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## A WORD FROM THE EDITOR-IN-CHIEF

### **An Update on *CJNR*'s Future**

*CJNR (Canadian Journal of Nursing Research)* is a quarterly journal dedicated to scholarship in nursing and health care in Canada and internationally. In 2014 we will be celebrating 45 years of continuous publication. We are proud to be one of the most downloaded journals in the IngentaConnect collection. Over the past four and a half decades we have proudly published articles from both leading and emerging scholars based in Canada and beyond.

As *CJNR*'s new Editor-in-Chief — the fourth in its proud history — I am planning a number of changes, with the able assistance of our editorial board and our editorial team, to ensure that we continue to serve our readers and authors and continue to advance nursing scholarship:

- beginning in 2014, a shift away from specific topic areas in each issue (“focus issues”) and towards year-round publication of manuscripts across subject areas; also, for the first time we will be inviting proposals for special clusters of articles
- a broadening of our editorial board to include a team of respected experts from across this country and abroad, in a variety of roles, including Editors, Associate Editors, and members of an Editorial Advisory Board; these individuals have now begun working with us
- revised calls for the broad categories of articles we have published in the past (including data-based, methodological, and review articles) and calls for new types of articles (including scholarly essays and data-based practice-development pieces); these calls will be posted on our Web site starting in summer 2013
- in 2014, beginning with the first issue of the year (Vol. 46, n° 1), we will become an online-only journal and will launch an exciting new Web site with a variety of features designed for you as a researcher, clinician, or educator

Whether you are a past or current contributor, reviewer, or reader, and regardless of your career phase or career path, please visit us at [www.cjnr.mcgill.ca](http://www.cjnr.mcgill.ca). We are especially interested in hearing from people in all career phases who have some publication experience and who might be interested in becoming a *CJNR* reviewer. See what we have in store for you over the coming months, and feel free to contact me at

*A Word From the Editor-in-Chief*

cjnreditor.nursing@mcgill.ca or the editorial office at cjnr.nursing@mcgill.ca with your comments or queries.

**Sean P. Clarke**  
**Editor-in-Chief**

EDITORIAL

## Broadening the Dialogue: A Challenge for Us All

Last August *CJNR* hosted the annual meeting of the International Academy of Nursing Editors (INANE) in Montreal. This was the 29th time that editors and publishers of nursing journals had come together to discuss the latest trends in publishing, share information, impart wisdom, and discuss the challenges entailed in disseminating knowledge in order to promote best publishing practices.

When nursing editors joined forces to form INANE in 1981, terms such as globalization, the Internet, e-mail, evidence-based practice, and social media had not yet entered our lexicon. We had never heard of, let alone considered, the effects on publishing of impact factors, e-journals, open access, self-plagiarism, copyright, interactive multimedia communications, or the global health-care community. These phenomena have caused a revolution in the publishing world and will continue to shape the evolution and transformation of nursing publishing worldwide.

The August 2012 meeting in Montreal proved to be a resounding success as the aforementioned topics were explored. The papers presented the first day of the conference, at the morning session moderated by Marion Broome, editor of *Nursing Outlook*, set the tone for the event. The first two contributions were presented by renowned editors and scholars. Sally Thorne, editor of *Nursing Inquiry*, and Peggy L. Chinn, founder and editor of *Advances in Nursing Science*, offered position papers exploring the issue of what makes for a global conversation that accounts for different theoretical orientations, diverse points of view, and a range of experiences. As gatekeepers of what gets published, knowingly or unknowingly, we editors all too often select manuscripts that are biased in favour of Western ideas and the dominant medical discourse. To broaden the dialogue, the program planning committee invited the editors of three international journals to comment on these position papers: Patricia D'Antonio of *Nursing History Review*, Joel Mancía of *Revista Enfermagem em Foco do COFEN* [Nursing in Focus: Journal of the Federal Council of Nurses (Brazil)], and Maureen Shawn Kennedy of the *American Journal of Nursing*.

The conference participants applauded these presentations as groundbreaking. The next two days saw repeated requests to have them made available to all participants. As hosts of the event, *CJNR*'s editors thought,

why not make these papers available to the wider community by publishing them in a forthcoming issue of the Journal?

These papers are gifts. When I first heard the presentations and when I later had an opportunity to read them, I realized that there are ideas here that extend far beyond the realm of editors. The insights and wisdom in these contributions are relevant for clinicians, educators, nursing leaders, policy-makers, and researchers.

Everett Rogers (2003), author of the “bible” on diffusion of new innovations, identifies the first stage of change as awareness of the innovation. In this case, we need to become aware of our assumptions, attitudes, beliefs, worldviews, and practices, as a first step towards broadening the dialogue. The papers you are about to read ask us to stand in front of a mirror and look at ourselves and into ourselves. Thorne asks us to listen to our conversations steeped in postcolonial influence and Chinn asks us to examine the “centres” from which we operate. However, the problem with mirrors is that once we step away the image disappears; it is as if it never existed. We, as editors and as readers, are being asked to stay a while, linger in front of the mirror long enough to absorb what we see in front of us. We are being asked to reflect on how — or whether — we embrace the ideas and experiences of others. We are being asked to pose difficult questions to ourselves, in order to unwrap and reveal what we think, feel, and do, rather than what we *think* we think, what we *think* we feel, and what we *think* we do. We are being asked to consider our decisions and practices by examining the underlying assumptions about how they were reached. We are being asked to consider how we engage in the global conversation.

Although these questions were originally put to editors, they need to be put to each of us and considered from each of our respective positions. For example, as clinicians we need to think about how we advocate for patients who differ from those at the “centre” or from the norm. We need to consider how we might broaden the dominant medical, problem-based, deficit-based illness discourse, to include nursing conversations about strengths, personhood, health, and healing. We need to consider how we might extend our reach beyond illness care and embrace the “health” in health care.

As leaders and managers we need to consider our role in transforming systems — first at the staff level, then at the unit level, program level, institutional level, and beyond. What role do we see for ourselves? Are we reacting to decisions made by others, or are we part of the group of architects who shape the conversation with an eye to creating a new landscape comprising values and visions that put people first and empower them to take greater control over their lives? How can we influence policy in order to bring a different voice, fresh perspectives, a

different lens to the table, driven primarily by humanistic values rather than economic considerations? How do we create space for staff and colleagues who hold different perspectives?

As educators, how are we challenged by the ideas raised in these papers to consider our curricula, our programs, and our interactions with students? How are decisions made with respect to curriculum and the proportion of time devoted to nursing content? What messages do we give to students about embracing cultural diversity, and how do we encourage thinking outside the “centre”? How do we shape a unique nursing identity, as distinct from a medical one, embodied in the person who will call her/himself a nurse?

As researchers, how do we broaden the discussion to include design methodologies underpinned by different, non-Western worldviews, so as to answer questions that our current designs cannot adequately address and generate ideas and knowledge that are more relevant for the user and that differ from our current “centres”?

These papers ask us to stand before a mirror, pause, and take stock. Each author has assumed the role of guide by raising thought-provoking issues and posing critical questions. By examining these issues and considering these questions, we can embark on the slow process of transformation — reflecting on our values, uncovering our assumptions and biases, and analyzing the bases that have guided our decisions. They ask us to step outside our comfort zone and imagine, dream, and create a vision of what *could be*, rather than what *is*, in this new global world of ours. What the authors ask of us requires thought, integrity, courage, and commitment. In the process of such reflections we will be transforming ourselves. We can begin to broaden the dialogue by having a conversation first with ourselves, then with our friends and colleagues, then with others. We invite you to read these papers, share them, and enter into discussion and debate.

Any innovation begins with an idea. But ideas are only the first step towards transformation. “Ideas won’t keep,” wrote the renowned mathematician, philosopher and educator Alfred North Whitehead. “Something must be done about them” ([http://en.wikiquote.org/wiki/Alfred\\_North\\_Whitehead](http://en.wikiquote.org/wiki/Alfred_North_Whitehead)). We at *CJNR* are proud to have done something by publishing these important papers and continuing the conversation in the hope of broadening the dialogue.

**Laurie N. Gottlieb**  
**Editor-in-Chief Emeritus**

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# Conceptual and Idea/ Logical Colonization: Ideational Practices in the World of Journal Editing

Sally Thorne

We begin by engaging in collective critical reflection towards expanding the kind of dialogue that journal editors create by thinking about the question *What makes a global conversation?* I have the privilege of launching this reflection, with some consideration of the ideas, and the practices around those ideas, with which we exert a species of power we might conceptualize as akin to colonial authority. I hope my thoughts and those of my colleagues will provoke a bit of controversy and reaction and open up a space for considering some of the taken-for-grantedness of how we influence what gets said, how it gets said, and perhaps also what has to this point been inadvertently silenced.

## The Nature of Colonization

Whether we think of it in the biological, military, or political sense, “colonization” is a term that describes what happens when any species populates a territory. In the human interactional sense, we think of colonialism as the establishment and maintenance of a territory by people from another territory. In this kind of social interaction, the metropole claims sovereignty over the social structure, governance, and economics, with the colonizers permanently changing those they have colonized within a fabric of unequal relationships.

What fascinates scholars about these phenomena is the way in which ideas and practices become taken for granted and dominant norms exert tremendous influence over a wide spectrum of human experiences and interactions, even long after the material colonization may have concluded. Thus, cultures and populations take in and absorb a set of ideas with respect to such issues as who holds power, who ought to hold power, what risks and privileges accompany authority, and what ideas and opinions should and should not enter the public domain. And this thoughtful examination of what happens as a result of colonialism becomes the postcolonial lens that can be usefully applied to understand-

ing issues of unequal relations across so many of the contexts of concern to our profession.

### **Nursing's Relationship to Colonial Practices**

Nurses certainly share an experiential understanding of the way in which ideas about medical superiority have shaped the practice of nursing in our health-care institutions. The bedrooms, convalescent homes, and hospital wards that were the natural site of nursing practice were gradually transformed for a century after Florence Nightingale's time by medical ideas of what constitutes an effective and appropriate health-care system. So we became great at serving the high-acuity, high-technology, medically intensive conditions. At the same time, we started to lose our grip on ensuring appropriate systems for primary prevention, home care, residential care, palliative care, and community services. And we do understand how nursing often becomes part of the predicament in failing to recognize that there is a serious problem with that balance of resources and attention. The greatest challenge facing all of our health-care systems today is working out how to shift our focus from the extreme investments in high-acuity care towards a more balanced model of health care across the spectrum. And although the smart people who put their minds to these things can deal relatively easily with the structural adjustments that might help us get there, the barrier to change always lies in the resistance of health-care providers and their allies to giving up our comfortable way of doing business — even if our disciplinary knowledge repeatedly and stridently reminds us that it isn't right.

So nursing has an intimate understanding of how ideas become the arena within which colonial practices persist, and many nurse scholars have contributed greatly to our understanding of ourselves through deconstructions of apparent reality using a critical postcolonial theoretical lens. This perspective has opened up new ways of thinking about and working with issues embedded in the context of our ongoing discourses around diversity, health inequities, social determinants of health, and social justice. And so it is through that postcolonial lens that I think we can learn much about how we in the nursing editorial community serve to maintain and sustain a particular kind of ideational power that becomes a barrier to the kind of full and robust dialogue that will include a wider international audience.

In his article "Whiteness and Difference in Nursing," David Allen (2006) tackles the manner in which the language and ideation of nursing curricula have reproduced racialized relationships in the process of educating nurses and consequently have compromised the project of positive engagement with cultural difference. He traces the problem to the core

metaphor of the factory as a way of thinking about curricular processes and products, alluding to an apparently neutral machinery that, from his perspective, is thoroughly white and class-based in origin. Other lively discourses in the nursing education literature apply a similar lens to rethinking our educational practices from the perspective of, for example, international or Indigenous learners. It is well recognized by educators that attention to the internal colonization of the “other” and displacement of the colonizer are fundamental to the processes that allow nursing students to learn and develop consciousness within the kind of global citizenship ethos that underscores multicultural and international excellence.

### **Nursing Editors as Gatekeepers**

Allen’s (2006) manufacturing image made me wonder what core metaphor may exist for those of us in the publishing industry with respect to the social injustices we too may be unwittingly reproducing. The International Academy of Nursing Editors (INANE) has recognized that, despite good intentions, it may have become an organization that primarily serves the interests of a particular dominant group within the theoretical universe of nursing scholarly writing. In order to better understand why the organization reaches out to scholars from different regions of the world differently, the conference planners have chosen to create some provocative dialogue, to invite us to disrupt our assumptive base, to challenge ourselves to deconstruct our practices and processes for the purpose of seeing if there are any insights we might obtain about ourselves that may be contributing to an organizational climate that feels more chilly for some of us than for others.

The elephant in the room is, of course, the matter of language. There is no question that, despite the multiplicity of languages within which nurses develop and share their ideas, the English-language press is a dominant force in driving the development of nursing scholarship. An organization such as INANE exists within the much larger context of an increasingly global English-language dominance. This is a subject of tremendous complexity that requires conversations well beyond the confines of a community such as ours. But even as it poses a problem we cannot hope to resolve, it remains an elephant we must always keep an eye on.

In this era in our collective history, beyond the obvious issue of language dominance, what other ideas and assumptions underpin our role in the business of deciding whose scholarly products will and will not be publicly shared? We in the editorial community set the rules by which authors shape their ideational pieces. We set the criteria upon which

reviewers cast their judgements on the quality of ideas and interpret the calibre of their expression. And we create editorial processes through which some of the hopeful submissions that come our way are successful and some are not. So we editors control the processes of production within which some ideas are privileged and some are obscured or even rendered silent. We are a community with significant power over discourses.

