

REVIEW

AN OVERVIEW OF ABORIGINAL HEALTH RESEARCH IN THE SOCIAL SCIENCES: CURRENT TRENDS AND FUTURE DIRECTIONS

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ABSTRACT

Objectives. To examine if Aboriginal health research conducted within the field of social sciences reflects the population and geographic diversity of the Aboriginal population.

Study Design. Review.

Methods. We searched the Web of Science Social Science Citation Index, the Arts and Humanities Citation Index and Scholars Portal for the time period 1995–2005 using search terms to reflect different names used to refer to Canada's Aboriginal peoples. Citations that did not focus on health or Canada were eliminated. Each paper was coded according to 7 broad categories: Aboriginal identity group; geography; age; health status; health determinants; health services; and methods.

Results. Based on the 96 papers reviewed, the results show an under-representation of Métis and urban Aboriginal peoples. Most of the papers are on health status and non-medical determinants of health, with a particular focus on chronic conditions and life-style behaviours. Only 6 papers examined traditional approaches to healing and/or access to traditional healers/medicines. A small number involved the use of community-based research methods.

Conclusions. Further research is required to address gaps in the current body of literature. Community-based research studies are necessary to address gaps that are most relevant to Aboriginal peoples. (*Int J Circumpolar Health* 2008; 67(2-3):179-189)

Keywords: Aboriginal peoples, Canada, health status, non-medical determinants of health

INTRODUCTION

In 2001, the Aboriginal population in Canada totalled almost one million individuals who represent 3.4% of Canada's total population (1). The Aboriginal population is younger and thus is growing at a much faster rate than the general Canadian population. Projections indicate that between 2001 and 2017 the Aboriginal population will grow at an annual rate of 1.8%, which is more than double the 0.7% growth rate estimated for the general population (1). This population growth has numerous implications for health, health policy and planning.

Research has shown that Aboriginal peoples constitute a vulnerable population and, as a group, experience disparities in both health status and access to health services when compared with the non-Aboriginal population. In Canada we have witnessed some improvements in Aboriginal health over time (e.g., decline in infectious diseases such as tuberculosis and reductions in infant mortality); however, disparities persist. Specifically, Aboriginal peoples continue to suffer from higher levels of mortality (as documented by lower levels of life expectancy) and morbidity (particularly chronic conditions) as compared with their non-Aboriginal counterparts (2–7). Given these patterns of health inequalities and the continued growth of the Aboriginal population, there is increasing interest in examining the current and future health and health care needs of the Aboriginal population. This paper seeks to review the growing body of literature surrounding Aboriginal health research within the field of social sciences. In particular, the paper will assess whether the current body of literature reflects the population and geographic diversity of the Aboriginal population. In addition,

it will identify gaps in the current field of study and outline areas for future research. In doing so, the paper builds on a recent review of medical/health sciences research conducted on Aboriginal health (8). In his review, Young (2003) concludes that medical/health sciences research fails to adequately address the demographic needs of the Aboriginal population with a particular under-representation of Métis and urban Aboriginal peoples. We build upon Young's review by exploring current trends in social science research.

MATERIAL AND METHODS

Since we were only interested in those contemporary health-related articles published within the field of social sciences, we searched the Web of Science Social Science Citation Index, the Arts and Humanities Citation Index and Scholars Portal (Social Science database) for the time period 1995–2005. We used a broad range of search terms to reflect different names used to refer to Canada's Aboriginal population, including "Indian," "Eskimo," "First Nation(s)," "Métis," "Inuit," "Aboriginal" and "Indigenous," and combined this with "Canada" and "Canadian." Selecting articles for inclusion involved a two-step approach. First, we used the search strategy described above and removed non-relevant citations – that is, those not focused on Aboriginal peoples in Canada and those that did not include analysis of primary or secondary health-related data (i.e., book reviews, literature reviews, media analysis, historical pieces). Second, we deleted those articles with a clear biomedical focus and/or those published in biomedical and epidemiology journals. The papers selected for inclu-

sion were coded according to 7 broad categories: Aboriginal identity group; geography; age; health status; health determinants; health services; and methods. In some cases the information for each category could be gleaned from the abstracts, but in most instances the information was taken from the Data/Methods section of individual papers. Each of the categories will be briefly discussed before presenting the results.

