

BMJ Open A scoping review protocol on social participation of indigenous elders, intergenerational solidarity and their influence on individual and community wellness

Chantal Viscogliosi,^{1,2} Hugo Asselin,¹ Suzy Basile,¹ Yves Couturier,^{2,3} Marie-Josée Drolet,⁴ Dominique Gagnon,⁵ Jill Torrie,⁶ Mélanie Levasseur^{2,7}

To cite: Viscogliosi C, Asselin H, Basile S, *et al.* A scoping review protocol on social participation of indigenous elders, intergenerational solidarity and their influence on individual and community wellness. *BMJ Open* 2017;**7**:e015931. doi:10.1136/bmjopen-2017-015931

► Prepublication history and additional material are available. To view these files please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2017-015931>)

Received 11 January 2017
Revised 2 March 2017
Accepted 8 March 2017



CrossMark

For numbered affiliations see end of article.

Correspondence to
Chantal Viscogliosi;
chantal.viscogliosi@usherbrooke.ca

ABSTRACT

Introduction Indigenous elders have traditionally played an important role in maintaining social cohesion within their communities. Today, part of this role has been taken over by government social and healthcare services, but they are having limited success in addressing social challenges. Increasing elders' social participation and intergenerational solidarity might foster community development and benefit young people, families, communities and the elders themselves. However, knowledge of the contribution of elders' social participation and intergenerational solidarity to wellness is scattered and needs to be synthesised. This protocol presents a scoping review on the social participation of indigenous elders, intergenerational solidarity and their influence on individual and community wellness.

Methods and analysis This scoping review protocol is based on an innovative methodological framework designed to gather information from the scientific and grey literature and from indigenous sources. It was developed by an interdisciplinary team including indigenous scholars/researchers, knowledge users and key informants. In addition to searching information databases in fields such as public health and indigenous studies, an advisory committee will ensure that information is gathered from grey literature and indigenous sources.

Ethics The protocol was approved by the Ethics Review Board of the Université du Québec en Abitibi-Témiscamingue and the First Nations of Quebec and Labrador Health and Social Services Commission.

Discussion The comprehensive synthesis of the scientific and grey literature and indigenous sources proposed in this protocol will not only raise awareness within indigenous communities and among healthcare professionals and community organisations, but will also enable decision-makers to better meet the needs of indigenous people.

Conclusion The innovative methodological framework proposed in this scoping review protocol will yield richer information on the contribution of elders to community wellness. This work is an essential preliminary step towards developing research involving indigenous communities, drawing on the social participation of elders and intergenerational solidarity.

Strengths and limitations of this study

- Tracking scientific and grey literature as well as indigenous sources recognised and valued by knowledge users and key informants.
- Multidisciplinary research team involving various stakeholders including indigenous people will optimise knowledge translation.
- Although compared according to study design or type of document, as with other scoping reviews, the aim is not to assess the quality of studies and the results will include data obtained through various methods, each with its own strengths and limitations.
- While minimised by considering the grey literature and indigenous sources, a possible limitation is the over-representation of positive results (publication bias).
- Even though other definitions of social participation are considered, the decision to collate, summarise and report the data based on the *International Classification of Functioning, Disability and Health* (ICF) will influence the results obtained from this scoping review protocol.

INTRODUCTION

Indigenous approaches to promoting wellness differ substantially from non-indigenous approaches.¹ Public health and social welfare services often fail to meet the needs of indigenous people, mostly because of the complex interactions between the various challenges threatening indigenous wellness.² Substantial disparities in education,^{3 4} housing,³⁻⁶ economic development,⁴ well-being^{4 6-8} and health¹⁻⁴ have been noted between indigenous people and the general Canadian population. To better meet the needs of indigenous people and improve their living conditions, the Truth and Reconciliation Commission of Canada stated that the Canadian healthcare system

should include indigenous healing practices, in collaboration with healers and elders. Such an approach should promote intercultural dialogue to increase the cultural competence of social and healthcare professionals,^{9–13} and in turn strengthen cultural security¹⁴ for indigenous people. Resilience may be grounded in values and the cultural collective identity transmitted by elders.¹⁵ For indigenous people, ‘elder’ is a social role acquired when a community recognises a person’s legitimacy and competency. Not all elders are thus old people, and not all old people are elders, contrary to the non-indigenous context.¹⁶ The social participation of elders is important in indigenous communities,¹⁷ and intergenerational dynamics must be considered in a holistic approach to wellness.

Importance of social participation and intergenerational solidarity

Social participation is defined as the involvement in activities that make one interact with others in the community.^{18,19} According to the *International Classification of Functioning, Disability and Health* (ICF) published by the WHO,²⁰ social participation is influenced by personal and environmental factors, both physical and social.²¹ Classified under social participation, intergenerational solidarity can represent the interaction between personal factors (age, gender, sociocultural identity, organic systems and abilities) of elders and other community members, and environmental factors, that is, physical and social environments which determine the context and organisation of a society. Intergenerational solidarity involves mutual help in which each generation gives to and receives from following and preceding generations.^{22–26} Also under social participation, the concept of wellness is multidimensional (physical, emotional, mental, spiritual, social, environmental and occupational) and considers the inter-relatedness between a person and his/her environment.²⁷ ‘Wellness from an indigenous perspective is a whole and healthy person expressed through a sense of balance of body, mind, emotion and spirit. Central to wellness is belief in one’s connection to language, land, beings of creation and ancestry, supported by a caring family and environment.’²⁸ In this context, the First Nations of Quebec and Labrador Health and Social Services Commission (FNQLHSSC) encourages strategies for working with indigenous elders and families to promote a more inclusive society.^{10, 11, 29} From the perspective of a collaborative approach to wellness and health promotion based on individual and collective strengths, increasing the social participation of elders could help promote strong, healthy communities in accordance with local values that include respecting people and nature.³⁰ In fact, involving elders through traditional practices, arts, spiritual activities and intergenerational linkages fits with indigenous models of healing and resilience promotion.^{9, 31}