We justify our role in these practices on the basis of a conviction that what we are producing is scholarship. Each of our journals delineates its own territory of scholarship through defining its scope and naming the particular kind of audience it expects to please. And we establish and make explicit the criteria by which our particular domain of scholarship will be assessed as well as the standards it must meet in order for ideas to find their way into our particular conversations.

Although I am quite confident that none of us takes a malevolent approach to the work of being a nursing journal editor, deconstruction of our discourses and practices can usefully illuminate some of the complexities that we may gloss over in the course of our everyday production priorities. And that critical self-reflection that we consider to be a hallmark of nursing practice excellence can guide us in examining the sometimes unseemly underbelly of editorial practices in a similar manner. To begin, I propose a few of the ideational practices we may want to reflect on as a way of deconstructing the unintended consequences of the ways in which we collectively assert power over the knowledge that will be available to the next generation in our profession.

### **Ethical Mandate**

The first is our commitment to what we see as an ethical mandate. Despite the range of scholarship models in our collective repertoire, publishing decisions all rely on concepts of meritocracy that reinforce existing hierarchies. We accept that they require rationality and must be theoretically sound. And we also understand that this core value lies in tension with another direction that co-exists within society and also presumably deserves to flourish. This direction is the spark of creativity and innovation that pushes our thinking beyond its comfort level. And it exists within the realm of exploration of unpopular ideas. We can see its value when we look back historically on the progression of our ideas. And yet we tend not to know how to welcome it in the present, even as we theoretically value its role for our future.

Baruch Brody (1990), in his consideration of the “quality of scholarship in bioethics,” recognizes an essential challenge in the nature of different forms of scholarship in the field of ethics. To resolve this problem,

he proposes a “reflective equilibrium” that aligns the kind of mid-level principles of ethics to the criteria for evaluating scholarly merit. His proposal made me wonder what kinds of ethical principles we might draw upon to locate and conceptualize the challenge we face in being the colonizers of ideas within our domains of interest. Do we accept half-baked theoretical solidity if it meets some standard of disrupting equilibrium? Or do we hold creativity and innovation to a different level of credibility? And how do we recognize that which is potentially creative or usefully disruptive within the volume of manuscript submissions that we all sort through?

### **Stylistic Sameness**

As James Baldwin (1955) writes in *The Harlem Ghetto*, “The American ideal, after all, is that everyone should be as much alike as possible” (p. 65). According to Lippi-Green (1997), just as language functions to perpetuate inequitable social structures, discrimination based on accent permeates our interpretations of what constitutes intelligence and credibility. We take comfort in a manuscript that looks as it should, has followed our rules of formatting, begins at the beginning and follows logically towards a definable end, and conforms to the unspoken conventions of length, form, structure, and language use. Our minds, and the minds of the reviewers upon whom journals rely, react differently to difference from how they react to sameness. Difference prompts a valuation motivation whereby we seek to categorize it as good difference or bad difference. We love to be delighted by a brilliant argument that we were not expecting, and that kind of difference favourably disposes us to a positive assessment regardless of any flaws that may coexist in the written product. However, we do not appreciate being irritated by an awkward turn of phrase or a linkage that is not self-evident to our logic. Too many of those will almost inevitably shape our attitudes in the direction of a negative opinion.

### **Locational Familiarity**

We like to be familiar with the conversation within which an author is positioning ideas. We often believe that there is a fixed set of authorities that are properly trotted out in support of certain claims and platforms. However, we typically do not realize that we inhabit a particular “nationhood” of thinking that may or may not represent all of what is out there. I had a remarkable experience once when asked to review an introductory text on qualitative methods written for an English-speaking audience by an author writing and publishing in Germany. I considered myself well versed in the qualitative-methods literature but was

astounded to find that, on the other side of the pond, a completely parallel universe had unfolded in which very similar kinds of ideas were being attributed to an entirely different set of authors. This was an eye-opener to me. It shattered my uncritically held assumption that I “knew the literature.” Obviously, I knew one conversation in that field but had been completely oblivious to a rich and evolving alternative discourse from which I might have benefitted. I further realized that the parallel conversation had in fact taken place in English, somewhere outside of my spectrum of awareness. I also realized that, because we in the qualitative research world so freely reference the methodological masters of the Frankfurt school, reproducing their German-language concepts in our current thinking, we had actually misled ourselves into thinking that was all there was. In this manner, we recreate our preference for location by inflicting upon our authors the opinions of reviewers (and ourselves) as to which are the appropriate authorities within which to position our thinking.

### **Regional Preference**

Anssi Paasi (2005), a Finnish geographer writing in the field of globalization of knowledge production, believes that publishing practices have been dominated by hegemonic Anglo-American discourses as to what “international” entails. In his view, the publishing industry operates in a market-like manner, leading to homogenization even in those fields that are reliant on being heterogeneous and context-dependent. Surely nursing must be one of those fields.

His analysis challenges us to consider the geographic regions of the world from which we choose to hear when we seek to expand our internationalization. I feel sure that analysis of manuscript-selection patterns across nursing journals would reveal a great deal about the intersectional confluence of values and power dynamics that is shaping who we hear from and who we do not. While we may reassure ourselves that fewer publications from a region is merely a matter of fewer high-quality submissions, there are other stark realities that we do not often choose to confront — other elephants in the room.

Like many journal editors, I notice patterns in the responses of invited reviewers. Most editors are particularly attuned to those occasions when we receive an unusually high rate of “decline” or “unavailable” responses from qualified and generally available reviewers. In this context, I sometimes wonder what would happen were we to change the geographical location implied in the submission’s title or abstract. To illustrate, I recently encountered considerable difficulty securing an appropriate set of reviewers for a submission whose title signalled its focus on “burnout

among Chinese nurses.” I began to wonder if I might have had more success had the population of burned-out nurses been Portuguese, Australian, or American. And although I have not figured out an ethical way in which to test my theory, I strongly suspect that certain geographical locations will be consistently less readily accepted by reviewers. I fully appreciate that a North American reviewer may feel he or she knows nothing about that other national/geographic context and might therefore be less qualified than some other reviewer. However, that ostensibly charitable attitude may be furthering the conditions under which a fair and just review becomes almost impossible — widening, if you like, that great global citizenship divide (Stasiulis & Bakan, 2005). I suspect most journal editors have had similar experiences. And so I wonder how we ought to be thinking about this. What is our ultimate responsibility in relation to the processes and practices we use to solicit, interpret, and judge the knowledge products of those who seek to find a place within the scholarly dialogues we so enthusiastically promote?

### **Concluding Comments**

The dialogue we begin today creates an opportunity for individual reflection on ways in which we may unwittingly be perpetuating post-colonial practices in our powerful capacity as journal editors. It invites us to unpack our assumptions, to critically consider the decisions and details that make up the work we do to bring ideas to light. It creates an opportunity to step aside from the everyday realities of our editorial work and to consider how we might look at our practices in order to maximize our global citizenship and create as inclusive an intellectual dialogue as we can — to welcome the “other” into the dominant discourse. In so doing, we look inward at ourselves as a community of editors, with the collective strength to perpetuate our current practices or to strive towards an ideal of a broader dialogue that encompasses a more inclusive world. We take up the opportunity to strive towards the ideals of the *Nursing Manifesto* that has captured the attention of our profession — to advance thinking through the core values of global-ecological diversity and inclusivity, participatory engagement, and audacious optimism (Kagan, Smith, Cowling, & Chinn, 2009).

The point of this exercise is not critique, finger-pointing, or blame, but, rather, a journey of collective discovery and learning. I suggest that we have a moral obligation to have this kind of difficult conversation from time to time. After all, we are the gatekeepers, the rule-makers, the holders of power in relation to the ideas of the discipline. We need to disrupt our ways of thinking in order to better understand our complicity in creating a knowledge world within nursing in which certain ideas

stand a better chance than others of finding their way into print. In the words of Henry Wadsworth Longfellow (cited in Turale, 2006, p. 71), “The mind of the scholar, if he would leave it large and liberal, should come in contact with other minds.”

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Sally Thorne, RN, PhD, FAAN, FCAHS, is Professor, School of Nursing, University of British Columbia, Vancouver, Canada, and Editor, Nursing Inquiry.

# **Being “Ec/Centric” in a World of Increasing Diversity**

**Peggy L. Chinn**

## **Introduction**

Nursing journal editors today face a major challenge — how to serve the needs of their primary audience while at the same time expanding the scope of content to reach wider global audiences, and in doing so challenge readers to consider realities beyond their own. In this paper I propose that meeting this challenge requires the courage to be ec/centric — to reach beyond what is assumed to be at the centre.

The word “eccentric” carries connotations of being a bit strange, unconventional, or off-centre. I have added the slash mark between the two *c*’s to suggest that it is important to consider just what is at the centre — what exactly we and our readers assume to be “true” or “given,” and how those assumptions limit possibilities in fulfilling nursing’s mission in the world. The worldwide colonization by Western medicine/nursing defines what might be thought of as the “centre” from which many nursing journals originate. The content of nursing journals reflects a worldview that is largely shaped by Westernized approaches to care of the sick and injured; a relative lack of emphasis on disease prevention, health, and health promotion; and bare mention of healing modalities originating from other cultural and thought traditions.

The problem with a colonized centre is that, once socialized to accept what is “given” in the process, that centre-ized view becomes hegemony — it is assumed to be the “way things are,” ingrained so that no other way is imaginable, and any challenge comes as a surprise — sometimes an unwelcome surprise. I recall an experience I had in an Asian country several years ago when I asked nurses I was working with about ancient forms of healing that might still be practised by their patients, and if they integrated those practices into their nursing care. Although the nurses I was working with were thoroughly “in” their local and national cultures (meaning not entirely Westernized), and very proud of this fact, they were surprised by the question and admitted that they had little familiarity with their own pre-Western ways of healing. To be fair, if someone were to ask me about Native American healing traditions, I would draw a complete blank as well.

This “missing link” in awareness of healing traditions beyond a Westernized perspective serves as an example of one meaning embedded in becoming *ec/centric* — the ability to ask questions about what is assumed to be true and stepping outside of that assumed way of thinking in order to see what has been overlooked or forgotten. Another meaning embedded in becoming *ec/centric* involves the ability to explore forces and factors that produce what occupies the centre of thought in a particular discipline, and carefully shaping editorial practices within a chosen context, not a context simply handed to us.

To illustrate the choice of context, consider several examples of forces that produce a particular way of thinking. In Westernized cultures, dominant ethical/moral codes tend to lean heavily on the assumption that saving a life at all costs is the highest “good.” Given this assumption or cultural moral code, nursing and medical practices tend to the “heroic” even when individuals and families might prefer a different way of approaching their experience of serious illness or injury. Linguistic conventions in the culture are another example. In Westernized medical and nursing cultures, euphemisms abound — “health”-care system is a euphemism for the “illness and injury”-care system that exists in reality. “Prevention” is often used to refer to practices that in fact are disease-detection practices, not prevention. The result — given what we assume to be “the good,” and the twist of meaning embedded in euphemistic language usage — is a way of thinking that reinforces what is at the “centre” of thought in the discipline, and in turn what constitutes a major proportion of content in professional nursing journals.

There are, of course, other “centres” that exist around the world, and in fact other “centres” from which some practitioners practise or towards which they aspire. Growing numbers of medical and nursing practitioners are shifting towards models of care that are known as “holistic” or “alternative” or “complementary” — all of which derive a way of thinking from traditions around the world that have been neglected in Westernized approaches to care. In the following sections I explore tensions between and among various “centres” that exist around the world, along with some examples to illustrate the editorial challenges inherent in producing nursing journal content. Then I explore some ways to consider becoming *ec/centric*, in the hope of furthering a “thinking out loud” global dialogue that opens doors and creates greater understanding and appreciation of different “centres.”

### **Global Cultural Tensions**

I believe that it is fair to say that generally nursing journal editors have an implicit intent to publish content that is culturally sensitive and appro-

appropriate, and there are certainly many articles in nursing journals that address how to achieve cross-cultural sensitivity in practice. However, those who are invested in promoting the quality of nursing journal content need to engage in discussions about the most sensitive challenges in producing that content, the editorial policies in relation to these challenges, and to consider ways to shape nursing journal content for global audiences.

Consider, for example, the issue of nursing care for people who have sexual orientations and gender identities that are outside the realm of hetero-normative practice and issues surrounding family structures for these populations, including the issue of gay marriage. Among any group of health professionals there is probably a wide range of “centres” around these topics. When national and international “norms” or “centres” are considered, it is clear that, culturally and politically, some nations consider sexual and gender diversity an expression of a wide range of what is “normal,” while in other places sexual and gender non-conformity are crimes punishable by death.

While this may seem an extreme example, it brings to light the challenges that nursing journal editors face in selecting editorial content related to sexual and gender diversity. What are the consequences for nursing literature if editors take a stance to limit publication of sexual and gender diversity content in an effort to publish only that which is acceptable in any national context? What are the consequences if nursing journals publish content that is consistent with our own national policies, or the editor’s personal or organizational beliefs? What editorial principles or values best guide choices where important and far-reaching cultural differences exist? There are no simple answers to these questions, but it is vitally important to consider these kinds of questions in the interests of being ec/centric — of moving beyond unacknowledged assumptions about journal content to a realm that represents a “centre” or “centres” that are carefully chosen.