Aboriginal Identity Group: The Constitution Act of Canada (1982) recognizes 3 broad Aboriginal identity groups: North American Indians (i.e., First Nations peoples), Métis and Inuit. Traditionally, the term Métis was used to describe the children of Cree women and French fur traders living in the prairie region of Canada. However, today the term is used quite broadly to refer to individuals of mixed First Nations and European ancestry (9). The Inuit are Aboriginals who live in Canada's most northern regions. Each article was coded to determine if it focused on one, a combination or all three of Canada's Aboriginal identity groups.

Geography: We examined 2 aspects of geography among the articles we reviewed. First, we identified if a study referred to the on-reserve or off-reserve (i.e., urban or rural) population. The term reserve refers to land that has been set aside by the Crown for the use of a First Nations community. Second, we identified the province or territory in which the research took place. This was done to compare the geographic-focus of research with the regional (i.e., provincial/territorial) and sub-regional (i.e., on- vs. off-reserve) distribution of the Aboriginal population across Canada.

Age: All articles were examined to determine if research mainly focused on the general Aboriginal population or if particular age

groups (i.e., younger or older age cohorts) received attention.

Health Status: In coding health status we were interested in assessing the scope of health outcomes used in Aboriginal health research. Following Young (2003), 5 categories of health outcomes were used, including trauma/injury, mortality and life expectancy, infectious diseases, chronic conditions and mental health.

Health Determinants: Following Young (2003), we used 4 broad categories to represent the non-medical determinants of health: genetics, lifestyle, physical environment and the social environment.

Health Services: This category includes those articles that focus on use of and access to health care. We distinguish between those articles that examine conventional health care services and traditional healing practices.

Methods: Each article was coded according to whether the authors utilized primary data or relied on secondary data sets. In instances where primary data was used, we identified whether the data was collected through quantitative or qualitative research methods. We were also interested in identifying the extent to which authors are engaged in community-based research with Aboriginal peoples.

RESULTS

The process for selecting articles for inclusion resulted in a literature database containing 96 citations. This number is substantially lower than the 254 citations included in Young's (2003) review indicating, not surprisingly, that much of the research on Aboriginal health is conducted within the field of medical/health sciences.

Seventy-three percent of all papers referred to First Nations peoples.¹ In contrast, 15% of papers referred to the Inuit population while the Métis were represented in 14% of the papers. According to the 2001 Census of Canada, approximately 60% of the Aboriginal population is comprised of First Nations peoples, 30% are Métis and 5% are Inuit (1). Thus, the papers included in this review appear to under-represent the Métis population and over-represent the Inuit population with respect to their relative share of the total Aboriginal population (see Fig. 1). Interestingly, in 17 of the papers, the term “Aboriginal” is used, but it is not clear if the research relates to the total Aboriginal population, one identity group or a combination of identity groups.

With respect to place of residence, Aboriginal peoples in Canada are usually classified as residing on-reserve or off-reserve, the latter category being further subdivided into urban or rural locations. Data from the 2001 Census show that the majority of the Aboriginal population lives in urban areas (49%) while 31% live on-reserves and the remainder resides in rural, non-reserve locations (1). Of the 96 papers we reviewed, approximately 50% focus on the on-reserve population (10,11) while only 23% refer to the urban-based population (12–14) (see Fig. 1). However, since the majority of Aboriginals who live on reserves are First Nations peoples, it makes sense to only compare the geographic location of the 58 articles that are solely focused on First Nations peoples with their corre-

