mp. or Tuscarora.mp. or Wyandot.mp. or Aboriginal*.mp. or Indigenous*.mp. or Metis.mp. or red road.mp. or "on reserve".mp. or off-reserve.mp. or First Nation.mp. or First Nations.mp. or Amerindian.mp. or (urban adj3 (Indian* or Native* or Aboriginal*)).mp. or ethnomedicine.mp. or country food*.mp. or residential school*.mp. or ((exp Medicine, Traditional/ or traditional medicine*.mp.) not Chinese.mp.) or exp Shamanism/ or shaman*.mp. or traditional heal*.mp. or traditional food*.mp. or medicine man.mp. or medicine woman.mp. or autochtone*.mp. or (Native* adj1 (man or men or women or woman or boy* or girl* or adolescent* or youth or youths or person* or adult or people* or Indian* or Nation or tribe* or tribal or band or bands)).mp.) and (exp Canada/ or (Canad* or British Columbia or Columbie Britannique or Alberta or Saskatchewan or Manitoba or Ontario or Quebec or Nova Scotia or New Brunswick or Newfoundland or Labrador or Prince Edward Island or Yukon Territory or NWT or Northwest Territories or Nunavut or Nunavik or Nunatsiavut or NunatuKavut).mp.) (Campbell *et al*., 2016).

Australia/New Zealand

Oceanic Ancestry Group/ or Australian* aborigin*.mp. or Australian* indigen*.mp. or Torre* Strait Island*.mp. or Torre* Strait.mp. or New Zealand indigen*.mp. or Maori*.mp. or Australoid race*.mp. or native australia*.mp. or native new zealand*.mp.

Appendix B. Data Extraction Tool

Followings are the proposed data extraction tool for the scoping review.

Author Source Year
Title
Purpose/Aim
Origin of country Indigenous identity
Location of study (community, urban, rural, remote)
Aims/Purpose/Objective
Participant sample size type) Age Group Gender
Intervention type duration
Study Method Design
Theoretical or Conceptual Framework
Role and Experience of Traditional healer
Culturally safe dementia care integration into existing health care system
Key findings and results
Policy barriers
Research gaps
Evaluation or recommendations
Missing details (language, date range, justification, etc.)

Appendix C. Local Community Stakeholder Consultation Report

Date and Time: May 18, 2021, Tuesday (9 am to 12 noon) via Zoom Circle Gathering

Participants:

1. Joe Peltier, Elder knowledge holder
2. Roselin da Peltier, Elder knowledge holder
3. Art Petahtegoose, Elder knowledge holder
4. Neil Monague, Elder knowledge holder
5. Karen Pitawanakwat, RN, and Community Researcher
6. Dr. Jennifer Walker, Supervisor, Associate Professor, School of Rural and Northern Health, Laurentian University
7. Dr. Marion Maar, Member, Supervisory Committee and Associate Professor Northern Ontario School of Medicine, Laurentian University
8. Hom Shrestha, School of Rural and Northern Health, Laurentian University

The Zoom Circle Gathering began with the introductions of my supervisor Dr. Jennifer Walker, Dr. Marion Maar, Karen Pitawanakwat, and the presentation of Hom Shrestha. The purpose of this gathering was to guide the interpretation and meaning of the results of the scoping review.

Hom presented the rationale and preliminary findings of the scoping review "*Traditional healing and medicine in dementia care for Indigenous populations in North America, Australia and New Zealand.*"

The presentation focused on: 1) what important questions did this review set out to answer? 2) what answers did we find and what questions remain? and 3) why are the results important and how can they be used at a community level?