Benefits of social participation and intergenerational solidarity for wellness

Through their experiences, indigenous elders, especially women,³² contribute to the transmission of values,^{9, 25}

collective cultural identity³³ and education,^{34, 35} and promote community development,³⁶ communication³⁷ and intergenerational relationships.³⁸ Knowledge, including memories and ways to develop competency and creativity, is transmitted from elders to youth.^{18, 30} Intergenerational activities involving the participation of elders benefit the elders themselves (functional and cognitive skills), youth (finding meaning in life), families (developing networks) and society.^{39–43} Intergenerational links provide for bilateral sharing of knowledge and values, reciprocity in relationships, mutual assistance and solidarity.⁴³ Some studies have presented the benefits of social participation and intergenerational solidarity of older adults in non-indigenous contexts.^{24, 40–42} Although there are other studies on this topic with indigenous elders,^{9, 25, 33–39} none provides an integrative perspective about the benefits of social participation and intergenerational solidarity for wellness. Some studies involved indigenous elders in community-based participatory research,^{44, 45} while others were based on individual interviews and focus groups with elders aimed at understanding their perception of the issues facing indigenous communities.^{46, 47} However, these studies did not provide information about the benefits of elders’ contribution to wellness. Even though other studies described the involvement of indigenous elders in their community^{48, 49} and of grandparents with their grandchildren,^{50, 51} a detailed description of elders’ social participation and intergenerational solidarity is needed, including dimensions of social participation, that is, knowledge production and use, communication, interpersonal interactions and relationships, work and volunteering, domestic life, community, social and civic life. It is also important to have a better understanding of environmental factors such as politics, systems and services development in health, education and social services, which could act as facilitators or barriers to elders’ social participation and intergenerational solidarity. To understand indigenous elders’ contribution to wellness, integrative knowledge of its influence on individual and community wellness is needed, with consideration given to environmental factors that are challenged in indigenous communities. Such a synthesis is complicated by knowledge and practices that vary across indigenous communities, resulting in different contexts for elders’ social participation. Finally, as the scientific literature presents only a part of elders’ contribution to wellness, a synthesis of this knowledge needs to include the grey literature, as well as information held by indigenous communities and organisations. Over the long term, this knowledge could help to improve social services and healthcare. Thus, this paper presents a scoping review protocol aimed at developing a better understanding of how the social participation of indigenous elders and intergenerational solidarity are associated with individual and community wellness.

METHODS AND ANALYSIS

A systematic scoping review method^{52–54} operationalised in six steps across 12 months (table 1) is presented. Each

Table 1 Steps in the scoping review process and roles of each team member

Timeline	Steps and planned actions	Team members												
		PI	ME	CE	EE	KU1	KU2	KU3	KU4	IS	KI	RA		
Month 1	Step 1: identify research questions	x	x	x	x	x	x	x	x	x	x	x	x	x
Months 1-3	Step 2: identify relevant documents Contact key informants (phone interview)	x	x	x	x	x	x	x	x	x	x	x	x	x
	Step 3: select relevant documents	x												x
	Validate (phone interview)	x	x	x	x	x	x	x	x	x	x	x	x	
Months 3-6	Step 4: extract and chart data	x	x	x	x	x	x	x	x	x	x	x	x	x
	Validate charting (meeting)	x	x	x	x	x	x	x	x	x	x	x	x	x
Months 3-8	Step 5: collate, summarise and report results	x												x
	Analyse data	x	x	x	x	x	x	x	x	x	x	x	x	x
	Validate analysis (meeting)	x	x	x	x	x	x	x	x	x	x	x	x	x
	Report results (meeting)	x												x
	Apply meaning to results (meeting)	x	x	x	x	x	x	x	x	x	x	x	x	
	Broaden implications (meeting)	x	x	x	x	x	x	x	x	x	x	x	x	
Months 8-12	Step 6: knowledge translation	x	x	x	x	x	x	x	x	x	x	x	x	x
	Develop plan (meeting)	x	x	x	x	x	x	x	x	x	x	x	x	x
	Collaborate in dissemination	x	x	x	x	x	x	x	x	x	x	x	x	x

CE, content expert coinvestigators; EE, ethics expert coinvestigators; IS, information scientist; KI, key informants (indigenous community representatives, indigenous elders); KU1, first knowledge user, First Nations of Quebec and Labrador Health and Social Services Commission (FNQLHSSC); KU2, second knowledge user, Native Friendship Centres; KU3, third knowledge user: Integrated Health and Social Services Centres (IHSSC); KU4, fourth knowledge user: community organisations; PI: principal investigator, ME, method expert coinvestigator; RA, research assistants.

step involves the active contribution of key informants, that is, indigenous elders and indigenous community representatives, and an advisory committee including knowledge users with varied perspectives and experiences. Individual interviews and focus groups held in indigenous communities representing various indigenous nations and using different indigenous languages will point towards recognised practices adapted to each community context, taking into account indigenous interests, culture, knowledge and experience, and community strengths.^{55 56} This innovative methodological framework aims to empower indigenous people and give them access to knowledge.

