Trends in Métis-related Health Research (1980-2009): Identification of Research Gaps

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ABSTRACT

Objective: Several literature reviews have highlighted the under-representation of Métis in research regarding Aboriginal Peoples. However, to date, an in-depth examination of trends in Métis research has not been undertaken. This literature review aims to identify trends and gaps in Métis-related health/well-being research over the past three decades (1980-2009).

Methods: Health, medical and social sciences literature databases including Cochrane, CINAHL, Embase, Pubmed, PsychInfo, and Web of Science were searched for Métis-relevant peer-reviewed articles published between 1980 and 2009 via two search strategies: 1) using the terms "Métis," "mixed-blood" or "half-breed," and 2) using a combination of terms: (Aboriginal OR Indigenous OR native OR "First Nation" OR Indian) and (mixed OR European OR Caucasian OR white) and "Canada". Articles pertaining to the health/well-being of Métis in Canada were retained, coded and analyzed by study type/design, gender-specificity, geography, research topic, the extent to which Métis-specific breakdown of findings was provided, and methodological quality relating to validity and reliability of the study.

Results: Noteworthy strengths in Métis research were observed, including increasing attention to chronic diseases, diet/nutrition/physical activity, and maternal and child health; a trend towards increased presentation of Métis-specific results among pan-Aboriginal studies, and female-specific and qualitative studies; and an equitable focus on urban and rural areas. Gaps were seen in research related to environment/toxicology, genetics, health delivery/programming/policy, injury, mental health (MH)/addictions, social determinants of health, and violence/crime. In addition, a dearth of male-specific research was identified. Also, most articles were cross-sectional in design. Finally, despite an increase in Métis-related articles over the past three decades, a large proportion of articles remained pan-Aboriginal in nature and did not provide a Métis-specific breakdown of findings. With respect to methodological quality, nearly two thirds of all studies were of strong or moderate quality (cross-sectional studies), good quality (cohort/case-control studies) or acceptable quality (qualitative and mixed methods studies).

Conclusion: Several gaps exist in Métis-related health/well-being research with respect to study type/design, gender-specificity, research topics, presentation of Métis-specific findings, and methodological quality. In addition to specific gaps, the overall limited number of research articles/studies needs to be recognized. These deficiencies could be alleviated by increasing targeted funding and support for Métis-related research, and removing barriers to Métis-specific research. Addressing gaps in Métis health research will enable identification of appropriate targets for intervention and, subsequently, design, development and evaluation of interventions to address Métis health disparities and their determinants.

Key words: Review; Indigenous population; health research; medical research; trends; Métis

La traduction du résumé se trouve à la fin de l'article.

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Métis are one of the three constitutionally recognized^{1,2} and distinct Aboriginal Peoples in Canada,³ and account for one third of the Aboriginal population with a self-identifying population of 389,785.² Most Métis (87%) live in Ontario and the western provinces, and in urban areas (69%). The Métis population has a lower median age (30 vs. 40 years), lower median income (\$20,935 vs. \$25,955), and lower rates of completion of post-secondary education (50% vs. 61%) than the non-Aboriginal population.⁴

Métis are disproportionately affected by a range of diseases compared to the general population. Métis are less likely to report excellent or very good health (58% vs. 62%) and more likely to report arthritis/rheumatism (21% vs. 13%), high blood pressure (16% vs. 12%), asthma (14% vs. 8%), and diabetes (7 vs. 4%) compared to the total Canadian population.² A population-based study shows that Manitoba Métis have a higher prevalence of hypertension, arthritis, total respiratory morbidity, and ischemic heart disease, among other conditions, compared to all other Manitobans. Manitoba Métis also have a 21% higher premature mortality rate, 15% higher total mortality, and 12% higher diabetes-related mortality.⁵

Despite their large population size, distinctness, and disproportionate burden of many diseases, Métis have been severely under-represented in Aboriginal health and social sciences research.^{6,7} A review of 254 Aboriginal-specific, medical/health sciences-related articles published between 1992 and 2001 identified only two papers (0.8%) that contained information on Métis.⁶ A review of 96 social sciences-related articles (1995-2005) revealed that only 14% were Métis-specific.⁷

However, an in-depth examination of trends in Métis-related health/well-being research has not been undertaken. Identification of trends and gaps are important in guiding funding, recognizing and ameliorating other barriers to research, which, in turn, may lead to identification and development of interventions to tackle health disparities. To address this knowledge gap, a review of Métis-related health and social sciences publications over the past three decades (1980-2009) was carried out to identify trends and gaps in