### **Tensions Around Professional Issues**

There is a host of reasons for varying expectations, standards, licensure, and practices around the world, with vast differences in licensure practices, registration, and educational requirements — not to mention technological capacities, resources, and so on. Large portions of the world’s health care are far less technologically oriented than is typical of the contexts that give rise to the content of most nursing journals. If journal content were driven by the approaches to health care that dominate in much of the world, it would be much more focused on community health (as opposed to individual disease conditions) and disease preven-

tion and health promotion (as opposed to disease detection and treatment). There are tensions between the needs and demands of high-tech-driven health care (representing many nursing journal readers) and low-tech-driven health care (readers whom nursing journals might also want to reach). These tensions may not be at the forefront in selecting journal content, but they represent a possibility well worth considering in light of the power of nursing journals to shape the future of health care. The fact that nursing journal content is weighted in the direction of high-tech-driven approaches signifies the hegemony that shapes the editorial world — the centre-ized view that prevents substantive recognition of the pressing needs of low-tech-driven models, and the vastly important insights and knowledge that are missing from nursing journal content.

### Political Tension

In the first 20 years after the founding of the *American Journal of Nursing*, the United States was embroiled in political tensions around the emergence of World War I. Sophia Palmer, the editor of the *AJN*, opposed the entry of the United States into the war, as did the avid anti-war activist Lavinia Dock, who was in charge of one of the departments of the journal. Dock would not permit any mention of the horrors of war in her department, but wrote extensively of her solidarity with nurses in countries ravaged by war. Eventually, Palmer permitted publication of columns reporting war news and encouraging nurses to support the war effort, even though she herself held primary allegiance to Dock's anti-war stance (Wheeler, 1985).

This is not simply an artifact of nursing history. Recently we at *Advances in Nursing Science* published an article titled "The Politics of Nursing Knowledge and Education: Critical Pedagogy in the Face of the Militarization of Nursing in the War on Terror" (Perron, Rudge, Blais, & Holmes, 2010). This article prompted threats against the journal and calls for retraction. I presented the situation to the *ANS* advisory board along with my editorial decision to stand by the publication of the article; the board agreed wholeheartedly with my position but also engaged in a lively and very important consideration of our review policies and editorial stance on issues of policy and politics.

These examples, occurring a century apart, illustrate the tensions that nurses in general, and editors of nursing journals in particular, face where political tensions are concerned. Political actions, from the aggression of war to large and small negotiations affecting the distribution of resources that determine health and human welfare — all of these influence not only how nursing practices unfold worldwide, but also the responsibilities of nursing journal editors. What are these responsibilities? How do we

resolve the tensions between our personal political commitments (which are often also moral and ethical responsibilities) and the often opposing political commitments of our colleagues and our governments? How do these tensions influence editorial roles? Again, there are no easy or “correct” answers. Rather, it is the asking of the questions and the exploring of the alternatives inherent in them that lead us into ec/centric territory where potentials for the future can be discovered.

### **Possible Ec/Centricities**

I am a long-time fan of an article published in *Nursing Outlook* in 1996 titled “Men Researching Women Working” (Porter, 1996). In this article, Sam Porter responds to criticisms that, as a man, he cannot adequately conduct research on women. Porter takes the criticisms to heart and provides a most thoughtful response based on feminist approaches to scholarship. His response provides an apt model, from which I have adapted possible ways in which those who produce nursing journal content (editors, publishers, authors) can shape an ec/centric dialogue that facilitates cross-cultural and global relevance in our editorial content.

Porter’s (1996) first principle is humility — recognizing that perhaps the best we can do is understand, reach out, and respect the “centres” in which many others are situated. Porter calls this “hermeneutic understanding” — taking a stance that aims for the best understanding possible of another perspective but that does not fully address or resolve the tensions between our own perspective and that of others.

The next principle that Porter (1996) proposes is what he calls “breaking with patriarchy,” which, translated to the challenge of producing nursing journal content, means recognizing that as editors, publishers, or authors we are situated in a nursing/medical/political/economic context of relative privilege. At the same time, we can recognize the relatively disadvantaged perspective of many around the world who consume the content published in nursing journals. These recognitions do not solve the problems we face, but they do increase our capacity for finding common ground with those who do not share a relatively privileged perspective.

Next is the recognition that knowledge is socially and culturally produced, and therefore that the content of nursing journals is influenced by the social and cultural context in which it is produced. This means that while the contexts from which journal articles are produced are at times worthwhile and important, at other times they are much less relevant. Further, those contexts that are not expressed in journal content quite possibly could offer more knowledge, more expertise, in certain areas

than we can even imagine. Realizing that perhaps something is missing could be one of our most important recognitions.

Finally, and perhaps most importantly, we can acknowledge the perspective from which we are writing/editing/publishing. This may be the most important “lesson” from the content in the first 20 years of the *American Journal of Nursing*. The women who participated in producing the content of the journal in those years provided clear and explicit explanations of what they were thinking, and why. If we acknowledge the perspective, the stance, the context from which nursing journal content arises, we also share a sense of humility and recognition that there are other perspectives from which to view our content.

Let the global dialogue begin!

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*Peggy L. Chinn, RN, PhD, FAAN, is Professor Emerita, School of Nursing, University of Connecticut, Storrs, United States, and Editor, Advances in Nursing Science.*

## Working on the “Jagged Edge”: Reflections on Thorne and Chinn

Patricia D’Antonio

Sally Thorne’s and Peggy L. Chinn’s thoughtful and provocative papers have set the standards quite high for our ability as editors to engage in “global conversations.” Sally asks us to self-consciously examine the ways in which we unwittingly perpetuate postcolonial assumptions and power relationships; and Peggy wants us to practise humility as we seek to understand and respect “centres” or perspectives that are not our own. As the editor of *Nursing History Review*, I have long thought about the ideas and practices that construct a “global conversation,” and their papers have given me much more about which I need to think. The *Review* is a small, highly specialized journal that — for the 21 years of its existence — has deliberately (and somewhat successfully) sought an interdisciplinary and international audience. But we have reached only some of our colleagues across the globe.

My remarks, however, are framed by my background as a historian as much as they are by that as an editor. And, like Sally’s and Peggy’s, my work is steeped in colonial and postcolonial paradigms. But, as a historian, I am also seeing how the notions of hierarchical and hegemonic power relationships within these paradigms are beginning to fracture. We are realizing that those labelled “others” within these paradigms see their own sources of power in adopting particular Western ideas and that their adoption is less a capitulation than a careful calculus. We are also seeing how there is rarely wholesale or uncritical adoption of particular Western practices — particular times and places lend themselves to careful reconstructions of “best practices.” And we now understand how the “other” affects the “metropole” — that there is a diffusion of ideas and practices. I am thinking particularly of Jonathan Cole’s work on nursing and midwifery in colonial Senegal (Cole, in press). The French colonial government developed maternal and public health policies that trained Senegalese women in Western nursing and midwifery. But Senegalese women participated because their education allowed them to challenge the patriarchal hierarchy in which they lived and to empower themselves with a new identity as a professional.

What does this mean to us in our role as editors? I was urged to be provocative — so I will be. First, I think it means we must unpack the implicit assumption that the process of knowledge production and dis-

semination is *only* an intellectual process among a global audience committed to the creation of knowledge for disciplinary practice. It is an important — perhaps even a primary — process. But knowledge production is as much a social and political (and — in some parts of the world — religious) process as it is an intellectual one. We know from history that what gets produced, with what resources, and under what priorities is a very messy, at times incoherent, yet very carefully calibrated set of negotiations among actors with very different sources of power.

I think my historical example also urges caution in characterizing those in non-Western and perhaps under-resourced areas of the globe as less powerful. And, finally, I think it means not privileging outcomes (of a beautifully constructed data-based manuscript) as the only marker of scholarship. It means creating a space where process may be privileged in a global conversation as well.

How might we make this happen? Again — provocatively — we need to accept that English is now the near-universal language of global scholarship. It was not always so: It was once Latin, more recently German. And it may not be so in the future. We need to think about what kinds of resources we can put into translation efforts.

And we need to use the power inherent in our roles as editors. Marion Broome, in her introductory remarks, noted our role in “stewarding the integrity of our individual journals.” And I completely agree that this is our essential role. We do have to privilege what I would call the standard manuscript form (one with a clear statement of the problem, review of the literature, methods, data and analysis, and discussion if a quantitative study). I once struggled with wanting to publish a manuscript with fascinating data — but with no analysis. A senior member of my editorial board — to whom I turned for advice — was very clear: What I published would set the norms for good historical research for all other authors seeking to understand historical methods. I did not publish the paper but suggested the author seek an historian co-author.

But if we privilege this particular form, does that mean we must inevitably privilege it as the *only* form of scholarship? The editors of the *Journal of Women's History* — also committed to the idea of more global conversations and to conventional scholarly articles — have a long tradition of experimenting with different kinds of scholarly production in different and well-demarkated sections. In the *Review*, I have created a “Notes and Documents” section, which allows me the flexibility to bring to my particular audience that which I think is important if non-conventional. What if we made a place for a selected group of authors from around the globe to answer some carefully crafted questions on such topics as HIV/AIDS, end-of-life care, nutrition, or community-based systems of care?

But, and in addition to our responsibility to our journals, we also have a responsibility to our audiences. We all know who our audiences are and what they expect from us. There is an inevitable tension in our editorial role. We think we know what we want but we have to wait for them to produce it. What we do not capture is the process of our authors working on what one historian has called the “jagged edge”: that very unsettled, de-centred, and often uncomfortable place where ideas are discussed and debated, not merely presented as formal papers at scholarly conferences. In the end, a more global conversation will require time — time to work on language, ideas, discussions, and debates. Time much like what we have here at INANE today.

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*Patricia D’Antonio, RN, PhD, FAAN, is Editor, Nursing History Review.*



## Reflections From the South

Joel Mancía

I was most appreciative of the organizing committee's invitation to participate in this discussion about such exciting and timely issues in the publishing globalized world. In particular, I would like to make reference to the champions on this special panel. Dr. Peggy L. Chinn is a prominent personality on the international scene. Her work is well known in Brazil. During my own PhD studies in the philosophy of nursing, translations and discussions of Peggy's journal, *Advances in Nursing Science*, were given much emphasis. So it became a very pleasant moment for me to join her on this panel. The second champion is Dr. Sally Thorne, a prominent researcher whose very provocative proposals have mobilized the researchers of our profession in various parts of the world. As the editor of *Nursing Inquiry*, she creates enlarged discussions with her international editorial board that contribute in a very special way to exchanges of ideas on editorial policy.

Brazil currently ranks as an emerging country in the world of the privileged nations. It intends to take its place in the world as a republic with the full capacity to participate in international negotiations and to become a vital part of global decision-making bodies such as the Organization for Economic Co-operation and Development and the United Nations. In the nursing world, Brazil has a vibrant tradition of publishing. At present around 30 journals specific to the profession are published in Brazil, the oldest being the *Brazilian Nursing Journal*, founded in 1932. However, only four of Brazil's nursing journals have been indexed in the Web of Science since 2008. Among them, the *Latin-American Journal of Nursing* has the highest impact factor (0.625 in 2011).

It is important to highlight *Nursing in Focus*, which is the official journal of the Federal Council of Nursing of Brazil, founded in 2010. It is recognized by the academic community as one of the most important nursing journals in Brazil. It is available in print and online free of charge. The print version is distributed by mail to all International Council of Nurses members residing in Brazil (Mancía, de Pires, Felli, Lopes Neto, & Forta, 2012).

In response to the Chinn and Thorne discussion papers, I have selected for consideration three ideas that are linked to the conditions of having been colonized by Anglo-American Western countries. These are language, issues of interest, and common strategies.

## Language

Language is the major problem for speakers and writers when they want to communicate in English to a globalized world about their scientific productions. In Brazil, we try to be part of this world. To accomplish this, we have established a number of strategies, including publishing our journals in English, in both print and on the Web, and indexing our journals in international databases, especially those that are recognized by the English-dominant countries. We do this with the expectation that these products might be accepted by the English-dominant world, although inside our country it brings about decreased access to these ideas of our national readers (Mancía & Gastaldo, 2004). Is this fair?

We also promote our journals in other countries, and invite internationally acclaimed researchers to join our editorial boards as reviewers and writers, because it sheds light on our journals. The fact that we have foreign reviewers as members of our editorial boards increases the possibility of having them write for our journals and, because of this, motivating other researchers to submit to our journals. Therefore, our journals will have a better position on the international scene as well as nationally. Publishing our journals in English has begun to show that we are headed in the right direction because it allows us to enter the world of the impact factor, the metric that models the world's publishing standards. Some of our journals have already been included on the *Journal Citation Reports* list due to English citations. Thus, by excluding some we have included others, and this remains a complex policy debate for us.

## Issues of Interest

Despite the diversity of issues that we think ought to have global penetration, some of them are not interesting to high impact factor journals. We notice that issues that are highly relevant for a developing country are sometimes not considered important or interesting to an international audience as determined from the perspective of those in Western countries. While we use the language of the “international audience,” it is not always clear what an international audience is. Thus, one might argue that this “international audience” becomes an underlying criterion of exclusion for what is not centric for both the colonizers and the colonized, who often look at what is set in stone through a similar lens.

We begin to see some resistance to that centre-ized view when researchers from developing countries have the opportunity to publish their papers in Anglo-American journals. From my point of view, some journals have been quite interested in publishing reports of work on AIDS, tuberculosis, and other neglected diseases in Brazil, because the practices that have been developed in our context are often cheaper and

more efficient approaches to health care than what Westernized systems can envision. These kinds of reports seem to stand the best chance of arousing interest among readers in developed countries as the challenge to the health sector has been growing worldwide. We hope that these issues as seen from a Brazilian perspective contribute to a better understanding of those diseases as they are currently experiencing a resurgence in developed countries.