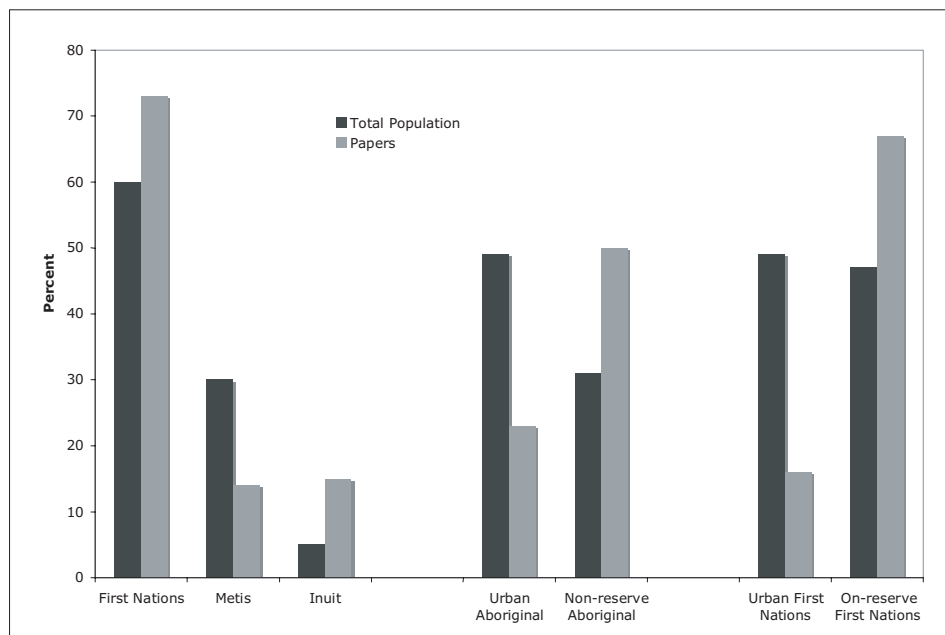


Figure 1. Comparing the demographic and the subregional profile of Aboriginal peoples and research themes.

¹ To arrive at this figure, we summed the total number of articles that only included First Nations peoples (58) with those that included First Nations peoples in combination with Inuit and/or Métis peoples (12) and divided these by the total number of articles (96). The same procedure was used for calculating the total number of papers related to Inuit and Métis health.

sponding geographic distribution in Canada. Approximately 41% of First Nations peoples in Canada live in urban areas (1). In contrast, of the 58 papers that only included First Nations peoples, 67% are focused on the reserve-based population while only 16% provide data on urban First Nations peoples (Fig. 1). Ten of the papers do not make any reference to geographic location. This clearly demonstrates that despite the increasing urbanization of the First Nations population, those living in urban settings are severely under-represented in social science health research.

Sixteen papers were conducted at the national level. All but 2 (Newfoundland and Prince Edward Island) of Canada's 10 provinces were represented in regionally based

studies. Eighteen studies took place in the provinces of Ontario (15) and British Columbia (12,16,17), followed by 14 in Alberta (18), 12 in Manitoba (19), 9 in Quebec (20), and 4 in Saskatchewan (21). Two of Canada's northern territories (Northwest Territories and Nunavut) were the focus of 5 regional studies (22,23). In comparing the provincial/territorial location of research with the geographic distribution of Canada's Aboriginal population (see Fig. 2), it is evident that, with respect to the provinces of Quebec, Ontario, Alberta, Manitoba and British Columbia, research reflects the general regional distribution of the population. In contrast, social science research appears to over-represent the population living in Nova Scotia while the province of Saskatchewan is