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Table 1. Select Métis-related Articles by Research Topic, Métis Relevance, Study Type and Gender- and Geographic-specificity

Research Topic	Article	Métis Relevance	Gender	Study Type	Urban/Rural
Chronic Diseases	Oster RT, Toth EL. 2009 ²⁷	Pan-Aboriginal/Métis	Male/female	Quantitative, Cross-sectional	Rural
	Ralph-Campbell K et al. 2009 ²⁸	Métis-specific	Male/female	Quantitative, Cross-sectional	Rural
	Veenstra G. 2009 ²⁹	Pan-Aboriginal	Male/female	Quantitative, Cross-sectional	Urban/Rural
	Iwasaki Y et al. 2005 ³⁰	Pan-Aboriginal/Métis	Male/female	Qualitative	Urban
	Bruce SG et al. 2003 ³¹	Métis-specific	Male/female	Quantitative, Cross-sectional	Urban/Rural
Diet/Nutrition/ Physical Activity	Hidiogrou N et al. 2008 ³²	Pan-Aboriginal	Male/female	Quantitative, Cross-sectional	Rural
	Lambden J et al. 2007 ³³	Pan-Aboriginal	Female	Quantitative, Cross-sectional	Rural
	Simoneau N, Receveur O. 2000 ³⁴	Pan-Aboriginal	Male/female	Mixed methods	Rural
	Berti PR et al. 1998 ³⁵	Pan-Aboriginal	Male/female	Quantitative, Cross-sectional	Rural
Environmental/ Toxicology	Butler Walker J et al. 2003 ³⁶	Pan-Aboriginal	Female	Quantitative, Cross-sectional	Urban/Rural
	Kuhnlein HV et al. 1995 ³⁷	Pan-Aboriginal	Female	Quantitative, Cross-sectional	Rural
General Health & Well-being	Tjepkema M et al. 2009 ³	Pan-Aboriginal/Métis	Male/female	Quantitative, Prospective	Urban/Rural
	Bartlett JG. 2005 ³⁸	Métis-specific	Female	Qualitative	Urban/Rural
	Trovato F. 1988 ³⁹	Pan-Aboriginal	Male/female	Quantitative, Cross-sectional	Urban/Rural
Genetics	Tucker DC et al. 2006 ⁴⁰	Pan-Aboriginal	Male/female	Quantitative, Cross-sectional	Urban
	Singh R et al. 1983 ⁴¹	Métis-specific	Male/female	Quantitative, Cross-sectional	Rural
Health Delivery/ Programming/Policy	Smylie J et al. 2008 ²⁵	Pan-Aboriginal/Métis	Male/female	Qualitative	Urban/Rural
	Lecompte E, Baril M. 2008 ⁴²	Pan-Aboriginal	Male/female	Quantitative, Cross-sectional	Urban/Rural
Infectious Diseases	Mehrabadi A et al. 2008 ⁴³	Pan-Aboriginal	Male/female	Quantitative, Cross-sectional	Urban
	Mill J et al. 2008 ⁴⁴	Pan-Aboriginal	Male/female	Mixed methods	Urban
	Moses S et al. 2002 ⁴⁵	Pan-Aboriginal/Métis	Male/female	Quantitative, Cross-sectional	Urban
	Hammond GW et al. 1988 ⁴⁶	Pan-Aboriginal	Male/female	Quantitative, Cross-sectional	Urban
Injury	Callegari PR et al. 1989 ⁴⁷	Pan-Aboriginal	Male/female	Quantitative, Retrospective case control	Urban/Rural
Maternal and Child Health	Giroux I et al. 2009 ⁴⁸	Pan-Aboriginal	Female	Quantitative, Cross-sectional	Urban
	Yip D et al. 2007 ⁴⁹	Non-Aboriginal & Pan-Aboriginal	Male/female	Quantitative, Cross-sectional	Urban/Rural
	Wenman WM et al. 2004 ⁵⁰	Pan-Aboriginal/Métis	Female	Quantitative, Prospective	Urban
MH/Addictions	Muhajarine N et al. 1997 ⁵¹	Pan-Aboriginal	Female	Quantitative, Cross-sectional	Urban
	Lemstra M et al. 2009 ⁵²	Pan-Aboriginal	Male/female	Quantitative, Cross-sectional	Urban/Rural
	Weekes JR et al. 1995 ⁵³	Pan-Aboriginal/Métis	Male	Quantitative, Cross-sectional	Urban/Rural
Social Determinants of Health	Arboleda-Florez J et al. 1994 ⁵⁴	Pan-Aboriginal	Male	Quantitative, Retrospective	Urban/Rural
	Richmond CA et al. 2007 ⁵⁵	Pan-Aboriginal/Métis	Male/female	Quantitative, Cross-sectional	Urban/Rural
	Kenny C. 2006 ⁵⁶	Pan-Aboriginal	Female	Qualitative	Urban/Rural
Violence/Crime	Newbold KB. 1998 ⁵⁷	Pan-Aboriginal/Métis	Male/female	Quantitative, Cross-sectional	Urban/Rural
	Bonta J et al. 1997 ⁵⁸	Pan-Aboriginal/Métis	Male/female	Quantitative, Cross-sectional	Urban/Rural
	Brooks JH, Reddon JR. 1996 ⁵⁹	Pan-Aboriginal	Male	Quantitative, Cross-sectional	Urban/Rural