Identify research questions (Step 1)

The research questions will be identified by the research team, including knowledge users and key informants. Key informants from specific indigenous nations (Abenakis, Anicinapek, Atikamekw, Crees, Hurons-Wendats, Innus, Inuit and Mohawks) will credibly represent a diversity of social realities, cultures, opportunities for social participation and living conditions. Key informants who do not speak English or French will be interviewed with an interpreter. Particular attention will be paid to including women as well as men, as perceptions, needs and roles may differ depending on gender.^{57 58} Moreover, to consider all aspects of the social participation of indigenous elders, the structural and conceptual content of the ICF²⁰ will guide the analysis. Other conceptual definitions of social participation and its components^{18 19 59} will be used to enhance the ICF.

Identify relevant documents (Step 2)

Two research assistants (supervised by the principal investigator and information scientist) will query databases to retrieve all studies corresponding to the keywords (table 2). Modifications to keywords and databases will be made if needed. For feasibility reasons, only documents published in English, French, Spanish or indigenous languages will be retained. The search will not be limited to a specific time period, as both recent and older documents could be relevant. Moreover, Medical Subject Headings (MeSH) will be used to maximise information retrieval from the databases. Extended search strategies for grey literature and unpublished documents, such as those from indigenous organisations, will be conducted in collaboration with key informants and the advisory committee, as well as by manually searching bibliographies, health-related websites, books, journals and magazines.

Select relevant documents (Step 3)

Research assistants supervised by the principal investigator will separately screen the studies for relevance to the research questions according to title, abstract and keywords. Selection of the relevant literature will be restricted to documents about indigenous elders' social participation and intergenerational solidarity. Documents related to social participation and intergenerational solidarity of indigenous people influencing individual and community wellness will be included. Inclusion criteria embrace the scientific and grey literature and sources from indigenous communities and organisations, which could be written, video or audio. Scientific articles

Table 2 Document search strategy

Concepts	Keywords (and French equivalences)	Databases and search engines
Concept A1 Indigenous	Native* OR Indigenous OR 'First Nation*' OR Metis OR Inuk OR Inuit OR Eskimo* OR 'American Indian*' OR Aboriginal* OR Amerindian*	Autochtonia, First Nations Periodical Index, Bibliography of Native North Americans, Canadian Research Index, Cochrane Database of Systematic Reviews, Medline, CINAHL, Ageline, Sociology database, PsycINFO, Scopus, Academic Search
Concept A2 Elders	Elder* OR Aged [MeSH] OR Senior* OR 'Old*Adult*' OR 'Old age' OR 'Old* person*' OR 'Old* people' OR 'Wise one*' OR Grandmother* OR Grandfather* OR Grandparent* OR 'Traditional healer*' OR Leader*	Complete, Repère\$, Santecom\$, Proquest Research Library, Google/ Google Scholar
Concept B Wellness	Resilient OR Resilienc* OR 'Capacity building' OR Strength* OR Wellbeing OR 'Well-being' OR Wellness OR 'Self efficacy' OR 'Self esteem' OR 'Living conditions' OR Health OR Hardiness [MeSH] OR 'Indigenous health' [MeSH] OR 'Psychological wellbeing' [MeSH] OR Happiness OR 'Self concept' [MeSH] OR 'Sense of coherence' OR 'Socio economic factors' [MeSH] OR 'Social condition*' OR 'World health' [MeSH] OR 'Global health' OR 'Health education' OR 'Health promotion'	Complete, Repère\$, Santecom\$, Proquest Research Library, Google/ Google Scholar
Concept C Social participation	Intergeneration* OR Generation* OR 'Social participation' OR 'Community participation' OR 'Social involvement' OR 'Social engagement' OR 'Community involvement' OR 'Community engagement' OR 'Civic participation' OR 'Consumer participation' [MeSH] OR 'Community-based participatory research'	

MeSH, Medical Subject Headings.

reporting results from community-based participatory research involving elders but not highlighting their social participation will be excluded. Special attention will be paid to gathering documents reporting not only positive effects, but also neutral or negative impacts of elders' social participation and intergenerational solidarity on wellness. Documents reporting neutral or negative effects could help deepen our understanding of factors influencing the implementation success of interventions based on elders' contributions. The research team will meet regularly to discuss and resolve any ambiguity concerning document selection. All team members will contribute to final document selection. If disagreements occur, they will be discussed with the first knowledge user (FNQLHSSC). A flow chart of the systematic literature search following PRISMA guidelines and methodological choices will be documented to ensure transparency and reproducibility of the process.⁶⁰

Extract and chart data (Step 4)