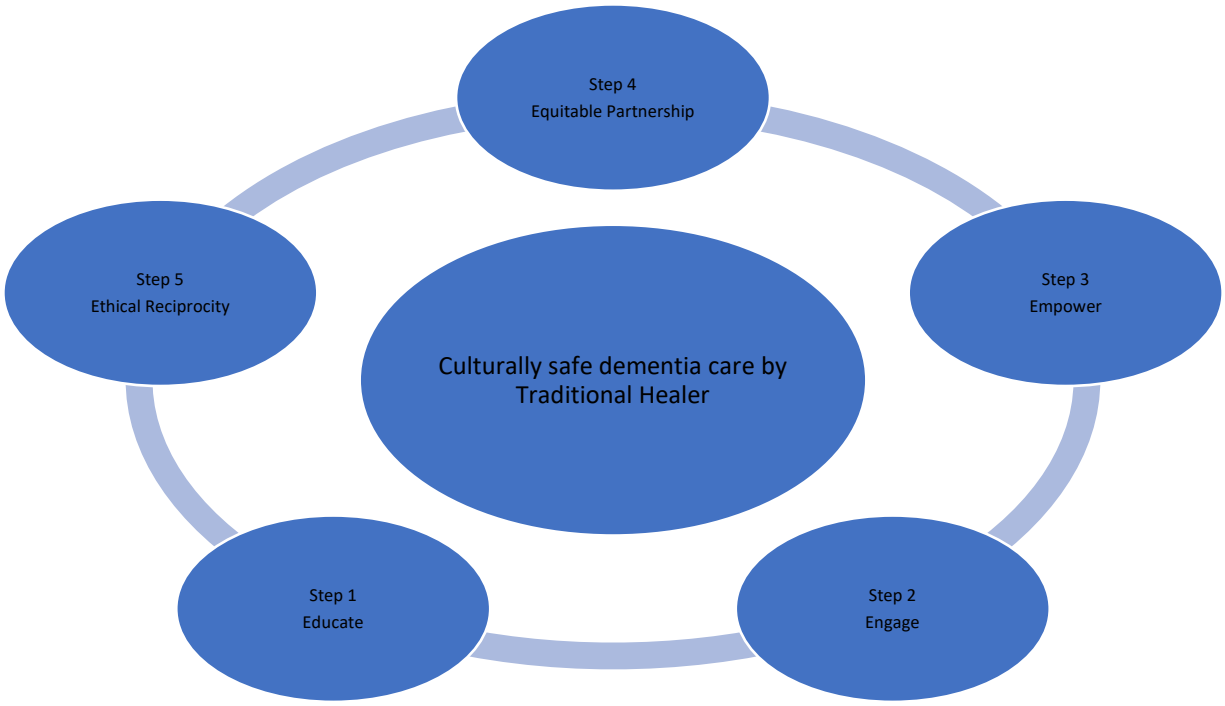
Each of the Elder and knowledge-holders shared their perspectives on the results are important, and what would be the best use or practices for dementia care, assessment, and treatment in First Nations Anishinaabe communities in Northern Ontario. They reviewed the