### **Common Strategies for Decreasing the Differences**

Although the global dialogue we are proposing at the moment embraces some of the important tensions that distinguish the English-dominant Western nations from those looking in, there are numerous paradoxes and problems to be considered. Issues such as the political and cultural regional differences between us or variations in professional issues and ethical models might at first seem to be setting the rules that will be the path to publishing. In fact, from my perspective this is an illusion. It seems an obvious reality that scientific production is recognized only if and when it is published in high impact factor journals and it is only on this basis that researchers are rewarded by their institutions. This situation creates the standard for scientific production that is driven by an endless and challenging dialectic. As for the world community of nursing editors, it is fascinating to consider that we are all driven by a certain vision of strength that leads us towards high impact factor journals. So, from this point of view, one might say that colonizers and colonized are entwined together, sharing the same aspirations, either to be high impact factor journals or to publish in them. The irony of this situation gives us much to think about, and I welcome the ongoing conversation!

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*Joel Mancia, RN, PhD, is Editor-in-Chief, Revista Enfermagem em Foco do COFEN [Nursing in Focus: Journal of the Federal Council of Nurses (Brazil)].*



## The Balancing Act: Mission, Readers, and Other Voices

Maureen Shawn Kennedy

Both Thorne's and Chinn's papers challenge us to reflect on how we as editors facilitate the inclusion of all voices and perspectives to create a "global conversation." They challenge us to be open, intellectually and ethically unbiased, and inclusive. Thorne's paper is a comprehensive and thoughtful review of practices by which editors might perpetuate the status quo in scholarly thought and create barriers to presentation of different and new voices and ideas. These barriers include language, editorial processes, the reviewers we choose, how we define scholarship, and biases towards unpopular ideas. She provokes and prods us to think about how we might inadvertently contribute to stifling new voices and new ways of thinking.

Chinn's paper also prompts us to think about challenges in presenting ideas that are not central to conventional thinking or popular. She describes content areas where we have fallen short as well as backlash that can result when readers choose to see thinking that is out of the mainstream as oppositional instead of unique.

My thoughts are from my perspective as the editor of an American journal geared for practising nurses, the *American Journal of Nursing*. *AJN* is a 112-year-old broad-based, peer-reviewed, and evidence-based journal. It publishes original research, review articles, and quality improvement reports, as well as news, short clinical columns and opinion pieces, narrative writing, and even poetry and flash fiction.

The common theme presented in both papers is the difficulties and challenges in publishing content that is not central or may be outside of conventional "scholarship," or that may be unpopular or politically charged. While this is a challenge to any editor, nursing journals like *AJN* have a great deal of leeway since our content area includes all aspects of nursing. *AJN*'s purpose was very clearly laid out in the first issue, published in October 1900:

It will be the policy of the magazine to lend its pages freely to the discussion of subjects of general interest, presenting every question fairly and without partisanship, giving full recognition to all persons offering a suggestion that shall be in the line of nursing progress, excluding only such controversy as shall seem to be personally malicious or lacking in the broad interest of the profession. (Palmer, 1900)

So, given that we are a general practice journal, and given our charge from Ms. Palmer, our subject matter should include all issues that may have an effect on the health and well-being of those we care for, as well as issues related to how we as nurses can provide that care effectively. The journal should be a channel for presentation and analysis of ideas and should help nurses weigh the merits of available information and opinion. And while we are a scholarly journal in the traditional sense of following standard criteria for review of research and scientific writing, we do have many columns that are venues for creative expression, opinion, and reflection. Our social media sites have also been a proving ground of sorts, allowing for expression and reaction and providing a mechanism for exploring ideas and issues.

The primary question, then, in making decisions about content is, Who does the journal serve and how best can we serve them? Certainly serving our readers is paramount, but who are our readers now, in this new world where information is only a URL away? *AJN's* readers have largely been American nurses; in the first part of the century, these nurses for the most part practised in the community setting and later moved into hospital-based nursing. That trend has continued and currently almost two thirds of our readers practise in acute-care settings. Annual reader surveys tell us that our subscribers and readers want evidence-based clinical information relevant to their practice and information that will have an impact on their role as nurses.

Today that does mean including global content, as the information needs of American nurses have changed along with the diversity of the population for whom they provide care — according to US Census figures, 13% of the population is foreign-born. And while the great majority of our readers live in the United States, over one quarter of monthly visitors to *AJN's* Web site and social media pages are outside of the United States.

I am cognizant that “including international content” is vastly different from providing a voice to those who are outside our borders, and we do seek content written by nurses outside of the United States. It is a challenge, as there is a great deal of complexity to achieving balance between “inclusion-friendly” editorial practices with the need to maintain scientific rigour, journalistic standards for writing, and, key for a practice journal, relevance to our readers. We have received complaints and reminders from some of our more parochial readers, however, that we are the *AMERICAN Journal of Nursing* and should focus on American health-care issues. For us it is a delicate balance and we struggle with how to please all of our readers as our readership changes.

And while we must serve our readers in order to remain viable, we must also serve the profession. We are very mindful of our legacy as an historical archive of the progression of American nursing in the context of a changing society. This means covering issues that may be unpopular but important, documenting how nurses think about such issues and how nursing as a whole may respond or not, and covering the “business” of the profession. And as Chinn notes in her paper, there are risks to doing that — we have lost alliances and subscribers because readers objected to what we published. On some occasions it was not even that we advocated for a particular position or viewpoint — readers objected to the subject matter in a professional journal. This included a poem about an adulterous nursing student; a report about the struggles of the professional organization; cover artwork that some felt was too risqué; an article on the underuse of emergency contraception. Editorials on supporting Muslim nursing colleagues, women’s rights, and the problems faced by gay teens elicited negative responses from some readers. A reader opinion piece on why all nurses should oppose war provoked some readers to cancel their subscriptions, saying we were unpatriotic and that the piece had no place in a professional journal.

I believe that my job as editor of a journal geared towards practising nurses is to provide our readers with content they need to perform their role as nurses and to inform their thinking about their profession in the context of the world in which they live. To do that, we need to present all stories and all sides of the story; we need to weed out the facts from the rhetoric. If we only publish what is mainstream and safe, we are not serving our readers well, nor are we serving the profession. It is our objective to challenge readers’ assumptions and provoke critical thinking and conversations. In this age of information overload, I see our journal as a curator of information — sorting through the noise and identifying what is important, unbiased, accurate, and relevant to nurses wherever they might practise. Most of the time, it will be content readers recognize that they need and want and value, but on occasion it may be a “stretch” — an editorial or article that may be outside of readers’ comfort zones or challenge their beliefs. Our readers are not shy in informing us if we have crossed an arbitrary line they have set for us, and e-mail and social media sites offer many pathways to voice opinions. But it means that readers are thinking and discussing and reacting, and that means we are fulfilling the purpose for which this journal was founded so many years ago.

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*Maureen Shawn Kennedy*

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*Maureen Shawn Kennedy, RN, MA, is Editor-in-Chief, American Journal of Nursing.*



Résumé

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**Melq'ilwiye : Union — carrefour entre identité,  
culture et santé des jeunes Autochtones  
vivant en milieu urbain**

**Natalie Clark, Patrick Walton, Julie Drolet, Tara Tribute,  
Georgia Jules, Talicia Main, Mike Arnouse**

L'objectif de ce projet exploratoire de recherche participative en milieu communautaire était double : déterminer comment les jeunes Autochtones vivant en ville établissent leurs besoins en santé à partir d'un modèle de la santé et du bien-être qui est de nature culturelle, et créer de nouvelles connaissances de même qu'une capacité de recherche par et avec les jeunes Autochtones et les fournisseurs de soins de santé autochtones en milieu urbain. Les expériences visées par le projet ont été examinées au moyen d'un cadre méthodologique mixte reposant sur la participation à des cercles de la parole et la réalisation d'un sondage. L'étude issue de ce projet contribue au développement de la recherche anticoloniale dans la mesure où elle résiste aux explications en termes de maladie/malaise mises de l'avant par les paradigmes de recherche néocoloniaux. L'un des principaux axes de la recherche était l'élaboration de stratégies permettant de tenir compte des *aspirations* des jeunes Autochtones vivant en milieu urbain, afin ainsi de construire les assises grâce auxquelles ces jeunes pourront alimenter, soutenir et concrétiser leur potentiel en matière de santé et de bien-être. La contribution de la présente étude consiste donc à proposer une nouvelle façon de concevoir la santé des jeunes Autochtones vivant en milieu urbain, conception s'appuyant sur un cadre axé sur la culture, culturellement approprié et apte à reconnaître à la fois le lien profond qui rattache les jeunes Autochtones en milieu urbain à leurs terres, leurs langues et leurs traditions ancestrales et la nature des espaces entre lesquels ils évoluent.

Mots clés : santé des jeunes Autochtones, culture, cercles de la parole, recherche anticoloniale, traditions ancestrales

# ***Melq'ilwiye*: Coming Together — Intersections of Identity, Culture, and Health for Urban Aboriginal Youth**

**Natalie Clark, Patrick Walton, Julie Drolet, Tara Tribute,  
Georgia Jules, Talicia Main, Mike Arnouse**

The goal of this exploratory community-based participatory action research project was twofold: to determine how urban Aboriginal youth identify their health needs within a culturally centred model of health and wellness, and to create new knowledge and research capacity by and with urban Aboriginal youth and urban Aboriginal health-care providers. A mixed-method approach was employed to examine these experiences using talking circles and a survey. The study contributes to anticolonial research in that it resists narratives of dis(ease) put forth through neocolonial research paradigms. A key focus was the development of strategies that address the *aspirations* of urban Aboriginal youth, laying foundations upon which their potential in health and wellness can be nurtured, supported, and realized. The study contributes to a new narrative of the health of urban Aboriginal youth within a culturally centred and culturally safe framework that acknowledges their strong connection to their Indigenous lands, languages, and traditions while also recognizing the spaces between which they move.

Keywords: Aboriginal health, collaborative research methods, culture, gender, health promotion, youth health

## **Introduction**

Our work together began with a story told by a Secwepemc Elder who assisted and guided our participatory action research project as a gate-keeper. *Melq'ilwiye* is a Secwepemc word that means “coming together.” The research took place in the interior region of British Columbia through a community-university partnership between the Interior Indian Friendship Society and Thompson Rivers University, both of which are located on the traditional territories of the Secwepemc peoples in the city of Kamloops. The Interior Indian Friendship Society is part of a network of 119 Friendship Centres in Canada and is a member of the National Association of Friendship Centres (NAFC, n.d.). Friendship Centres are the primary providers of culturally enhanced programs and services to urban Aboriginal people. For over half a century they have been facilitating the transition of Aboriginal people from rural, remote,

and reserve life to an urban environment (NAFC, n.d.). For many Aboriginal people they are the first point of contact for referral to culturally and socio-economically based programs and services. The urban Aboriginal population is the fastest-growing segment of the Canadian Aboriginal population (54% in 2006) (NAFC, n.d.), yet in Kamloops there remains a temporal component to one's location and identification as "urban Aboriginal," varying according to the person's life history and story. Elders, Aboriginal youth, and community contributed to all phases of the research. Our research team comprised Elders, Indigenous youths, community partners, Indigenous faculty, and allies for this particular project.

The goal of this community-based exploratory study was twofold: to determine how urban Aboriginal youth in Kamloops identify their health needs within a culturally centred model of health and wellness, and to create new knowledge and research capacity by and with urban Aboriginal youth and urban Aboriginal health-care providers. A key focus was the development of strategies for addressing the *aspirations* of urban Aboriginal youth, laying the foundations upon which their health and wellness potential can be nurtured, supported, and realized. The project was aimed at addressing the need, identified by the NAFC, for more effective ways to promote health among urban Aboriginal youth. It was also aimed at addressing the recommendation of the Senate Standing Committee on Aboriginal Peoples (2003) with respect to promoting "urban First Nations health research initiatives that could provide valuable information on the needs, experiences and priorities of First Nations youth living in urban centers under a First Nations controlled design" (p. 3).

### Context

Recent research offers a range of ways to view Aboriginal health, from studies that locate health narrowly such as the absence of disease (Devries, Free, Morison, & Saewyc, 2009; Kaufman et al., 2007; Perry & Hoffman, 2010); to more complex and holistic analyses of health, including social determinants (Mehrabadi et al., 2008); to collective health concepts that are Indigenous-centred; to health-system analyses (Anderson, Smylie, Anderson, Sinclair, & Crengle, 2006; Burack, Blidner, Flores, & Fitch, 2007; Ungar, 2008).

Institutional and systemic racism in Canada negatively impact health, with studies demonstrating the need for increased research in this area due to health determinants, the physiological health impact of racism, and inadequate access to or isolation from health care (Andersen et al., 2006; Ungar, 2008; Veenstra, 2009; Wexler, 2006). Poverty, racism, violence, and

assimilation pressures all contribute to the increased vulnerability of urban Aboriginal children and youth, as do the history of colonization and the subsequent colonialism that persists to this day (Justice Institute of British Columbia, 2002, 2006).<sup>1</sup>

Many studies have identified disproportionately severe health challenges for Aboriginal youth, such as higher rates of sexual and physical abuse; suicide as the leading cause of death, especially for Aboriginal males; higher rates of violence against Aboriginal compared to non-Aboriginal females; racism; and increased tobacco and marijuana use (BC Children's Commission, 1999; McCreary Centre Society, 2000; Saewye et al., 2008; Tonkin, Murphy, Lee, Saewye, & McCreary Centre Society, 2005). However, much of the research does not place the issues within colonization and ongoing colonialism, nor within a strengths-based and culturally centred understanding of youth health.