study type/design, gender-specificity, geographic focus, research topics, “Métis relevance” (the extent to which Métis-specific findings were presented in publications), and methodological quality.

METHODS

Health, medical and social sciences literature databases (Cochrane, CINAHL, Embase, Pubmed, PsycInfo, and Web of Science) were searched for Métis-relevant peer-reviewed articles published between 1980 and 2009 using two strategies. In the first strategy, “Metis,” “half-breed” and “mixed blood” were used as search terms. In the second strategy, the following combination of terms was used: (Aboriginal OR Indigenous OR native OR “First Nation” OR Indian) and (mixed OR European OR Caucasian OR white) and “Canada”. Citations recovered from the databases were combined and duplicate records were eliminated. The remaining citations were reviewed to determine if they related to Métis in Canada. Only English language articles and those relevant to health/well-being or social determinants of health were retained. Articles that exclusively outlined methods, protocols or guidelines; dissertations; and book chapters were excluded. Articles in which Métis or Aboriginal people were not the main focus of the study were accommodated if they specifically included Métis.

Coding of articles

Each article was coded within five overarching categories: study type/design, gender-specificity, geographic focus, research topic and Métis relevance. Coding was carried out and reviewed by three

coders, and reviewed again by the first author to ensure accuracy. Where incongruencies in coding arose, a code was determined based on consensus.

Study Type/Design, Gender- and Geographic-specificity

Articles were coded as quantitative, qualitative or mixed, and as cross-sectional or longitudinal based on study design. Studies were coded as urban- or rural-specific if they focused on urban or rural populations, respectively. Urban/rural articles involved both urban and rural populations. Articles were coded as female- or male-specific, or female/male based on the study sample.

Research Topics

Each article was coded based on several pre-determined research topics, which were adapted from an existing report of Aboriginal health research.⁸ Diet/nutrition/physical activity (PA), general health & well-being, and reproductive health were added to the topics due to their prevalence in the literature. In addition, some original topics were divided into two topics (violence/crime, and injury) or combined into one topic (mental health (MH) and addictions). Pre-determined topics included chronic diseases, diet/nutrition/PA, environment/toxicology, general health & well-being, genetics, health delivery/programming/policy, infectious diseases, injury, maternal and child health (MCH), MH/addictions, reproductive health, social determinants of health (SDOH), and violence/crime. Only SDOH articles – articles that focused on determinants such as income, education and culture – that explored associations with

health (as an independent or dependent variable or correlate) were included. When articles fell into more than one category, the predominant research theme was identified and used for coding.

Métis Relevance

To reflect the extent to which Métis-specific findings were presented, a study was coded as: a) Métis-specific, if it exclusively presented Métis-specific findings and information; b) pan-Aboriginal, if it included Métis and First Nations and/or Inuit individuals, but did not or was unable to provide Métis-specific breakdown of some or all of the findings; or c) pan-Aboriginal/Métis, if it met the latter criterion and provided a Métis-specific breakdown of the results.

Quality assessment

The quality of all articles was assessed using study design-specific tools. Those identified as being of “weak” quality were not excluded from the analysis since the aim was to identify trends and gaps, rather than to extract and synthesize data.

Articles were reviewed by two team members and discrepancies were resolved through discussion and consensus. To assess the methodological quality of cross-sectional studies (n=53), Estabrooks’ Quality Assessment and Validity Tool for Cross-Sectional Studies was adapted.^{9,10} It assesses three core domains – sample, measurement and statistical analysis – using 14 criteria. Inter-rater agreement was almost perfect ($\kappa=0.98$).