Before extracting the data, research assistants and researchers will write down their assumptions to minimise their potential influence on data collection and analysis. A preliminary reading will help categorise all the selected documents based on their focus on either social participation or intergenerational solidarity (see template in see online supplementary appendix 1). The main quantitative or qualitative findings of the selected documents will be extracted into a framework (see template in see online supplementary appendix 2) according to how social participation and intergenerational relationships are associated with or influence wellness (ie, significantly positively (+), negatively (-) or not significantly (0)). Special attention will be paid to extracting and charting neutral or negative effects of social participation and intergenerational solidarity on wellness, and more specifically the personal and environmental context that could explain such effects. A theme-based charting template will be developed that characterises social participation and intergenerational solidarity according to categories emerging from data collation and analysis following an iterative thematic analysis process. A guide will be built based on the ICF, listing and defining themes of interest.²⁰ Research assistants supervised by the principal investigator will independently extract and categorise the data. In collaboration with the principal investigator, indigenous translators will extract and categorise data from documents in indigenous languages. The process will be validated following analysis of the first five documents, and subsequently as required when new themes are added.

Collate, summarise and report results (Step 5)

Contextual data analysis will begin with descriptive statistics.^{52-54 61} Data will be independently grouped by meaning and classified into coherent, relevant and clearly defined themes by the two research assistants supervised by the principal investigator to ensure validity and credibility of the results. Each theme will be reported to illustrate

associations or influences, and subsequently contrasted to bring out similarities and differences in their relationships with wellness. Based on the ICF categorisation, knowledge gaps will be identified. Analyses will also be discussed with the principal knowledge user, and one third of the data will be co-coded by a content expert. To present results according to indigenous community needs, findings will be discussed and validated in meetings with knowledge users and key informants from indigenous communities and organisations. Presentation of the results in relation to the study objectives and the PRISMA flow chart will ensure quality and transparency.⁶²

Translate knowledge (Step 6)

Congruent with an integrated knowledge translation process and with an ethical framework, various strategies will be used, such as presentations, radio interviews and articles (table 3), targeting a wide audience (researchers and knowledge users, including decision-makers, Native Friendship Centres, healthcare and social service professionals and community organisations) in partnership with indigenous representatives. The synthesis report will be tailored to each target audience to optimally meet their interests.

ETHICAL APPROACH

This scoping review protocol respects the principles of the Aboriginal Methodological Framework for the Canadian Best Practices Initiative for which the indigenous concept of proven methods replaces the Western concept of best practices,¹⁰ referring to the holistic model of wellness and considering the nature of the target group. Moreover, this scoping review protocol honours the principles of ethics in research with indigenous people⁶³ centred on respect, justice, enhancing cultural competence, intersectoral collaboration, and empowerment.⁶⁴⁻⁶⁷ To draw a complete portrait of elders' reality, it is essential to work with indigenous communities and organisations, as well as with the elders themselves. The research team and advisory committee include indigenous members. The participation of several key informants from indigenous communities will ensure balanced power in terms of access to information, involvement in methodological decisions and authenticity in the dissemination of results. This approach is inspired by constructivist theories,⁶¹ including sources of unconventional data to overcome the limitations of systematic methods. Through collaboration with an advisory committee including indigenous people, this approach recognises the mutuality of knowledge transmission and acquisition in the relationship between indigenous peoples and the academic community.^{30 68 69} Ethical approval was obtained from Ethics Review Board of the Université du Québec en Abitibi-Témiscamingue (2016-11). The FNQPHSSC also approved every step in this scoping review.

Table 3 Knowledge translation plan

Knowledge generated	Strategies/target audience		
	Researchers	Knowledge users	Expected outcomes
<ul style="list-style-type: none"> ▶ Characteristics of elders' social participation associated with individual and community wellness ▶ Characteristics of intergenerational solidarity associated with individual and community wellness ▶ Characteristics of elders' social participation and intergenerational solidarity associated with individual and community wellness not covered in the literature 	<ul style="list-style-type: none"> ▶ Articles in peer-reviewed journals ▶ Scientific conferences ▶ Workshops 	<ul style="list-style-type: none"> ▶ Coffee meeting ▶ Workshops with community members, decision-makers and researchers ▶ Advisory committee involved at all stages of the research ▶ Magazine article for a non-scientific audience (with indigenous collaborators) ▶ Toolkit on elders' social participation (with indigenous collaborators) ▶ Radio interviews (with indigenous collaborators) 	<ul style="list-style-type: none"> ▶ Improved understanding of elders' social participation and intergenerational solidarities ▶ Enhanced cultural security and equity ▶ Partnership among researchers, decision-makers and knowledge users ▶ Increased awareness among Canadians of the contribution to wellness of indigenous elders' social participation ▶ Appropriation and translation of knowledge by decision-makers, indigenous and non-indigenous people

DISCUSSION

The originality of this scoping review protocol lies in its foundation on the strengths of indigenous elders and communities. The participation of indigenous key informants, indigenous scholars/researchers and indigenous organisations fosters their power and their access to knowledge throughout the process. Moreover, inclusion in the research team of knowledge users and key informants from a variety of indigenous communities with complementary expertise will facilitate the retrieval of scientific and grey literature as well as indigenous documents. The participation of an information scientist and of method, content and ethics experts, along with the validation working session, will maximise data retrieval and improve the validity of the results. The research will be performed iteratively following a rigorous, culturally relevant process.