The literature that does exist in this area indicates that healthiness among Indigenous youth is promoted by aspects of cultural continuity such as cultural identity and pride, awareness of colonization and its influence on the present, ability to speak one's Indigenous language, and the sharing of a collective identity (Anderson et al., 2006; Chandler & Lalonde, 1998; Croll, Neumark-Sztainer, Story, & Ireland, 2002; Jacono & Jacono, 2008; Kaufman et al., 2007; Mehrabadi et al., 2008; Ungar, 2008; Wexler, 2006). Research linking positive health outcomes, including decreased suicide, for Aboriginal youth living in reserve communities where there are strong cultural components has been established (see Chandler & Lalonde 1998). However, the link between cultural continuity and urban Aboriginal health in smaller cities has not yet been examined. Indigenous youth are the fastest-growing youth population in Canada. In Kamloops more than half the Aboriginal population is under the age of 25 (compared to 30% of the non-Aboriginal population) (Statistics Canada, 2010), which points to the relevance of the present study.

The McCreary Centre Society's recent Adolescent Health Survey (Smith et al., 2009), a province-wide survey of over 29,000 high-school students, found that high levels of certain protective factors predicted less likelihood of engaging in risky behaviours. For example, youth who felt highly connected to their culture or ethnicity were less likely to engage in binge drinking, physical fighting, or weapon carrying. They were also less likely to report suicidal ideation and less likely to rate their health as poor, compared to those who scored low on cultural connectedness.

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<sup>1</sup> For a discussion of colonization, or the "invasion and eventual domination of North America by European Americans," and the subsequent, ongoing colonialism experienced by Indigenous communities, see Alfred (2009).

Cultural strength, identity, and pride, in particular, have been found to be protective of health among rural youth (Clark & Hunt, 2011; Smith, Leadbeater, & Clark, 2010). This type of health promotion includes developing a politicized identity, developing resistance, engaging in social action against discrimination, and building knowledge about the impact of colonization (Chandler & Lalonde, 1998; Croll et al., 2002; Ungar, 2008).

Many studies point to the need for specific health promotion strategies for youth that centre Indigenous culture and wisdom. They also indicate a need for culturally specific health strategies, such having Elders teach youth, involving family members, focusing on interdependence, and using culturally based Indigenous community research to develop health intervention and prevention strategies and culturally safe health services (Anderson et al., 2006; Chansonneuve, 2006; Clark & Hunt, 2011; Majumdar, Chambers, & Roberts, 2004; Steenbeek, 2004; Tuefel-Shone, Siyuja, Watahomigie, & Irwin, 2006).

Furthermore, the NAFC has identified the need for more effective ways to promote health among urban Aboriginal youth, while the Senate Standing Committee on Aboriginal Peoples (2003) has recommended promoting “urban First Nations health research initiatives that could provide valuable information on the needs, experiences and priorities of First Nations youth living in urban centers under a First Nations controlled design” (p. 3). One of the two youth peer researchers for the present project described it thus:

*Being an urban Aboriginal youth, I could relate to how they would feel and how we could engage other urban Aboriginal youth. I thought it was a great idea to have youth representatives on the team. It was easier for us to explain the questions to the youth. It was easier for us to engage the other youth. I have sat on many youth councils related to health. I always wanted to be a youth advocate and put a youth view and ideas onto projects like this.*

The other youth peer researcher also described her experience:

*Very educational! Being a part of the project helped me to grow many strengths through interviewing others, putting myself out there in the community, and learning to work and be accountable. It also helped with my self-confidence and it was really interesting to learn about different aspects of various youth. It also expanded my view on how we can help others through research and focus group conversations. Presenting the findings in Toronto at the conference made me feel proud and helped me to know that I am valued and that I can make a difference for my Aboriginal people.*

The study contributes to anticolonial research in that it resists the narratives of dis(ease) put forth through neocolonial research paradigms and instead considers past and current forms of colonization. “The rusty cage may be broken,” writes Taiaiake Alfred (1999), “but a new chain has been strung around the indigenous neck” (p. xiii). Anticolonial scholarship can theorize about not only past forces of colonialism but current ones as well. Examples of neocolonialism can be found in the research and discourse about Indigenous youth that construct narratives of (dis)ease, are not based in the strengths and resistance of Indigenous cultures and peoples, and do not recognize the diversity of Indigenous youth. Many Indigenous scholars acknowledge that we need a theory for the multiplicity of Indigeneity that has emerged from colonization — Métis, full-blood, half-blood, community member (Ermine, Sinclair, & Jeffery, 2004; Grande, 2004, 2008; Simpson, 2003). Intersectionality is a concept and framework that developed out of the lives and resistance of African-American feminist activists (Combahee River Collective, 1977). The term was coined by the critical race scholar Kimberley Crenshaw (1989) to describe the oppression structurally produced and simultaneously experienced and resisted individually and collectively through and across diverse social categories of identity. To Indigenous peoples, however, intersectionality is not a new concept. Prior to colonization, many Indigenous communities had strong matrilineal traditions, multiple categories of gender, and holistic understandings of and approaches to health (Yee, 2009). There is increasing recognition that the concept of intersectionality “complements growing discussions about the complexity and multiplicities involved in being indigenous, in the category of indigeneity, and in indigenous people’s health and well-being” (de Leeuw & Greenwood, 2011, p. 54). An intersectional lens facilitates recognition of the diversity of Indigenous youth and examination of the issues that impact youth, including dichotomous notions of urban/rural and male/female. Studies with Indigenous and “urban” youth frequently leave gender and other intersecting factors unexamined.

There has been an increased focus on Indigenous youth in large cities (MacKay 2005). However, there have been few studies that adopt an intersectional framework and acknowledge and incorporate multiple intersecting factors that address space, place, or location in a small city as impacting health, and fewer still that take a community-based participatory action approach (de Finney, 2010; Downe, 2006). In the report *Growing Up in BC*, the Representative for Children and Youth, British Columbia (2010), recognizes that children and youth in the interior and northern regions of the province face significant health disadvantages. According to the report, the adoption of “a lens that recognizes that multiple forms of discrimination occur simultaneously would identify and

shed light on differences in health outcomes, pathways, and access to services related to the intersecting factors that have long-term health consequences for individuals and populations” (p. 25).

The present study was conducted by an intersectional research team comprising a diverse group of Aboriginal youth and Elders, Indigenous community practitioners through the Interior Indian Friendship Society, Aboriginal health through Interior Health, and Indigenous and non-Indigenous university researchers. Intersectional research teams choose to create a research space that asks about everyone’s agenda in doing the work and uses all of the different knowledges in the room (Aluli-Myer, 2008; Clark, Hunt, Good, & Jules, 2010). Through this process, (dis)ease-focused research questions are resisted in favour of culturally relevant and culturally appropriate questions.

Four research questions were developed by the research team as a group: (1) *Which cultural components are linked to the health needs of urban Aboriginal youth?* (2) *Will the identified Aboriginal cultural components differ by gender, ability to speak one’s Aboriginal language, sexual orientation, and type of school attended (high school, alternative school, university)?* (3) *What are the cultural safety priorities identified by urban Aboriginal youth in meeting their health and wellness needs?* (4) *What supports do Aboriginal students and the Aboriginal community need to facilitate their health needs (mentors, Elders, access to Aboriginal faculty, learning resources, interventions)?*

## Methods

This exploratory study was guided by an Indigenous research paradigm, which centralizes relationships and accountability to these relationships (Aluli-Myer, 2008; Kovach, 2009; Wilson, 2008). It was also guided by the concept of looking in one direction and having “a good heart” (Wilson, 2008, p. 60). Further, building on the knowledge and wisdom of the youth and Elders who were involved in the project and who shared the importance of us “all looking the same way,” the study placed urban Aboriginal youth in a central role as peer researchers and collaborators.

This project observed culturally determined ethics and guiding principles (Alderman, Balla, Blackstock, & Khanna, 2006; Tuhiwai Smith, 2001) and used a checklist developed by the authors and a colleague that reflects a number of ethical guidelines, including human rights, the four R’s (Kirkness & Barnhardt, 1991), OCAP principles (Schnarch, 2004), and ethics as determined by the Indigenous community (Justice Institute of British Columbia, 2002, 2006). According to Clark et al. (2010), “Researchers who are connected to the community are therefore accountable to the community for the ethics, practice and outcomes/ action of the research. The findings are more than data, but are stories and

actions in relationship with people and Communities” (p. 250). Ethics approval was obtained from the community and the university and Tri-Council Research Ethics Guidelines were followed. Finally, consistent with Aboriginal knowledge translation (Estey, Smylie, & Macaulay, 2009), the findings were presented by the youth peer researchers at an Indigenous youth health conference organized in Kamloops by the research team and attended by more than 200 Indigenous youth from rural and urban communities. In addition, the findings were presented in 2011 by the youth researchers, together with members of the team, in Toronto at the first national conference on urban Indigenous health, Fostering Biimaadiziwin [Fostering the Good Life].

The theoretical and applied framework guiding this project built on the work of Irihapeti Ramsden, a Maori nurse, and the work of Dianne Wepa (2003, 2005), a Maori social worker, who, together with Maori national organizations, developed the concept of cultural safety. Cultural safety focuses on power relationships between the colonizer and the colonized and is linked to Aboriginal self-determination (Chansonneuve, 2006). The emphasis is on the experience of the service user or client in defining the experience as culturally safe, thus shifting power relationships. Additionally, the research team focused on culturally safe research within an intersectional research team and grounded in Indigenous methodology and Indigenous ethical protocols.

Ermine et al. (2004), in their review of research with Indigenous people, identify participatory action research as one of the best methods for addressing the complexity of the issues currently facing Indigenous communities: “The participatory action research approach to community issues is a culturally relevant and empowering method for Indigenous people in Canada and worldwide as it critiques the ongoing impact of colonization, neocolonialism and the forces of marginalization” (p. 9). This view is echoed by other Indigenous scholars, such as Eve Tuck (2007), who writes of the “radical possibilities of PAR spaces as spaces in which sovereignty can be recognized, practiced, theorized, and cultivated” (p. 163). Furthermore, community-based participatory action research invites youth to “critically investigate the social policies that construct and constrict their lives, interrogating policies that ravage their communities and threaten their imaginations” (Torre, Fine, Alexandra, & Genao, 2007, p. 238).

The present community-based participatory action research study was carried out in Kamloops, British Columbia. It was conducted within an Indigenous research paradigm using mixed methods, including four talking circles with approximately 40 participants and 78 surveys completed by urban Aboriginal youth (60% female, 40% male) aged 12 to 25. The data were collected in 2008–09 and further analyzed in 2010. Three

educational sites were used: an alternative Aboriginal high-school program, a number of mainstream high schools, and a university campus.

All survey and talking circle questions were developed in consultation with the project's advisory board, including community partners, Elders, and Aboriginal youth. The original items for the survey and the talking circle were piloted, revised, and then reviewed again by the research team. The survey items were then divided into questions that could be answered on a Likert scale and items that required further explanation. Consistent with an Aboriginal worldview, survey and talking circle items included questions from the physical, cognitive, emotional, and spiritual domains. Four talking circles were conducted, two male and two female. Two Aboriginal youth researchers were trained to collect the data and were part of developing the survey. The talking circles were audiorecorded and the recordings were transcribed into MS Word. The transcripts were shared and read by the research team using a grounded research approach that facilitated the identification of key themes and issues. The findings were analyzed by and with community partners, Elders, and Aboriginal youth to ensure meaning and understanding. A training session on research methods was conducted with Aboriginal youth members of the research team and mentoring was ongoing. The survey was administered by urban Aboriginal youth members of the team at an alternative Aboriginal high-school program, a number of mainstream high schools, and a university campus. The survey results and the transcripts from the talking circles were examined together. The meaning of the quantitative results was better understood by considering the complementary nature of the two data sets.

Often, resource-allocation decisions are based on "hard facts" and the "bottom line," while much of the evidence surrounding the experiences of Aboriginal communities is qualitative in nature. As observed in a study commissioned by the Cariboo Tribal Council,

personal experiences are not somehow more "truthful" when there are numbers attached to them, nor is research likely to uncover information that could not be obtained from comprehensive personal narratives. However, when research supplements such information sources, those experiences or narratives cannot be dismissed as "merely stories." (Chrisjohn & Young, 1994)

## **Findings**

The Aboriginal youth reported connections across a wide range of factors related to their health needs, including identity, culture, knowledge about and resistance to colonialism, and recommendations for culturally safe health care. The findings are organized under four headings:

*Indigenous Identity and Resistance, Cultural Connectedness, Colonialism and Structural Racism, and Culturally Safe Health Care.* Our results are consistent with those of the limited research that has been conducted to date reporting that young speakers of Aboriginal languages cite culture-based spirituality and traditional Indigenous healing methods as important for their health (First Nations Centre, 2005; MacKay, 2005).