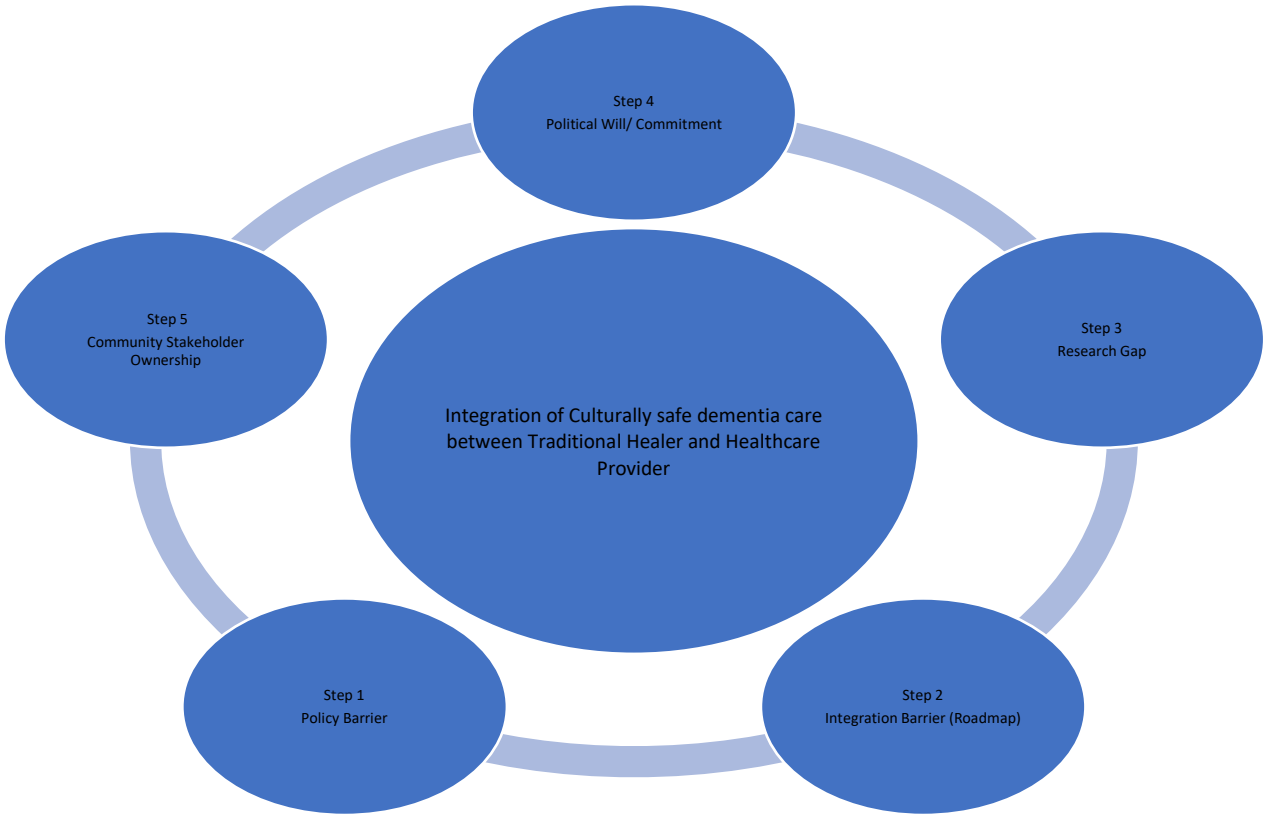
proposed two culturally safe dementia care models, as a framework for the integration of traditional healers in culturally safe dementia care and the five key steps to establishing culturally safe dementia care by traditional healers.

The messages from all of those who shared their knowledge at the gathering are important to guide and to locally conceptualize the interpretation and validation of this scoping review. These include the importance of:

1. acknowledging the ways that people have moved away from traditional teachings and ways of life and how this has resulted in increased dementia in younger people. These changes include food, diet, technology distractions, and use of Anishinaabemowin language.
2. community organizations to facilitate social interaction, communication, and connection between the traditional healer and local community health care providers (primary physicians, nurse, geriatricians, therapists, personal support worker), caregivers, families, Elders, knowledge holder, local stakeholders, and leaders.
3. Anishinaabemowin language strengthening to maintain connection to traditional practices as well as to communicate with those who have dementia.
4. policy dialogue and advocacy within the existing health care system to eliminate institutional racism and discrimination.
5. developing a community-based culturally safe dementia care model to promote integration between traditional healers and local health care providers. They considered and supported the proposed model 1 and 2 includes five steps (as

specified below) in holistic aspects for the integration roadmap of culturally safe dementia care for traditional healers, local health care providers and their community advisory group/council and community members/stakeholders.





6. developing and implementing a diversity, equity, and inclusivity (DEI) framework at a community level to promote anti-racism, ethical reciprocity, resilience, humility, and culture to create a dementia-equity and inclusive community.

In conclusion, the Indigenous methods in care and healing of dementia care are within the land, language, cultural ceremonies, seven grandfather sacred teachings, music (drum), sun dance, medicine wheel, medicine walk, medicine lodge, sweat lodge, full moon, and sunrise ceremonies. These elements are the immense sources of healing and wellness for people with dementia in families and communities.