Expected outcomes

Conducted in partnership with knowledge users and representatives from various indigenous communities, the scoping review proposed in this protocol will synthesise knowledge to foster the development of policies and practices that promote indigenous elders' social participation and intergenerational solidarities. To our knowledge, this scoping review protocol is the first on this topic. Hence, the protocol will encourage high-quality scoping review studies with indigenous populations and replication with other topics and sociocultural contexts. The involvement of indigenous people in the research team, advisory committee and among key informants is empowering and could be duplicated with other topics and other populations. The extent of the scoping review, including the scientific

and grey literature as well as indigenous sources to provide richer knowledge, might be a valuable way to recognise mutual knowledge transmission between researchers and indigenous peoples. Moreover, the results of this scoping review will provide a solid basis for working with indigenous communities, building on their strengths to improve wellness. This scoping review will also identify areas in which scientific evidence is currently insufficient and for which interdisciplinary research is needed. This scoping review protocol will be useful to researchers, communities and organisations wishing to synthesise information on issues requiring a broad perspective based on the scientific and grey literature and indigenous sources.

Strengths and limitations

Designed to mine the scientific and grey literature, and indigenous sources suggested by elders and community/organisation representatives, as well as knowledge users, this scoping review protocol⁵²⁻⁵⁴ is positioned on a continuum between positivist and constructivist epistemological paradigms, nearer to the constructivist end of the continuum. This multidisciplinary participatory research team involves stakeholders from public and community sectors as well as various institutions and indigenous community representatives. The snowball sampling method and contribution of key informants will guide us toward relevant documents, including those written in indigenous languages. Knowledge translation will be supported by principles and approaches that enhance collaboration between researchers and knowledge users.⁷⁰ Like in other scoping reviews, the aim is not to assess the quality of the studies and the

results will include data obtained through various methods, each with its own strengths and drawbacks. To overcome this limitation, results will be presented and discussed according to study design or type of document. While minimised by considering grey literature and indigenous sources, a possible limitation is the over-representation of positive results (publication bias). Finally, the working definition of social participation (ICF) could bias the results. However, results from studies based on other definitions and models^{21 59} will be included to broaden understanding.

CONCLUSIONS

Although previous investigations have examined elders' social participation and intergenerational solidarity, and their influences on individual and community wellness, no comprehensive, integrated analysis of this knowledge has been conducted to date. The main objective of this paper is to present a scoping review protocol to gather information on the social participation of indigenous elders, intergenerational solidarity and their association with wellness. The selected methodology, that is, the methodological framework for scoping studies, is innovative and involves an advisory committee and key informants through all six steps in the process. The scoping review will provide indigenous elders and community representatives, researchers, decision-makers and knowledge users with practical knowledge on how best to promote health and address social challenges while working with indigenous communities.

Author affiliations

¹School of Indigenous Studies, Université du Québec en Abitibi-Témiscamingue, Rouyn-Noranda, Québec, Canada

²Research Centre on Aging, Centre intégré universitaire de santé et de services sociaux de l'Estrie-Centre hospitalier universitaire de Sherbrooke, Sherbrooke, Québec, Canada

³Chaire de recherche du Canada sur les pratiques professionnelles d'intégration des services en gérontologie, Faculté des lettres et sciences humaines, Université de Sherbrooke, Sherbrooke, Québec, Canada

⁴Département d'ergothérapie, Université du Québec à Trois-Rivières, Trois-Rivières, Québec, Canada

⁵Unité d'enseignement et de recherche en sciences du développement humain et social, Université du Québec en Abitibi-Témiscamingue - Campus de Val-d'Or, Val-d'Or, Québec, Canada

⁶Department of Public-Health, Cree Board of Health and Social Services of James Bay, Mistissini, Québec, Canada

⁷School of Rehabilitation, Faculty of Medicine and Health Sciences, Université de Sherbrooke, Sherbrooke, Québec, Canada

Acknowledgements The Quebec Population Health Research Network (QPHRN) and l'Institut sur le vieillissement et la participation sociale des aînés (IVPSA) financially contributed to this publication by providing diffusion scholarships to Chantal Viscogliosi. This scoping review protocol was produced in collaboration with experts from various organisations and communities. The research team especially wishes to thank: Marc-André Fortin, Department of Literature, University of Sherbrooke; Patrick Fougeyrollas, Director, International Network on the Disability Creation Process (INDCP); Nancy Gros-Louis McHugh and Edith Picard, FNQLHSSC; Dominique Hamel, nurse, Inuulitsivik Health Center, Nunavik; Francis Lacasse, information scientist, CIUSSS de l'Estrie-CHUS; Lara Maillet, Institut universitaire de première ligne en santé et services sociaux, CIUSSS de l'Estrie-CHUS; Laurent Marcoux, President, Canadian Medical Association; Josée Roy, Coordinator, Coalition pour le maintien dans la communauté (COMACO); Fimba Tankoano, Director, Fédération des centres d'action bénévole du Québec (FCABQ); Sharon Tardif, interpreter for Innu and Naskapi communities, member of

the Naskapi community; André Tourigny, Director, Institut sur le vieillissement et la participation sociale des aînés (IVPSA).

Contributors CV initiated the project with HA and ML and wrote the paper. HA and ML supervised the project and contributed to writing the protocol. SB, YC, M-JD, DG, and JT revised the manuscript.