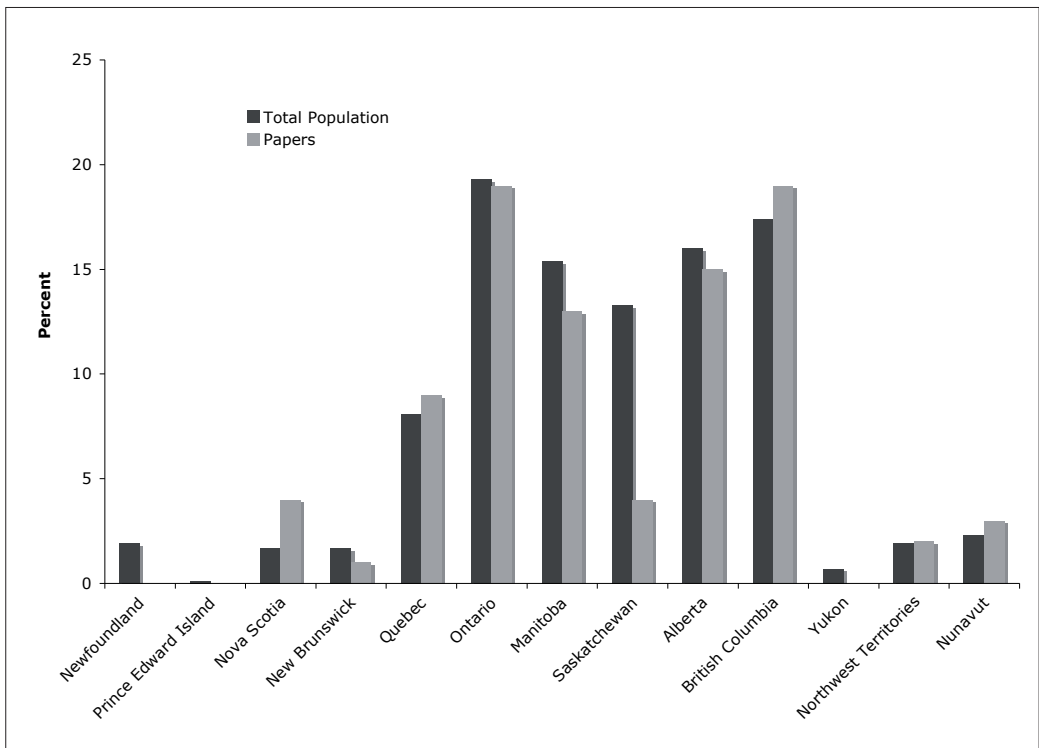


Figure 2. Comparing the regional geographic profile of Aboriginal peoples and research themes.

under-represented with respect to its share of the Aboriginal population.

The majority of the research articles are general population studies that do not focus on specific age groups. However, 13 papers did deal specifically with children and youth (24,25). Interestingly, approximately one-quarter of the papers dealt specifically with Aboriginal women.

In terms of the health-related focus of the papers, 55 dealt with the health status, 51 with non-medical determinants of health status and 27 dealt with access to/use of health care services. Of those studies pertaining to health status, 29 related to chronic conditions, 13 involved studies of life expectancy and mortality, 11 with infectious diseases, 13 were related to mental health and 4 focused on injuries/trauma. Diabetes accounted for the majority of chronic conditions (10,26). HIV/AIDS was the most frequently researched infectious disease (27). With respect to mental health, much of the research was related to stress and depression (13,28).

In terms of the non-medical determinants of health, 27 papers focused on life-style, followed by 12 papers examining aspects of the social environment, 7 papers related to the physical environment and 4 focused on genetics/biology. With respect to those papers that examined life-style as a determinant of health, most were related to smoking, substance abuse and diet (18,23,24). Of the 7 papers on the physical environment, the general focus was on location with research examining differences in health and access to health care among provinces or subregional locations (i.e., reserves/urban areas) (29,30) or on isolation in terms of access to services (31). Articles dealing with the social environment

were focused on a range of issues related to socio-economic status, cultural practices and culture change, and social support (32,33).

Most of the 27 papers on use of/access to health services focused solely on access to conventional health services with the majority examining physician use, preventive care, hospitalization, treatment programs and care-giving/support (16,29,31,34,35). However, 6 papers did examine traditional approaches to healing and access to traditional healers/medicines (12,18).