### ***Indigenous Identity and Resistance***

The overwhelming majority (96%) of Aboriginal youth reported that they were proud of their ancestry. Participants in the talking circles referred to their diversity as Indigenous youth, describing themselves as “short,” “tough,” “tall,” “brown,” “nice,” “outgoing,” “pretty,” “non-judgmental,” “random,” “honest,” “athletic,” “not racist,” “joyful,” “happy,” “not a Christian,” “two-spirited,” “Christian,” “singer,” “dancer,” “fun,” “pothead,” “jud,” “someone that drinks all the time,” “stud magnet,” “another Native,” “another Chilcotin,” “baller,” “I introduce myself with my full name,” “awesome,” “wonderful,” “courageous,” “curious,” “creative,” and “mean.” They also expressed strong resistance to the labelling of Indigenous youth:

*Putting signs on an office saying Mental Health Counsellor . . . is not where we want to be seen going, because we don't want to be labelled, we do not want to go to certain labelled services [mental health]. But school counsellors' office, FNEW [First Nations Education Workers] office, hospital, clinic — they're not embarrassing offices to access, Friendship Centres.*

Another youth echoed this view, stating that we should “stop young people from going to counselling because it labels us.”

In addition to challenging mainstream notions of Indigenous youth identity, participants challenged dichotomous notions of urban/rural in terms of Indigenous youth. A number of youth were currently urban but had moved on and off reserve throughout their lives. Both of the peer researchers identified as urban currently and helped the research team to understand the movement of many of the participants on and off reserve. Few participants identified as uniquely urban and many described living in multiple localities and moving back and forth to see family, access supports, or take part in ceremonies. For many participants, distance from Elders was an issue:

*I only see my grandma . . . once a month, when she comes to town, but it's important for my health.*

*I don't see my grandma much, but when I do it makes me happy.*

*My grandma lives in [another city], so distance is an issue.*

**Table 1 Responses for Select Survey Items**

|   | <b>Strongly Disagree</b><br>% | <b>Disagree</b><br>% | <b>Undecided</b><br>% | <b>Agree</b><br>% | <b>Strongly Agree</b><br>% |
|---|-------------------------------|----------------------|-----------------------|-------------------|----------------------------|
| I am proud of my Aboriginal ancestry                                  | 0                             | 0                    | 4                     | 24                | 72                         |
| I can speak my Aboriginal language                                    | 19                            | 30                   | 19                    | 27                | 5                          |
| Racism has negatively impacted my health                              | 8                             | 27                   | 42                    | 17                | 6                          |
| I would like my Aboriginal culture reflected in health services I use | 17                            | 44                   | 14                    | 19                | 6                          |
| I use the Internet to get information on my health                    | 14                            | 22                   | 15                    | 39                | 10                         |

Comprehending and challenging dichotomous categories of who is urban result in a more nuanced understanding of the resources available and barriers to “urban” Aboriginal health.

**Cultural Connectedness**

In a separate question, 42% of participants indicated that their culture-based spirituality was the foremost influence in their health and how they lived their lives. In our search for links between health and Aboriginal culture, we asked participants if they could speak their Aboriginal language. Although we did not assess language competency, 32% reported that they could speak their Aboriginal language. Further analysis found that youth who could speak their language participated more in traditional Aboriginal ceremonies. Most of the Aboriginal-language speakers (16/25, or 64%) reported significantly more participation in Aboriginal ceremonies for health, compared to non-speakers (17/53; 32%):  $F(1,76) = 5.16, p = .026$ .

Participants were also asked if they had used traditional Aboriginal healing approaches. Surprisingly, 48% indicated that they had done so and 52% reported that Aboriginal ceremonies were important for their health. This raises questions about what healing approaches they were accessing, and where, and whether these should be made more widely available to youth. One participant contrasted Western medicine with Indigenous healing approaches:

*I want to learn how to make Indian medicine, because one time I was heating up and I felt like I was cold to being really hot. I had to go to the hospital for a day, but I felt better after taking the Indian medicine.*

Another spoke of the importance of sweats:

*I wish more sweats were accessible. I haven't been in one since I was little, but I found it helpful. I felt better physically, emotionally, mentally, and spiritually.*

To the participants, access to and connection to Elders was important for their health. In the talking circles Elders were described as “comforting”:

*They are just like parents, but they are your grandparents . . . sometimes I can connect better with them because they're not as strict as my parents.*

*I have a great relationship with my grandparents. I see them . . . every weekend. Meals together are important. They are hilarious.*

Relationships with Elders were central to the health of the youth. Participants identified a range of things they would want to learn from an Elder:

*I would want to know how to get an Indian name, how culture started, tradition, history, to speak my traditional language, and cooking.*

### **Colonialism and Structural Racism**

Participants indicated that they understood the impact of colonization and ongoing colonialism. Although 82% indicated (*agree or strongly agree*) that they understood how residential schools affect Aboriginal people, this included significantly more females (45/47; 91%) than males (21/31; 68%):  $F(1,76) = 6.98, p = .010$ .

We were interested in whether the youth experienced instances of racism and if this affected their health. Of the participants, 23% reported that racism had negatively impacted their health. The talking circles provided rich examples of racism, and the impact was multi-generational:

*I was at [a restaurant] with some friends and an Elder and we were so angry because they put us in a corner. The server was ignoring us because we were Native, and when I finally asked him if we were going to get some service, he directed a female server to serve us but he was serving other white people. Later, during our meal, there was a hockey team being really loud and they asked our table to be quiet but they didn't say anything to the hockey team. The Elder that was with us got so mad too and she cried.*

*We were in [a supermarket] gas bar and the guy said, "You should get those Native people to do the rain dance," and it was totally sunny out.*

Youth also identified the impact of the intersection of race with gender and gender identity: "People won't hire because of race and sexual orientation." Gender differences were noted with respect to speaking up about racism, with 68% of males indicating that they spoke up, compared to 36% of females:  $F(1,76) = 6.10, p = .010$ . One male participant said,

*I get discriminated [against] all the time, but I just speak up and say, "Is it because I'm brown that you're staring at me?"*

### **Culturally Safe Health Care**

One quarter of participants stated that they encountered difficulty accessing health care. Health-care centres such as the Interior Indian Friendship Society health centre were identified in the focus groups as important. Furthermore, youth did not believe that having an Aboriginal health-care provider was important. They believed that all health-care providers should have the skills needed to work with Aboriginal youth:

*Non-Aboriginal health-care providers should be skilled to work with Aboriginal youth. All health providers should be skilled to work with FN youth. [I should not be] pawned off to an Aboriginal worker because white people don't know how to deal with me.*

*I go to anyone that will acknowledge my culture, grandparents, Elders.*

Further analysis found that having Aboriginal health-care providers was more important to females than to males: ( $F(1,75) = 6.54, p = .013$ ).

Approximately 49% of participants used the Internet to find health information. This raises the importance of making health information available online and presenting it in ways that are youth-friendly.

### **Discussion**

Key findings of this study include the importance to youth of a strong Indigenous identity, cultural connectedness, and awareness of and resistance to colonization, colonialism, and structural racism. Consistent with the literature, the findings have implications for culturally centred and culturally safe health care that involves Elders, families, communities, and traditional healing methods (Anderson et al., 2006; Long et al., 2006; Majumdar et al., 2004; Skye, 2002; Steenbeek, 2004; Tufel-Shone et al., 2006).

The findings support the call by Secwepemc Elders and recent work by Secwepemc scholars for a return to cultural teachings and language

(Billy, 2009; Manuel & Posluns, 1974). As described by the international Indigenous rights activist and Secwepemc chief George Manuel, co-author of the 1974 book *The Fourth World*, “residential schools were the laboratory and production line of the colonial system” (quoted in Billy, 2009, p. 63). Manuel’s father, a traditional medicine man, came to believe that learning about the culture and speaking the language were a detriment to his son: “Things are going to be different from here on in. I don’t think it is wise for me to teach you to go into the mountains. I think it will be a detriment rather than an asset for you” (p. 68). Manuel’s father told him to be “white,” but then later, on his deathbed, said, “My son, I made a mistake. You raise your children and your grandchildren as Indians” (p. 68). In her doctoral dissertation, Janice Billy, a Secwepemc woman, interviews Secwepemc Elders, who not only lament the devastation of colonization but point to language and culture as the way forward; Irene Billy, an Elder, describes attending Kamloops residential school for 9 years, from 8 to 17 years of age, and now, at age 82, “as grandmother and great grandmother I can pass on my language but not much of our culture. I am learning about our medicines and other things I didn’t learn when I was young” (Billy, 2009, p. 90).

The participants in our study expressed pride in their Aboriginal identity, a keen interest in learning their traditions, and the importance of traditional medicines for their own health. One of the few Aboriginal youth health surveys conducted in Canada, designed specifically to examine health-information issues, reports that youth are interested in learning about and using traditional medicines (First Nations Centre, 2005). Furthermore, previous research with urban Aboriginal youth (Belanger, Barron, & McKay-Turnbull, 2003) found that cultural identity is formed through a wide circle of activities, including access to Elders, language, First Nations education, community health spaces such as Friendship Centres, and the Internet. Tradition is inclusive of modern technology. In our study, 49% of youth accessed the Internet for health information. The research team has since considered how the Internet might be used for health promotion purposes, such as reviewing existing Web sites, suggesting changes to these sites, and finding ways to integrate culture into technology. Further research on health promotion and intervention by and with urban Aboriginal youth is an area to be investigated.

Youth were also aware of the structural factors impacting their health, in particular colonization and ongoing racism. However, gender differences were noted on this question, with females giving a higher rating to their knowledge of residential schools. In contrast, males were more likely to speak up when encountering racism. Furthermore, speakers of an Aboriginal language rated their health higher than those who did not

speak an Aboriginal language and also indicated that their culture-based spirituality was the most important factor in how they lived their lives.

This research is a first step in identifying what Alfred (1999) describes as a need for “self-conscious traditionalism” — not a return to the past but concern about survival in the future (p. 166). The study not only sheds light on the experiences of urban Aboriginal youth who long to sustain and build on their tribal roots, but also theorizes about mixed, urban, status, and non-status (Alfred, 1999, p. 173). As Bonita Lawrence (2003) reminds us, “for Native people, individual identity is always being negotiated in *relation to* collective identity, and *in the face of* an external, colonizing society” (p. 4). The present study begins to tell the story of Aboriginal youth health within an intersectional and culturally centred and culturally safe framework. This framework consists of strong connections to one’s Indigenous lands, languages, and traditions while also recognizing the spaces one moves between and around in navigating the process of growing up. MacKay (2005), in a study with urban Indigenous youth in Saskatoon, draws on the work of Norris and Jantzen (2003), who report that urban-rural mobility “is motivated by people moving to maintain family and cultural relationships” (p. 111). MacKay notes that ideas of identity and belonging are not contained within the boundaries of cities or reserves. One of the youth researchers in the present study described her own experience:

*What health means to me is being physically and mentally healthy, to have balance in your life by staying in touch with your culture and family. When I moved from a . . . town to a city, I found it hard to find health services. I do still go back to my small town to get my health needs met, because that is all I know. So I do find it hard to find some services. I have moved out of my home for a few years now and I do feel a loss of home and family. I would have to make time to see them.*

While clearly appreciating the advantages of her new urban environment, this youth describes the challenges of leaving her reserve and her need to stay connected to family and culture. Furthermore, in our team’s analysis of the data, she helped make meaning of the movement of the participants in the study. For the youth researcher and her friends, a move back to the reserve often coincided with a need to seek extra support or with a life transition.

These findings contribute to an anticolonial scholarship that resists narratives of disease. They provide new, more nuanced and complex stories about urban Aboriginal youth. Future research could examine the complexity of how racism impacts the health of urban Aboriginal youth and how the gender differences, gender-identity, and sexuality noted in the present study also impact health. For example, male participants were

found to be more likely to speak up about racism. The impact of speaking up for males and of silence for females requires further exploration. The trauma literature offers some analysis in this regard; for example, males are more likely to externalize and females to internalize trauma symptoms. Does speaking up lead to further criminalization for male Aboriginal youth? Does silence on issues of racism contribute to higher rates of mental health difficulties for Aboriginal females? The Indigenous researcher Jo-Anne Fiske (1996) reminds us that in research we need to present multiple realities, in contrast to the construction of “narratives of oppression” that prevent contrary and contradictory stories from being heard (p. 665). By creating innocent victims, we “inscribe them in terms not of their own choosing” (p. 666). Fiske argues that the narratives previously constructed by the colonizer must be “subverted, their subject reclaimed” (p. 666).

However, there are ways in which this research also extends colonial narratives. Of the participants in our study, seven self-identified as two-spirit, one as gay, and one as bisexual. Similar to the challenges of determining who is “urban” Aboriginal, binary analyses of gender preclude an understanding of the spiritual role encompassed within a two-spirit identity. Intersectionality scholarship calls on us to move beyond the binary constructs of gender found in the categories of male and female. Qwo-Li Driskell (2011), a Cherokee two-spirit academic, reminds us that gender itself is a colonial construct. Driskell points out that prior to colonization some communities had up to 12 genders and that colonization has altered our memory of gender. Colonialism and patriarchy need a gender binary system, as colonial domination is impossible without binary constructs. Driskell notes that, while re-learning Cherokee, s/he has been reminded that Indigenous languages were always multifaceted and multidimensional, as suggested in references to two-spirit people as having “a different heart” or having “two hearts.” According to Driskell, “unless two spirit people are listened to we won’t achieve” decolonization. We need research that listens to the unique experiences of two-spirit Indigenous youth and Elders, given the key role accorded to Elders by the Indigenous youth in our study with respect to their health.