Funding This work is supported by the Social Sciences and Humanities Research Council of Canada (SSHRC), grant number 872-2016-0011. ML is a Fonds de la recherche en santé du Québec (FRSQ) Junior 1 Researcher (no 26815; 2013-2017) and a Canadian Institutes of Health Research (CIHR) New Investigator (no 360880; 2017-2022).

Competing interests None declared.

Ethics approval Ethical approval was obtained from Ethics Review Board of the Université du Québec en Abitibi-Témiscamingue (2016-11)

Provenance and peer review Not commissioned; externally peer reviewed.

Open Access This is an Open Access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>

© Article author(s) (or their employer(s) unless otherwise stated in the text of the article) 2017. All rights reserved. No commercial use is permitted unless otherwise expressly granted.

REFERENCES

- Habjan S, Prince H, Kelley ML. Caregiving for elders in first nations communities: social system perspective on barriers and challenges. *Can J Aging* 2012;31:209–22.
- Damasse J, McGinn CA; Institut National d'Excellence en Santé et en Services Sociaux (INESSS). Efficacité des interventions en matière de négligence auprès des enfants, des familles et des communautés autochtones: une revue systématique. *ETMIS* 2014;10:1–38.
- UNICEF. *Supplément canadien au rapport La situation des enfants dans le monde 2009. La santé des enfants autochtones. Pour tous les enfants, sans exception*. Toronto, ON: Comité Canadien de l'UNICEF, 2009.
- National Association of Friendship Centres (NAFC). *Literature review on urban aboriginal peoples. Urban aboriginal knowledge network/ réseau de connaissances des autochtones en milieu urbain*. Ottawa, ON: National Association of Friendship Centres, 2013.
- Wilson K, Rosenberg MW, Abonyi S. Aboriginal peoples, health and healing approaches: the effects of age and place on health. *Soc Sci Med* 2011;72:355–64.
- Salée D, Newhouse D, Lévesque C. Quality of life of aboriginal people in Canada: an analysis of current research. *Choices* 2006;12:1–38.
- Assemblée des Premières Nations du Québec et du Labrador (APNQL) et Commission de la santé et des services sociaux des Premières Nations du Québec et du Labrador (CSSSPNQL). *Nos aînés... Notre identité. Mémoire présenté au Secrétariat des Aînés dans le cadre des consultations publiques sur les conditions de vie des personnes âgées: un enjeu de société, une responsabilité qui nous interpelle tous*. Québec, QC: CSSSPNQL, 2007.
- Saini M, Quinn A. *A systematic review of randomized controlled trials of health related issues within an aboriginal context*. Prince George, BC: National Collaborating Centre for Aboriginal Health, 2013.
- Hart MA. *Seeking Mino-Pimatisiwin: an aboriginal approach to helping*. Halifax, NS: Fernwood Publishing, 2002.
- Commission de la Santé et des Services Sociaux des Premières Nations du Québec et du Labrador (CSSSPNQL). *Conditions de vie des aînés des Premières Nations. Rapport final*. Québec, QC: CSSSPNQL, 2010.
- Simard-Veillet M. *Obligation de consulter et d'accommoder: vers un empowerment autochtone? Le cas des Atikamekw Nehirowisiwok au Québec [Master's thesis]*. Montréal (QC), Université du Québec à Montréal, 2015.
- Public Health Agency of Canada (PHAC). *Aboriginal methodological framework for the canadian best practices initiative*. Ottawa, ON: Public Health Agency of Canada, 2015.
- Centre d'Amitié Autochtone de Val-d'Or (CAAVD). *Rapport annuel 2009-2010*. Val-d'Or, QC: Centre d'Amitié Autochtone de Val-d'Or, 2010.