Finally, in terms of methods, the majority of the papers (70 in total) are based on primary data collection with 49 of these using qualitative research methods, including interviews, focus groups and sharing circles. Of the 33 papers that analyse secondary data sets, the majority use health data acquired mainly from regional and national health surveys (e.g., Aboriginal Peoples Survey, General Social Survey), hospital records and provincial health registries. A small number of articles (only 16) are based on community-based research methods that involved partnerships and consultations with Aboriginal organizations and communities (26,36,37).

DISCUSSION

The purpose of this paper was to assess if the growing body of social science research focused on Aboriginal health in Canada adequately reflects the population and geographic diversity of the Aboriginal population. In conducting this research, we were only able to review those social science articles appearing in the Web of Science Social Science Index, Arts and Humanities Index

and Scholars Portal. The final database of articles we reviewed included than 100 journal papers. It is possible that we may have missed some articles published in journals not indexed in these 3 databases. Our review also revealed some of the inherent difficulties in determining what constitutes “social science” research. Our initial literature search yielded hundreds of health-related articles, many of which, upon closer inspection, had a biomedical or epidemiologic focus. Thus, we could not rely on the database search engines alone to define “social science” research. In addition, since social scientists utilize both qualitative and quantitative research methods, it was not possible to eliminate non-social science research on the basis of methods alone. Further, health researchers working in social science disciplines (e.g., sociology, political science, geography) do not always publish in social science journals. We conclude, therefore, that the issue of what constitutes social science research is a difficult one to resolve. However, the two-stage approach we undertook represents a thorough and consistent strategy for identifying social science research.

Our literature search revealed that only 96 research studies that focused on the health of Aboriginal peoples in Canada were published over a 10-year period between 1995 and 2005. This is less than half of the number of studies Young (2003) reviewed in his analysis of medical research, indicating that there is a need for more research within the field of social sciences.

Similar to Young’s (2003) findings, our review revealed that existing social science research does not reflect the demographic composition and the geographic distribu-

tion of the Aboriginal population. In particular, while the First Nations population is adequately reflected in research (in light of their share of the total population), there is an under-representation of the Métis population research and an over-representation of the Inuit. In addition, Aboriginal peoples living in urban settings as well as those living in the provinces of Saskatchewan and Newfoundland are under-represented in existing social science health research. The focus on Inuit populations may be explained by the fact that, in general, there has been a historical research focus on the Inuit population, especially with respect to ethnography. In addition, it may be more difficult for researchers to access urban-based populations because they tend to lack a land base (from which they can be easily identified) and a central administrative organization or group that could facilitate access to such a diverse population. In contrast, the Inuit population is easily identified by its geographic location and there are clear research guidelines and licensing procedures required by the Nunavut Research Institute. Finally, the focus on Inuit health may be a function of researcher interests in the delivery of health care to remote and isolated areas. Indeed, many of those researchers who publish papers related to Inuit health are individuals who are involved in the delivery of health care to Inuit populations (e.g., nurses and physicians).

The review points to a number of other important areas for future research. First, one could argue that more attention needs to be directed towards the senior Aboriginal population. Approximately 2% of the studies reviewed focus on Aboriginal seniors who represent 4% of Canada’s total Aboriginal

population. While these percentages are quite similar, the 2001 Census of Canada does reveal a trend towards aging among Aboriginal peoples. In fact, the number of older Aboriginal peoples increased by 40% between 1996 and 2001, representing the largest population increase of all age groups in the Aboriginal population (1). Thus, this demonstrates a need for future research to focus on the health of Aboriginal seniors.