The Newcastle-Ottawa scale (NOS) was used to assess cohort (n=2) and case-control (n=2) studies.¹¹ The NOS has 3 subscales: selection, comparability, and outcome (for cohort studies) or exposure (for case-control studies). Inter-rater agreement was almost perfect ($\kappa=0.89$ and $\kappa=0.85$, respectively).

The 16-item QATSDD tool was used to assess qualitative and mixed methods studies (n=10).¹² This tool was created to assess the validity and reliability of studies with diverse designs. Inter-rater agreement was substantial ($\kappa=0.67$).

Trends over time

To examine trends over time, the numbers of publications from three decades – 1980-89, 1990-99 and 2000-09 – were analyzed based on the overarching categories.

RESULTS

The initial database search yielded 2,703 titles. Of the unique titles, 85 met the criteria for inclusion. Finally, 18 were literature reviews and commentaries, and were excluded, leaving 67 unique articles (Table 1).

Overall Trends

Most of the 67 articles (85%) were quantitative in nature, 10% were qualitative and 5% were mixed methods studies. A majority of the quantitative articles (n=57) described cross-sectional studies (94%). Most articles (75%) were not gender-specific, 21% were female-specific and only 5% were male-specific. The studies appeared to be equitably distributed among urban (22%), rural (31%) and urban/rural (46%) categories.

In terms of research focus, 22% addressed diet/nutrition/PA, 15% focused on chronic diseases, and one in ten examined infectious diseases (12%), MH/addictions (12%) or MCH (10%). Other types made up less than 10% of the articles each.

With regard to Métis relevance, two thirds (69%) of all articles were of pan-Aboriginal or non-Aboriginal focus with no Métis-specific breakdown of the results. One in five (21%) articles were pan-Aboriginal/Métis and 10% were entirely Métis-specific.

Quality Assessment of Included Articles

Among studies of cross-sectional design, one study (2%) was rated as strong, 19% were rated “high moderate” and 38% were “low moderate”. The remainder (42%) were rated “weak.” Among the “weak” studies, shortcomings included use of non-probabilistic samples, poor response rates ($\leq 50\%$), employment of self-reported outcome measures, use of outcome measures without reliability and/or validity indices, or failure to appropriately address missing data.

Both cohort studies were of good methodological quality. Only one of the two case-control studies was of good quality. The other study exhibited shortcomings in the areas of case definition, representativeness of cases, definition of controls, and comparability of cases and controls in design or analysis.

Among the qualitative and mixed methods studies (n=10), 90% were assessed as “acceptable” and one study as “weak”. The “weak” study was lacking in the areas of an explicit theoretical framework, representativeness of sample, and documentation of a) the recruitment process, b) rationale for choice of data collection tools, and c) study strengths and limitations.

Trends by Decade

Eight articles were published in 1980-89 and 17 in 1990-99. The number of articles increased 2.5-fold to 42 in 2000-09, accounting for 63% of total articles published in the three decades.

Study Type, Gender-specificity and Geographic Focus

Quantitative studies dominated in all three decades with qualitative studies appearing only in 2000-09 (17% of all articles). Among quantitative studies, cross-sectional studies led in each of the three decades – from 88% in 1980-89 to 94% in 1990-99 to 71% in 2000-09.

While gender-specific studies were absent in 1980-89, 12% of studies in 1990-99 focused on women, 18% were male-specific and the remaining were gender neutral. In the following decade, while women-focused publications increased to 29%, no male-specific articles were published.

Rural population-specific articles increased from 25% in 1980-89 to 47% in 1990-99, but decreased to 26% in the following decade. An urban focus was seen in 25%, 6% and 29% of all articles in the same decades, respectively.

Research Topic

In 1980-89, most studies focused on infectious diseases (38%) and MH/addictions (25%) (Figure 1). Other research areas included general health/well-being, genetics and injury. In the following decade, chronic diseases, diet/nutrition/PA, environment/toxicology, MCH, SDOH, and violence/crime were addressed for the first time, while genetics, infectious diseases and injury were not explored. Diet/nutrition/PA and MH/addictions were addressed in 35% and 24% of citations, respectively. Deficiencies were seen in the areas of genetics, general health & well-being, health delivery/programming/policy, injury and infectious diseases. In 2000-09, health

Figure 1. Métis-related publications by research topic and decade

delivery/programming/policy topics were examined for the first time. Chronic diseases (21%) and diet/nutrition/PA (21%) were predominantly addressed. MCH and infectious diseases articles represented 14% and 12%, respectively. Other research areas represented less than 10% each.