14. Coffin J. Rising to the challenge in aboriginal health by creating cultural security. *Aborig Isl Health Work J* 2007; 31: 3: .
15. Davidson-Hunt I, Berkes F. Learning as you journey: Anishinaabe perception of social-ecological environments and adaptive learning. *Conserv Ecol* 2003;8:5.
16. Wilson K. Therapeutic landscapes and first nations peoples: an exploration of culture, health and place. *Health Place* 2003;9:83–93.
17. Langford W. Friendship centres in Canada, 1959–1977. *Am Indian Q* 2016;40:1–37.
18. Levasseur M, Richard L, Gauvin L, et al. Inventory and analysis of definitions of social participation found in the aging literature: proposed taxonomy of social activities. *Soc Sci Med* 2010;71:2141–9.
19. Raymond É, Gagné D, Sévigny A, et al. *La participation sociale des aînés dans une perspective de vieillissement en santé. Réflexion critique appuyée sur une analyse documentaire. Direction de Santé publique de l'Agence de la Santé et des Services sociaux de la Capitale Nationale, Institut national de santé publique du Québec, Centre d'excellence sur le vieillissement de Québec et Institut sur le vieillissement et la participation sociale des aînés de l'Université Laval*. Québec: Institut national de santé publique du Québec, 2008.
20. World Health Organization (WHO). *International classification of functioning, disability and health*. Geneva: World Health Organization, 2001.
21. Fougeyrollas P. *Le funambule, le fil et la toile. Transformations réciproques du sens du handicap. (The tightrope walker, wire and canvas. reciprocal transformations of the meaning of disability.)* Québec, QC: Presses de l'Université Laval, 2010.
22. Rakotonarivo A. La solidarité intergénérationnelle en milieu rural malgache. Le rôle des personnes âgées dans la migration. *Autrepart* 2010;53:111–30.
23. Attias-Donfut C. Rapport de générations: transferts intrafamiliaux et dynamique macrosociale. *Rev Fr Sociol* 2000;41:643–84.
24. Sévigny A, Lepage D. *Les maisons des grands-parents: la vitalité de la participation sociale des aînés et des solidarités intergénérationnelles*. Cahiers du Cregés 2016, no 2. Montréal, QC: Centre de Recherche et d'Expertise en Gériatrie Sociale et CIUSSS du Centre-Ouest-de l'Île-de-Montréal, 2016.
25. Fleury C. Les solidarités intergénérationnelles dans une perspective des parcours de vie. Le cas des immigrants portugais du Luxembourg. *Sociol Soc* 2013;45:91–116.
26. Ministère de la santé et des services sociaux (MSSS) du Québec. *Aging and living together at home, in one's community, in Québec*. Québec, QC: MSSS, 2012.
27. School of Health Promotion and Social Development. Seven dimensions of wellness. University of Wisconsin–Stevens Point, 2016. <http://www.uwsp.edu/HPHD/Pages/7dimensions.aspx> (accessed 17 Feb 2017).
28. Dumont EJ, Hopkins C, Dell C, et al. *Culture as intervention in addiction treatment: Appreciating the evidence within indigenous knowledge. Issues of substance*. Ottawa, ON: Canadian Centre on Substance Abuse, 2013.
29. Truth and Reconciliation Commission of Canada (TRC). *Honouring the truth, reconciling for the future. summary of the final report of the truth and reconciliation commission of Canada*. Montréal and Toronto: McGill-Queen's University Press, 2015.
30. Einish N. Apprendre des aînés: renouer avec les traditions dans le cadre d'une recherche sur le changement climatique. In: Lévesque C, Labrecque M-F, eds. *Itinéraires d'égalité. Trajectoires des femmes autochtones du Québec et du Canada*. Cahiers Dialog, no 2007-03. Actes de Colloque. Montréal, QC: Réseau de recherche sur les connaissances relatives aux peuples autochtones (Dialog) et Institut National de la Recherche Scientifique, 2007:118–20.
31. Jacob S, Desautels G. Evaluation of Aboriginal programs: what place is given to participation and cultural sensitivity? *Int Indig Policy J* 2013;4:1–29.
32. Kermaol N, Altamirano-Jiménez I. *Living on the land. Indigenous women's understanding of place*. Edmonton, AB: Athabasca University Press, 2016:3–17.
33. Kant S, Vertinsky I, Zheng B, et al. Multi-domain subjective wellbeing of two Canadian First Nations communities. *World Dev* 2014;64:140–57.
34. Roué M. Guérir de l'école par le retour à la terre. Les aînés Cris au secours de la génération perdue. *Rev intern sci soc* 2006;187:19–28.
35. Laugrand F. Des humains, des ancêtres et des esprits. Ambiguïté et hétéronomie du rêve chez les aînés inuit de l'Arctique canadien. *Etud Inuit* 2001;25:73–100.
36. Lockhart A, McCaskill D. Toward an integrated, community-based partnership model of native development and training: a case study in process. *Can J Native Stud* 1986;6:159–72.
37. Valaskakis GG. Communication and participatory development in the north: inuit interactive experiments. Valaskakis GG, *Communication and the Canadian north*. Montréal, QC: Université Concordia, 1983:120–35.
38. Tassé L. Les terres promises: rôle social et filiation chez les Algonquins âgés de Kitigan Zibi. *Int Rev Community Dev* 1993;29:25–36.
39. Kahn CB, Reinschmidt K, Teufel-Shone NI, et al. American indian elders' resilience: sources of strength for building a healthy future for youth. *Am Indian Alsk Native Ment Health Res* 2016;23:117–33.
40. Loriaux M. *Les actions intergénérationnelles au service de la cohésion sociale dans les sociétés vieillissantes*. Paper presented at the seminar "Comment favoriser les relations intergénérationnelles". Brussels, Belgium: Fondation Roi Baudouin, 2006.
41. Mthembu TG, Abdurahman I, Ferus L, et al. Older adults' perceptions and experiences regarding leisure participation. *Afr J Phys Health Educ Recreat Dance* 2015;21:215–35.
42. Sakurai R, Yasunaga M, Murayama Y, et al. Long-term effects of an intergenerational program on functional capacity in older adults: results from a seven-year follow-up of the REPRINTS study. *Arch Gerontol Geriatr* 2016;64:13–20.
43. Olazabal I, Pinazo S. Les relations intergénérationnelles au sein de la parenté et de la communauté. In: Charpentier M, Guberman N, Billette V, eds. *Vieillir au pluriel. Perspectives sociales*. Québec: les presses de l'Université du Québec, 2010:255–80.
44. Jernigan VB, Salvatore AL, Styne DM, et al. Addressing food insecurity in a native American reservation using community-based participatory research. *Health Educ Res* 2012;27:645–55.
45. Kiviniemi MT, Saad-Harouché FG, Ciupak GL, et al. Pilot intervention outcomes of an educational program for biospecimen research participation. *J Cancer Educ* 2013;28:52–9.
46. Hiratsuka V, Brown J, Dillard D. Views of biobanking research among Alaska native people: the role of community context. *Prog Community Health Partnersh* 2012;6:131–9.
47. Naidu A, Macdonald ME, Carnevale FA, et al. Exploring oral health and hygiene practices in the algonquin community of Rapid Lake, Quebec. *Rural Remote Health* 2014;14:2975.
48. Fletcher S, Mullett J. Digital stories as a tool for health promotion and youth engagement. *Can J Public Health* 2016;107:e183–7.
49. Kahn CB, Reinschmidt K, Teufel-Shone NI, et al. American indian elders' resilience: sources of strength for building a healthy future for youth. *Am Indian Alsk Native Ment Health Res* 2016;23:117–33.
50. Cross SL, Day AG, Byers LG. American Indian grand families: a qualitative study conducted with grandmothers and grandfathers who provide sole care for their grandchildren. *J Cross Cult Gerontol* 2010;25:371–83.
51. Dickson G, Green KL. Participatory action research: lessons learned with Aboriginal grandmothers. *Health Care Women Int* 2001;22:471–82.
52. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol* 2005;8:19–32.
53. Daudt HM, van Mossel C, Scott SJ. Enhancing the scoping study methodology: a large, inter-professional team's experience with Arksey and O'Malley's framework. *BMC Med Res Methodol* 2013;13:48.
54. Colquhoun HL, Levac D, O'Brien KK, et al. Scoping reviews: time for clarity in definition, methods, and reporting. *J Clin Epidemiol* 2014;67:1291–4.
55. Wilson S. *Research is ceremony. Indigenous research methods*. Halifax, NS: Fernwood Publishing, 2009.
56. Kovach M. *Indigenous methodologies. Characteristics, conversations, and contexts*. Toronto, ON: University of Toronto Press, 2010.
57. CIHR. *What a difference sex and gender make: a gender, sex and health research casebook*. Vancouver, BC: CIHR Institute of Gender and Health, 2012. http://www.cihr-irsc.gc.ca/f/documents/What_a_Difference_Sex_and_Gender_Make-fr.pdf (accessed 5 Jan 2017).
58. Halseth R. *Aboriginal women in Canada: gender, socio-economic determinants of health, and initiatives to close the wellness-gap*. Prince George, BC: National Collaborating Centre for Aboriginal Health, 2013.
59. Polatajko HJ, Townsend EA, Craik J. Canadian Model of Occupational Performance and Engagement (CMOP-E). In: Townsend EA, Polatajko HJ, *Advancing an occupational therapy vision for health, well-being and justice through occupation*. Ottawa, ON: CAOT Publications ACE, 2007.
60. Moher D, Liberati A, Tetzlaff J, et al: The PRISMA Group. Preferred reporting items for systematic reviews and meta-analysis: the PRISMA statement. *PLoS Med* 2009;6:e1000097.