## **Conclusions**

Urban Aboriginal youth are living histories born of “a context of concrete social, political, and historical struggles and success” (Downe, 2006, p. 14). Although their identities and health needs are framed within ongoing experiences of colonization, residential schooling, and removal by child-welfare authorities, they are inheritors of rich narratives and histories of resistance and strength. Health programming based on Western

value systems only serves to further colonize the bodies and identities of Aboriginal youth. The health of urban Aboriginal youth must be addressed in models that are based on Indigenous traditions and belief systems and local knowledge and that incorporate spiritual, emotional, mental, and physical health. Let us not promote any one model with a fixed concept of Indigeneity, gender role, sexuality, or other aspects of identity. Programs that can respond to the unique needs and experiences of urban Aboriginal youth will be able to more meaningfully foster resilience and community connectedness. According to the Indigenous youth activist Jessica Yee (2009), resistance lies in finding “practical ways to translate all of this into modern terms for our young people to use so they can recover what past generations may have lost, and re-assert themselves as the resilient, fierce, and knowledgeable young people who were once upon a time, the most sacred in many of our cultures” (pp. 3–4).

Our exploratory study raises important considerations for health design and delivery. Both participants and peer researchers recommended special training for all those working with First Nations youth, including the design of health centres and the creation of a Web site providing Aboriginal youth with information on traditional medicines and healing approaches.

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*Natalie Clark, MSW, RSW (Métis ancestry; mother of Secwepemc children), is a PhD student at the School of Social Work, University of British Columbia, Vancouver, Canada; at the time of the project she was a faculty member, School of Social Work and Human Service, Thompson Rivers University, Kamloops, British Columbia. Patrick Walton, PhD (Métis ancestry), is a faculty member, School of Education, Thompson Rivers University. Julie Drolet, PhD, is Associate Professor, School of Social Work and Human Service, Thompson Rivers University. Tara Tribute, MEd (Mohawk ancestry), is First Nations Counsellor, School District 73, Kamloops; at the time of the project she was Youth Counsellor, Interior Indian Friendship Society. Georgia Jules is Youth Researcher, Secwepemc Nation; at the time of the project she was a student at Thompson Rivers University. Talicia Main is Youth Researcher, Urban First Nations; at the time of the project she was a high-school student. Mike Arnouse is Secwepemc Elder, Thompson Rivers University.*

**L'allaitement et les femmes autochtones :  
validation de l'échelle de mesure  
de l'auto-efficacité en matière d'allaitement,  
version abrégée**

**Karen A. McQueen, William J. Montelpare,  
Cindy-Lee Dennis**

L'objectif de cette enquête méthodologique, qui s'inscrit dans le cadre d'une étude de cohorte prospective, est d'évaluer la fiabilité et la validité de l'échelle de mesure de l'auto-efficacité en matière d'allaitement, version abrégée (BSES-SF), chez les femmes autochtones. L'échantillon est composé de 130 femmes autochtones allaitantes ayant séjourné en salle postpartum dans un hôpital de soins tertiaires urbain ou un hôpital rural. Les femmes ont fourni des renseignements de base pendant leur hospitalisation et ont été contactées par téléphone à la quatrième et à la huitième semaine postpartum afin d'évaluer leur méthode pour allaiter leur nourrisson. Selon l'enquête, la BSES-SF est un outil valide et fiable pour évaluer l'auto-efficacité chez les femmes autochtones en matière d'allaitement. Des différences importantes ont été constatées en ce qui a trait au score de la BSES-SF en milieu hospitalier, chez les femmes qui, à quatre semaines postpartum, nourrissaient leur nourrisson exclusivement au sein, avec une méthode mixte ou uniquement au biberon ( $F(2) = 7,31, p = 0,001$ ). Les auteurs concluent que les femmes autochtones affichant une faible auto-efficacité en début de période postpartum risquent d'arrêter d'allaiter de façon précoce et bénéficieraient d'un soutien supplémentaire en matière d'allaitement.

Mots clés : femmes autochtones, allaitement, échelle de mesure de l'auto-efficacité en matière d'allaitement, BSES-SF

# **Breastfeeding and Aboriginal Women: Validation of the Breastfeeding Self-Efficacy Scale – Short Form**

**Karen A. McQueen, William J. Montelpare,  
Cindy-Lee Dennis**

The purpose of this methodological investigation, part of a prospective cohort study, was to test the reliability and validity of the Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF) among Aboriginal women. The sample comprised 130 breastfeeding Aboriginal women from the postpartum ward of an urban tertiary care hospital or a rural community hospital. The women provided baseline information while in hospital and were telephoned at 4 and 8 weeks postpartum for assessment of their method of infant feeding. The BSES-SF was found to be a valid and reliable tool for assessing breastfeeding self-efficacy among Aboriginal women. Significant differences were found in BSES-SF in-hospital scores among women who at 4 weeks postpartum were exclusively breastfeeding, combination feeding, or solely feeding formula ( $F(2) = 7.31, p = 0.001$ ). The authors conclude that Aboriginal women with low breastfeeding self-efficacy in the early postpartum period may be at risk for early cessation and could benefit from additional breastfeeding support.

Keywords: Aboriginal health, breastfeeding self-efficacy, health promotion, perinatal nursing, psychometrics

## **Introduction**

Due to the compelling advantages associated with human milk, breastfeeding has been identified as the optimal source of nutrition for infants (Ip et al., 2007). The American Academy of Pediatrics (2005), the Canadian Pediatric Society (2005), Health Canada (2004), and the World Health Organization (2001) all recommend that infants be exclusively breastfed for the first 6 months of life and beyond, with the addition of complementary foods.

Although rates of breastfeeding initiation have increased over the past 20 years in Canada and the United States, breastfeeding duration remains a concern, as many women discontinue breastfeeding well before current recommendations (Centers for Disease Control, 2010; Chalmers et al., 2009). Further, the majority of mothers are not exclusively breastfeeding to 6 months postpartum. Recent studies suggest that only 50% of mothers are breastfeeding at 6 months, with fewer than one in five doing

so exclusively (Centers for Disease Control, 2010; Chalmers et al., 2009; Li, Zhao, Mokdad, Barker, & Grummer-Strawn, 2003; Sheehan, Watt, Krueger, & Sword, 2006). Rates are even lower in low-income populations, minority/racial groups, and adolescents (Anderson, Damio, Chapman, & Perez-Escamilla, 2007; Mossman, Heaman, Dennis, & Morris, 2008; Ryan & Zhou, 2006). As evidence suggests that breastfeeding has a dose response effect (Ip et al., 2007; Kramer & Kakuma, 2002), low rates of breastfeeding imply that many infants may not be receiving the maximum health benefits that breastfeeding affords. This may be especially true for Aboriginal infants, as research studies have identified lower rates of both initiation and duration of breastfeeding among Aboriginal women in comparison to non-Aboriginal women (Black, Godwin, & Ponka, 2008; Martens, 2002; UNICEF, 2009). For example, a retrospective chart review of women who gave birth over the 7-year period 1997 to 2003 in Moose Factory, Ontario, found a breastfeeding initiation rate of 51.9% (Black et al., 2008) — much lower than the Canadian initiation rate of 78% during the same period. Similarly, Manitoba South First Nations reported breastfeeding initiation rates are between 43% and 65%, with only 40% to 50% of Aboriginal mothers breastfeeding to 12 weeks postpartum and 20% to 30% to 6 months (as cited in Martens, 2002).

Improving breastfeeding rates is difficult as variables influencing breastfeeding outcomes are multifactorial and complex. The reasons why some Aboriginal women breastfeed and others decide to formula feed their infant have rarely been studied (Willows, Hanley, & Delormier, 2012). Additionally, little attention has been given to how the historical, social, and community context may influence breastfeeding among Aboriginal women. One qualitative study conducted in Saskatoon, Saskatchewan, found diverse variables influencing Aboriginal women's decision to breastfeed, including contextual (sociocultural and environmental), attitudinal, cognitive (knowledge, information and beliefs), experiential (previous infant-feeding experiences), and psychological factors (Wagner, 2005). However, researchers have suggested that, to adequately address low breastfeeding rates, interventions should focus on modifiable variables.

One potentially modifiable variable is breastfeeding self-efficacy. Breastfeeding self-efficacy, defined as a mother's confidence in her perceived ability to breastfeed her infant (Dennis, 1999), has been broadly studied both theoretically and empirically. Dennis (1999) developed the Self-Efficacy Framework based on Bandura's (1977) social cognitive theory and the Breastfeeding Self-Efficacy Scale (BSES) (Dennis & Faux, 1999), which was modified to the Breastfeeding Self-Efficacy Scale-Short

Form (BSES-SF) (Dennis, 2003). Using these scales, researchers have identified breastfeeding self-efficacy as a salient variable affecting breastfeeding outcomes in diverse countries. Further, researchers have advocated for the routine assessment of breastfeeding self-efficacy and the development and testing of a breastfeeding self-efficacy-enhancing intervention.

Given the lower rates of breastfeeding among Aboriginal women, focusing on improving Aboriginal women's breastfeeding self-efficacy may be one promising intervention. However, as few studies have focused on variables affecting breastfeeding outcomes among Aboriginal women it is undetermined if the factors affecting breastfeeding are similar or different to those of non-Aboriginal women. It may be premature to assume that breastfeeding self-efficacy is a salient variable and that the BSES-SF is a valid and reliable tool for identifying Aboriginal women at risk for early discontinuation of breastfeeding due to low breastfeeding self-efficacy. The purpose of this study was to extend the psychometric testing of the BSES-SF among a sample of breastfeeding Aboriginal women in the early postpartum period.

### **Self-Efficacy Theory**

According to Bandura (1977), self-efficacy is a cognitive belief that our actions can produce the outcomes we desire. Therefore, values of self-efficacy provide the foundation for many individual behaviours, including motivation, well-being, and personal accomplishment. For example, when individuals believe that they are capable of producing a desired outcome, they are more likely to pursue the behaviour(s) that will lead to that outcome. Alternatively, if individuals believe that they are not capable of producing a desired outcome, they are less likely to act or persevere, especially if confronted with any barriers. Therefore, individuals tend to select tasks and activities that they feel confident about and to avoid those that they do not feel confident about.

Dennis's (1999) self-efficacy framework conceptualizes the role of self-efficacy in explaining and predicting behaviour. In relation to breastfeeding, the framework indicates that a woman's breastfeeding self-efficacy will influence (a) whether she chooses to breastfeed or bottle-feed, (b) her level of effort or persistence regarding breastfeeding, (c) her thought patterns, and (d) her emotional reactions to breastfeeding. Thus, the model proposes that women who are confident about their ability to breastfeed will be more likely to initiate breastfeeding, invest great effort in breastfeeding and persist if difficulties are experienced, and have positive thought patterns and emotional reactions to breastfeeding.

### **Breastfeeding Self-Efficacy Scale**

Breastfeeding self-efficacy may be measured using the BSES (Dennis & Faux, 1999) or the BSES-SF (Dennis, 2003). The BSES was originally developed as a 33-item self-report tool to measure breastfeeding confidence (Dennis & Faux, 1999). Content validity of the BSES was based on a literature review, interviews with breastfeeding women, and expert judgement, as recommended by Lynn (1986). The tool was pilot tested and then psychometrically analyzed with a convenience sample of 130 Canadian breastfeeding women. While the psychometric testing of the BSES demonstrated that it was both a valid and a reliable tool for assessing breastfeeding self-efficacy, internal consistency statistics suggested item redundancy. Consequently, an additional methodological study was undertaken and 18 items were deleted using explicit reduction criteria (Dennis, 2003), resulting in a new 14-item instrument (BSES-SF). Internal consistency using Cronbach's alpha for the BSES-SF was 0.94. Construct validity of the BSES-SF was assessed using principal components factor analysis, comparison of contrasted groups, and correlations with measures of similar constructs. Support for the predictive validity of the instrument was demonstrated through significant mean differences in BSES-SF in hospital scores between women who were breastfeeding or formula feeding at 4 and 8 weeks postpartum.

Additional methodological studies have been conducted in Australia (Creedy et al., 2003); Brazil (Oria, Ximenes, de Almeida, Glick, & Dennis, 2009; Zubarán et al., 2010); Canada (Dennis, Heaman, & Mossman, 2011; Kingston, Dennis, & Sword, 2007); China (Dai & Dennis, 2003); Poland (Wutke & Dennis, 2007); Puerto Rico (Molina Torres, Davila Torres, Parrilla Rodriguez, & Dennis, 2003); Spain (Oliver-Roig et al., 2012); Turkey (Alus Tokat, Okumus, & Dennis, 2010; Eksioğlu & Ceber, 2011); the United Kingdom (Gregory, Penrose, Morrison, Dennis, & MacArthur, 2008); and the United States (McCarter-Spaulling & Dennis, 2010). While these studies represent diverse countries and languages, they also include various cohorts of women, including adolescents (Dennis et al., 2011), ethnically diverse women in the United Kingdom (Gregory et al., 2008), and Black women in the United States (McCarter-Spaulling & Dennis, 2010). In these studies, breastfeeding self-efficacy in the early postpartum period consistently predicted breastfeeding duration and exclusivity across the postpartum period. In particular, women with low breastfeeding self-efficacy were more likely to have shorter breastfeeding duration and were less likely to exclusively breastfeed. Overall, the results of these studies suggest that the BSES is a reliable and valid measure that can be used by health professionals internationally to assess breastfeeding

self-efficacy in order to identify women at risk for early discontinuation of breastfeeding so that supportive interventions may be provided. However, prior to using the tool with Aboriginal women, further psychometric testing should be conducted.