Métis Relevance

In 1980-89, a majority (75%) of the publications were pan-Aboriginal without Métis-specific breakdown of findings (Figure 2), and 13% each were pan-Aboriginal/Métis and Métis-specific. In the following decade, no Métis-specific articles were published, but the percentage of pan-Aboriginal/Métis articles nearly doubled (24%). Importantly, in 2000-09, the latter remained relatively unchanged (21%), and 14% of articles were Métis-specific. Regardless, most studies were pan-Aboriginal with no breakdown of findings by Aboriginal group.

DISCUSSION

This systematic health literature review is, to our knowledge, the first Métis-specific one. It revealed notable strengths including increasing attention to chronic diseases, diet/nutrition/PA and MCH; and a trend towards increased presentation of Métis-specific results among pan-Aboriginal studies, female-specific and qualitative studies. Notable shortcomings exist in environment/toxicology, genetics, health delivery/programming/policy, injury, SDOH, and violence/crime. Moreover, diet/nutrition/PA and environment/toxicology articles focused on Dene/Métis in Canada's Arctic and Northern territories, while none addressed Métis in the South, exacerbating the deficiencies.

Research on chronic diseases focused mainly on diabetes, perhaps given the complications of diabetes, and because Métis were twice as likely to report a diabetes diagnosis compared to non-Aboriginal Canadians.² Nonetheless, more research on other diseases and conditions is required. For example, Métis were more likely to report diagnosis of arthritis/rheumatism (21% of all Métis adults),¹³ high blood pressure (16%),¹⁴ asthma (14%)¹⁵ and stomach problems/intestinal ulcers (12%)¹⁶ than diabetes (7%).¹⁷ In a population-based study of Manitoba Métis, higher prevalence of hypertension (13% higher), arthritis (22% higher), ischemic heart disease (40%

Figure 2. Métis-related publications by Métis relevance and decade

higher) and total respiratory morbidity (28% higher) was observed relative to rates for all Manitobans.⁵ The leading causes of death among Métis men and women are circulatory system diseases and all cancers,³ while external causes such as suicides and motor vehicle accidents are also significant contributors.³ Further, none of the studies involved interventions to combat the diseases and conditions and their causes/determinants.

Additional knowledge gaps identified by Métis stakeholders and researchers include infant mortality rate,^{18,19} rates of communicable diseases in infants and children, crude and premature mortality rates, incidence rates for notifiable diseases, cancers, etc. among adults in many provinces.¹⁹ Other gap/priority areas include HIV,^{20,21} traditional knowledge, and access to appropriate, responsive and well-developed health care geared towards Métis.²¹ Also, the paucity of male-specific studies is notable.

An overwhelming proportion of studies were cross-sectional in nature, which while being cost effective and less time consuming, do not enable temporal associations and causal inferences to be derived,²² indicating the need for more longitudinal research. The quality of most studies examined was moderate or better with some deficiencies.

Finally, with regards to Métis relevance of results, a large proportion of the studies were pan-Aboriginal, and thus fail to recognize the unique experiences and exposures²³⁻²⁵ of Métis that may influence health outcomes. Health disparities experienced, and challenges faced by Métis are, in some instances, distinct compared to other Aboriginal populations. For example, while status First Nations and Inuit have access to First Nations and Inuit Health Branch services and Non-Insured Health Benefits, these services and benefits are not available to Métis.¹⁹ In terms of health outcomes, for instance, while circulatory diseases are the leading cause of death among registered Indian women, cancers represent the predominant cause of mortality among Métis women.³ Métis also experience stress and marginalization in ways that are unique compared to First Nations individuals.²⁴ Encouragingly, the proportion of pan-Aboriginal articles with Métis-specific breakdowns increased over the decades.

This review has some limitations. Pan-Aboriginal studies that included Métis, but did not include – in the title, abstract or key words – the search terms used in this study will not have been cap-

tured. This and the exclusion of dissertations and grey literature may have resulted in some undercounting. Second, the small number of articles published in the earlier two decades limits our ability to suggest that the noted research trends are truly representative. Also, while an attempt was made to search all pertinent databases, Métis-relevant articles in other databases will not have been included, resulting in some undercounting. Furthermore, some articles spanned multiple research areas, and since each article was coded under one predominant research area, some proportions may be underestimated. However, this should be minimal since very few articles examined multiple research topics (9%).