61. L'Écuyer R. *Méthodologie de l'analyse développementale de contenu: méthode GPS et concept de soi [methodology of developmental content analysis: GPS method and self concept]*. Québec: Presses de l'Université du Québec, 1990.
62. Equator Network. Enhancing the quality and transparency of health research. 2016 http://www.equator-network.org/?post_type=eq_guidelines&eq_guidelines_study_design=systematic-reviews-and-meta-analyses&eq_guidelines_clinical_specialty=0&eq_guidelines_report_section=0&s= (accessed 5 Jan 2017).
63. AFNQL. *First Nations of Quebec and Labrador's Research Protocol*. Wendake, QC: Assembly of First Nations of Quebec and Labrador, 2014.
64. Association of Canadian Universities for Northern Studies (ACUNS). *Ethical principles for the conduct of research in the north*. Ottawa, ON: Department of Indian and Northern Development, 2003.
65. Centre des Premières Nations (CPN). *Analyse et modèles d'éthique en recherche*. Ottawa, ON: National Aboriginal Health Organization, 2007. http://www.naho.ca/documents/fnc/french/FNC_Considerations&Templates_Fr.pdf (accessed 5 Jan 2017).
66. Prince H, Kelley ML. An integrative framework for conducting palliative care research with First Nations communities. *J Palliat Care* 2010;26:47–53.
67. Asselin H, Basile S. Éthique de la recherche avec les peuples autochtones. Qu'en pensent les principaux intéressés? *Éthique Publique* 2012;14:333–45.
68. New Zealand's Indigenous Centre of Research Excellence. International Indigenous Development Research Conference 2012 Proceedings. Auckland (New Zealand), 27–30 June 2012. <http://www.maramatanga.ac.nz/sites/default/files/NPM%20Conference%20Proceedings%202012.pdf> (accessed 5 Jan 2017).
69. Saini M. *Revue systématique des modèles de recherche occidentaux et autochtones. Évaluation de la validation croisée pour l'exploration de la compatibilité et de la convergence*. Prince George, BC: National Collaborating Centre for Aboriginal Health, 2012.
70. Canada Institutes of Health Research. *Guide to knowledge translation planning at CIHR: integrated and end-of-grant approaches*. Ottawa: CHIR, 2012. <http://publications.gc.ca/site/fra/426904/publication.html> (accessed 5 Jan 2017).