Second, as noted above, the existing body of research fails to adequately reflect the urban-based population. Within the last 50 years, Canada has witnessed unprecedented growth in the urban Aboriginal population. In the early 1950s less than 7% of the Aboriginal population lived in urban areas, by the early 1960s this figure rose to 13%, and today almost 50% of Aboriginal peoples live in urban areas while only 30% of the population resides on reserves (1,38). Despite the increasing urbanization of the Aboriginal population, there continues to be a paucity of health research related to urban Aboriginals. This may be explained, in part, by the lack of health data available for Aboriginals who do not live on reserves since most health data is only available for the on-reserve population (7). However, beyond issues of data availability, the Royal Commission on Aboriginal Peoples (RCAP) has argued that non-Aboriginal researchers overlook the urban population due to pervasive and persistent ideas about where Aboriginal peoples belong (2). In 1996, RCAP identified urban Aboriginal issues, particularly those related to health and health care, as requiring more attention and research. Yet, as demonstrated by this review, few have taken up this call for more research. However, it is important to note that

while only 23% of all papers in our review focused on urban populations, this figure is much higher than the 2% identified in Young's (2003) review of medical/health sciences research. This difference may be explained by the relatively higher use, among biomedical researchers, of secondary health data that is only available for the on-reserve population. In contrast, social scientists appear to be more engaged in primary research involving both the on- and off-reserve populations. Despite this, the proportion of research focused on urban Aboriginal peoples overall remains low in the social sciences as compared to the geographic distribution of the population. Thus, the health of the urban population continues to represent a significant gap in Aboriginal health research.

Third, it is well established that Aboriginal peoples often use both conventional and traditional healing practices (e.g., traditional healers). Yet the research reviewed has a clear focus on conventional health care (e.g., physicians, hospitals, nurses). Clearly, more research is needed to understand patterns of traditional healing use, particularly among off-reserve populations, who may have less access to traditional healing practices as compared to the on-reserve population.

Fourth, the review points to important areas of future research with respect to both health status and non-medical determinants of health. For example, together, circulatory diseases (23%) and injury (22%) account for almost half of all deaths among the First Nations population (39). Yet almost none of the studies focused on diseases of the circulatory system and a relatively small number examined injury. The review also points to the need for more research on health prob-

lems that are not linked to mortality. For example, the extent of disability is not known in the Aboriginal population and social science-oriented studies of disability in this population is also lacking. With respect to the non-medical determinants of health, the bulk of research on the physical environment is concerned with important issues related to geographic location and isolation. However, there are other aspects of the physical environment that need investigating, including those that relate to the natural environment (e.g., contamination, water quality, pollution) and the contextual characteristics of individuals (e.g., housing conditions). While there is much biomedical research on pollutants, the health impacts of contaminants also need to be examined from a social science perspective. Future research could explore contamination within the framework of risk assessment and in a manner that is sensitive to cultural knowledge and culturally specific risk communication. In terms of the social environment, given that Aboriginal peoples are over-represented by conditions of poverty, unemployment, homelessness, etc., further research is required to understand processes of marginalization (including discrimination) and how they impact health and well-being. In addition, as the Aboriginal population in older age cohorts continues to grow, more research on formal and informal caregiving will be needed to plan for this senior population.

Finally, while it is encouraging to see the high number of studies based on primary research, there appears to be a general lack of research conducted *with* Aboriginal peoples. By this we mean research that is rooted in developing partnerships and building capacity among Aboriginal peoples. As this

review reveals, very few studies have engaged in research that seeks to integrate social science approaches and Aboriginal values, traditions and perspectives. Certainly among Aboriginal communities, Aboriginal organizations and, more recently, funding bodies in Canada, greater emphasis is being placed on community-based, participatory health research (40–42). At the national level there are important examples of such initiatives taking place, such as the development of the *First Nations Regional Longitudinal Health Survey (RHS)*, a First Nations-controlled project that seeks to address health priorities from a First Nations perspective (43). In addition to the creation of important national initiatives such as the RHS, perhaps the development of the Canadian Institutes of Health Research's (40) *Guidelines for Conducting Research Involving Aboriginal Peoples* and the Social Science and Humanities Research Council's (44) *Opportunities in Aboriginal Research*, both of which seek to promote strong partnerships, capacity-building and the incorporation of Aboriginal knowledge, will foster an increase in community-based health research that seeks to improve health, well-being and access to culturally appropriate care. Such community-based studies may begin to address some of the research gaps we have identified, as well as those that are relevant to individual Aboriginal communities and organizations.

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