The aforementioned research gaps must be viewed in the context of the overall small number of Métis-related publications. Increasing the number of Métis-specific studies is an important goal; however, culturally appropriate pan-Aboriginal studies with adequate power to provide Métis-specific breakdown of findings could be cost-effective and efficient. In addition to increasing funding, other barriers need to be identified and addressed, including the lack of ethnic identifiers in provincial administrative databases,²⁶ and funding allocation that advantages communities with an established land base or research capacity (Andersen et al., unpublished manuscript). These measures may enable identification, development and evaluation of interventions to tackle health disparities.

Addressing these gaps via Métis-guided, rigorous, decolonizing, population-based and participatory research studies,^{24,25} which advance the development of holistic asset-based interventions²⁴ to improve access to culturally-appropriate programs, could be expected to have a significant impact on the health status of Métis. Research to develop programs that incorporate local understandings of health/illness and knowledge sharing mechanisms²⁵ and address the social, cultural and historical determinants of Métis health²⁴ could further augment the impact on Métis health.

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RÉSUMÉ

Objectif : Plusieurs revues de la littérature spécialisée ont souligné la sous-représentation des Métis dans la recherche sur les Autochtones. Jusqu'à maintenant cependant, on n'avait pas encore mené d'examen approfondi des tendances dans la recherche sur les Métis. Notre revue de la littérature vise à cerner les tendances et les lacunes dans la recherche liée à la santé et au bien-être des Métis au cours des trois dernières décennies (1980-2009).

Méthode : Nous avons consulté des bases de données d'articles sur la santé, la médecine et les sciences sociales, à savoir les bases Cochrane, CINAHL, Embase, Pubmed, PsycInfo et Web of Science, pour y répertorier les articles sur les Métis évalués par des pairs et publiés entre 1980 et 2009. Nous avons utilisé deux stratégies de recherche : 1) l'emploi d'équivalents anglais pour les termes « Métis » et « sang-mêlé » et 2) l'emploi de combinaisons d'équivalents anglais de certains termes : (autochtone OU indigène OU « Première Nation » OU Indien) et (mixte OU Européen OU blanc) et « Canada ». Les articles afférents à la santé/au bien-être des Métis au Canada ont été retenus, codés et analysés selon le type/le plan d'étude, la sexospécificité, la géographie, les thèmes de recherche, la présence d'une catégorie « Métis » dans la présentation des résultats, et la qualité méthodologique (validité et fiabilité de l'étude).

Résultats : Nous avons observé certaines forces méritant d'être soulignées dans la recherche sur les Métis, notamment l'attention accrue aux maladies chroniques, au régime/à la nutrition/à l'activité physique et à la santé maternelle et infantile; une tendance croissante à présenter des résultats propres aux Métis dans les études pan-autochtones, les études sur les femmes et les études qualitatives; et une attention équilibrée aux zones urbaines et rurales. Nous avons observé des lacunes dans la recherche liée à l'environnement/la toxicologie, la génétique, la prestation/la programmation/les politiques de santé, les traumatismes, la santé mentale/la toxicomanie, les déterminants sociaux de la santé et la violence/la criminalité. Les études spécifiquement axées sur les hommes étaient rares. Et la plupart des articles portaient sur des études transversales. Enfin, malgré l'augmentation des articles liés aux Métis au cours des trois dernières décennies, une grande proportion des articles étaient encore de nature pan-autochtone et ne présentaient pas de résultats propres aux Métis. En ce qui a trait à la qualité méthodologique, près des deux tiers des études étaient de qualité très bonne à moyenne (études transversales), de bonne qualité (études de cohortes/études cas/témoins) ou de qualité acceptable (études qualitatives et mixtes).

Conclusion : Il y a plusieurs lacunes dans la recherche sur la santé/le bien-être des Métis en ce qui a trait aux types/plans d'étude, à la sexospécificité, aux thèmes de recherche, à la présence d'une catégorie « Métis » dans la présentation des résultats et à la qualité méthodologique. Outre ces lacunes spécifiques, le nombre limité d'articles de recherche/d'études en général est préoccupant. Ces carences pourraient être comblées en augmentant le financement et l'appui ciblés à la recherche liée aux Métis et en abolissant les obstacles à la recherche spécifiquement axée sur les Métis. Le fait d'aborder les lacunes dans la recherche sur la santé des Métis permettrait de fixer des cibles d'intervention appropriées et, par la suite, de concevoir, d'élaborer et d'évaluer ces interventions pour s'attaquer aux disparités d'état sanitaire des Métis et à leurs déterminants.

Mots clés : évaluation; population indigène; recherche en santé; recherche médicale; tendances; Métis