Based on the previous testing of the BSES-SF instrument, three hypotheses were made with respect to the Aboriginal women in the present study: (1) those who had higher breastfeeding self-efficacy in the early postpartum period (in hospital) would breastfeed longer (duration) and have higher rates of breastfeeding exclusivity, (2) those who had breastfed previously would have higher breastfeeding self-efficacy than those who had not, and (3) those who had depressive symptoms would have lower breastfeeding self-efficacy.

## **Methods**

### ***Sample***

This methodological investigation was conducted as part of a prospective cohort study evaluating variables affecting breastfeeding outcomes among Aboriginal women. After hospital and university ethics approval was obtained, participants were recruited from the maternity ward at either a tertiary care centre or a rural hospital in northwestern Ontario between July 7, 2010, and March 2, 2011. Those eligible were breastfeeding Aboriginal women who had given birth to a healthy term infant and were expected to be discharged home with the infant. Aboriginal ancestry was identified by self-report. All new breastfeeding women were informed that there was a research study underway regarding breastfeeding among Aboriginal women and each woman was asked if she would like to voluntarily disclose whether she was of Aboriginal heritage. Additional inclusion criteria were ability to read and speak English and telephone accessibility for the purpose of completing follow-up questionnaires. A woman was excluded if breastfeeding could be precluded by some factor, such as infant prematurity/illness, multiple births, or maternal complications. For the purposes of the study, a woman was considered to be breastfeeding if her infant had received breast milk by breast or bottle or if she had not yet initiated breastfeeding but intended to breastfeed.

### ***Instruments***

***Baseline demographic information.*** A baseline questionnaire was administered upon the woman's entry into the study, which was usually within 48 hours postpartum. Questions addressed maternal characteristics, such as age, education, marital status, community of residence (urban or rural),

and breastfeeding goals and intentions. This questionnaire had been used in a previous breastfeeding study, which included Aboriginal women, without difficulty (McQueen, Dennis, Stremler, & Norman, 2011).

**Breastfeeding self-efficacy.** The BSES-SF is a 14-item self-report instrument (Dennis, 2003) that was used to assess breastfeeding self-efficacy at baseline (in hospital) and 4 and 8 weeks postpartum. All items were preceded by the phrase “I can always” and anchored with a five-point Likert scale ranging from *not at all confident* to *always confident*. All items were presented positively, and scores were summed to produce a range from 14 to 70, with higher scores indicating higher breastfeeding self-efficacy. The internal consistency of the tool, using Cronbach’s alpha, was .94 (Dennis, 2003).

**Depressive symptomatology.** The Edinburgh Postnatal Depression Scale (EPDS) (Cox, Holden, & Sagovsky, 1987) is a 10-item self-report instrument used to assess for depressive symptoms. Items are rated on a four-point scale to produce a summative score ranging from 0 to 30, with higher scores indicating lower maternal mood state. This instrument does not diagnose postpartum depression but rather is the most frequently used instrument for assessing postpartum depressive symptomatology (Boyd, Le, & Somberg, 2005). A cut-off score of greater than 9 was used to identify depressive symptoms (including minor depression) as recommended for non-clinical community samples (Cox et al., 1987). As no studies were found that validated the use of the EPDS among Aboriginal women in North America, use of a lower cut-off score may also increase the sensitivity of the measure (Matthey, Henshaw, Elliott, & Barnett, 2006).

**Breastfeeding duration and exclusivity.** Breastfeeding duration and exclusivity data were obtained using an infant-feeding questionnaire administered by telephone at 4 and 8 weeks postpartum. The questionnaire specifically addressed feeding method at the time of the telephone call, level of breastfeeding, and reasons for any change(s) in feeding method or level. If a women indicated that she was breastfeeding, breastfeeding level was further defined using the classification by Labbok and Krasovec (1990): (a) exclusive breastfeeding (breast milk only); (b) almost exclusive breastfeeding (breast milk and other fluids, but not formula); (c) high breastfeeding (< 1 bottle/day); (d) partial breastfeeding (at least 1 bottle of formula/day); or (e) token breastfeeding (breast given to comfort baby but not for nutrition). If a woman was no longer practising any breastfeeding (e.g., was formula feeding), the date of breastfeeding discontinuation was recorded to determine the number of weeks of breastfeeding.

### **Data Analysis**

Consistent with the original validation study of the BSES-SF (Dennis, 2003), the reliability of the BSES-SF (in hospital within 48 hours postpartum) was evaluated using the following methodological approaches. An online data-capture tool using Web-based programming was created to enable direct data entry from the survey into the data set. The online data-capture forms organized the data into a data set, which maintained a complete response for each individual. Once all data were entered and the data set was checked for errors/missing values, the data were analyzed using the Statistical Analysis System (SAS) Version 9.2 to provide the following: (a) item-summary statistics, (b) inter-item correlations, (c) corrected item correlations, (d) the reliability coefficient based on Cronbach's alpha, and (e) the reliability coefficient estimate when an item was deleted. Construct validity was assessed using factor analysis and compared to previously published constructs. The predictive validity was determined by evaluating the relationship between the instrument scores and the recorded infant-feeding method using one-way analysis of variance.

### **Results**

In total, 150 eligible Aboriginal women were approached to participate in the study. Of those, 132 (88%) agreed to take part. Of these women, 130 (98.5%) provided the baseline demographic information in hospital during the recruitment period, while 105 (80.7%) completed the 4-week infant-feeding follow-up and 102 (78.5%) completed the 8-week infant-feeding follow-up. This sample size was adequate for the analysis, as the minimum requirement for psychometric testing of the instrument has been identified as 70 (5 participants for each of the 14 items) (Dennis & Faux, 1999).

#### **Demographic Data**

The average age of the participants was 24.5 years ( $SD = 6.1$ ). While many of the women were married/common-law ( $n = 83$ , 68%), almost one third ( $n = 39$ , 32%) were single (see Table 1). Most of the women reported that their partner was supportive of their choice to breastfeed ( $n = 109$ , 85.9%). Of the participants, 70% ( $n = 89$ ) reported having a high-school education and 87.3% ( $n = 96$ ) indicated an average annual household income under \$40,000, the majority (64.5%) under \$20,000. Half of the women reported living in a city ( $n = 63$ , 42.9%). For 35% ( $n = 45$ ) of the women, this was their first baby. Of the 85 multiparas, 82% ( $n = 73$ ) had previously breastfed for various durations, with a range of 1 week to 3 years.

| Characteristic                     |                    | n (%)     |
|------------------------------------|--------------------|-----------|
| <b>Marital status</b><br>(n = 122) | Married/common law | 83 (68)   |
|                                    | Single             | 39 (32)   |
| <b>Education</b><br>(n = 128)      | Elementary school  | 13 (10.2) |
|                                    | High school        | 89 (69.5) |
|                                    | College/university | 26 (20.3) |
| <b>Income</b><br>(n = 110)         | ≤ 19,999           | 71 (64.5) |
|                                    | \$20,000–39,999    | 25 (22.7) |
|                                    | \$40,000–59,999    | 8 (7.3)   |
|                                    | ≥ \$60,000         | 6 (4.7)   |
| <b>Community</b><br>(n = 128)      | Urban              | 63 (49.2) |
|                                    | Rural              | 65 (50.8) |

### **Reliability and Internal Consistency**

The mean total BSES-SF score measured in hospital was 51.32 ( $SD = 11.74$ ), with an item mean of 3.69, ranging from 3.43 to 3.94. Internal consistency for survey responses in hospital using Cronbach's alpha was 0.95. In addition, a procedure to compute the change in the Cronbach's alpha coefficient when an item was dropped from the total set of questions indicated only a negligible change in the overall alpha estimates. Correlation coefficients between individual items and the total survey ranged from 0.65 to 0.81 for the in-hospital data collection, with no single item scoring below the recommended alpha of no less than 0.30 for item retention.

### **Construct Validity**

**Factor analysis.** Following the item analysis, the data were processed using a Pearson Product Moment Correlation procedure to produce correlation coefficients for an exploratory factor analysis. Kaiser's Measure of Sampling Adequacy was also calculated ( $MSA = 0.95$ ) to assess the appropriateness of conducting the factor analysis. The overall measure of sampling adequacy and the individual sampling adequacy estimates for each item in the survey were above 0.8, indicating that the survey was suitable for factor analysis using the exploratory approach. Next, factor analysis using *varimax* as the *orthogonal rotation* was run to determine if distinct factors (constructs) could be identified within the BSES-SF. The results of factor analysis confirmed that there was a single primary factor with an eigenvalue of 7.63 that explained 83.1% of the variance for the

BSES-SF applied to this cohort. Factor loadings (see Table 2) were all greater than the recommended .32 for item retention (Tabachnick & Fidell, 2006).

| <b>Item</b>  | <b>Loading</b> | <b>Communality</b> |
|--|----------------|--------------------|
| 1. Determine that my baby is getting enough milk                                 | .73            | .63                |
| 2. Successfully cope with breastfeeding like I have with other challenging tasks | .72            | .61                |
| 3. Breastfeed my baby without using formula as a supplement                      | .68            | .73                |
| 4. Ensure that my baby is properly latched for the whole feeding                 | .74            | .73                |
| 5. Manage the breastfeeding situation to my satisfaction                         | .83            | .79                |
| 6. Manage to breastfeed even if my baby is crying                                | .77            | .63                |
| 7. Keep wanting to breastfeed  | .73            | .60                |
| 8. Comfortably breastfeed with my family members present                         | .60            | .43                |
| 9. Be satisfied with my breastfeeding experience                                 | .79            | .74                |
| 10. Deal with the fact that breastfeeding can be time consuming                  | .66            | .55                |
| 11. Finish feeding my baby on one breast before switching to the other breast    | .72            | .67                |
| 12. Continue to breastfeed my baby for every feeding                             | .78            | .73                |
| 13. Manage to keep up with my baby's breastfeeding demands                       | .81            | .76                |
| 14. Tell when my baby is finished breastfeeding                                  | .75            | .66                |

**Correlation with other theoretical constructs.** According to Bandura's (1977) Self-Efficacy Theory, performance accomplishment (past experience) is recognized as one of the most influential sources of self-efficacy as the basis of one's personal experiences. It was therefore hypothesized that women who had previously breastfed an infant would have higher breastfeeding self-efficacy than primiparous women and multiparous women who had never breastfed. Significant differences in breastfeeding self-efficacy were found between women who had previously breastfed ( $M = 54.33, SD = 11.04$ ), primiparous women ( $M = 48.32, SD = 10.97$ ), and multiparous women who had never breastfed ( $M = 41.89, SD = 13.97; F(2) = 7.43, p = 0.0009$ ). Similarly, as low mood state may lower self-efficacy (Bandura, 1977), the relationship between breastfeeding self-efficacy and the presence of depressive symptoms was evaluated. Using an EPDS cut-off score of  $> 9$ , women were classified as having possible depressive symptoms versus not having depressive symptoms. Women who scored  $> 9$  on the EPDS at 4 weeks postpartum had significantly lower mean BSES-SF scores at 4 weeks postpartum ( $M = 49.73, SD = 11.09$ ) than women whose EPDS scores were  $\leq 9$  ( $M = 56.69, SD = 10.94; t(100) = -12.99, p < 0.001$ ).

### **Predictive Validity**

Predictive validity was determined by comparing breastfeeding self-efficacy scores measured in hospital against their reported method of infant feeding at 4 and 8 weeks postpartum using one-way analysis of variance. Statistically significant differences were found in baseline BSES-SF scores among women who at 4 weeks postpartum were exclusively breastfeeding ( $M = 56.05, SD = 9.31$ ), combination feeding ( $M = 48.24, SD = 12.72$ ), or solely formula feeding ( $M = 45.63, SD = 11.77$ ) ( $F(2) = 7.31, p = 0.001$ ). Similarly, significant differences were found in baseline breastfeeding self-efficacy scores among women who at 8 weeks postpartum were either exclusively breastfeeding ( $M = 56.74, SD = 9.38$ ), combination feeding ( $M = 49.09, SD = 13.09$ ), or formula feeding ( $M = 44.17, SD = 10.09$ ) their infants ( $F(2) = 9.33, p = 0.0002$ ).

## **Discussion**

The purpose of this study was to examine the reliability and validity of the BSES-SF with Aboriginal women. The results of the psychometric analysis are consistent with those of the original study of the BSES-SF (Dennis, 2003) and other methodological studies testing the BSES-SF with ethnically diverse samples (Alus Tokat et al., 2010; Gregory et al., 2008; Kingston et al., 2007; McCarter-Spaulding & Dennis, 2010; Wutke & Dennis, 2007; Zubaran et al., 2010). The testing of the BSES-SF

demonstrated that it is both a valid and a reliable tool for assessing breastfeeding self-efficacy among Aboriginal women. In particular, the high Cronbach's alpha is comparable to the original BSES-SF Cronbach's alpha of 0.94 (Dennis, 2003) and exceeds the recommended alpha for established instruments (Nunnally & Bernstein, 1994). The overall mean BSES-SF scores in hospital (51.32) were slightly lower than the original scales mean of 55.88 (Dennis, 2003), as was the item mean (3.69 vs. 3.99) and the item range (3.43–3.94 vs. 3.71–4.13). Direct comparison of BSES-SF scores between studies requires further analysis. However, since Canadian surveys have identified Aboriginal women as having lower breastfeeding rates than the general population of women, it is possible that breastfeeding self-efficacy was one variable affecting breastfeeding outcomes among this cohort of Aboriginal women (Black et al., 2008; Martens, 2002; UNICEF, 2009). Further evaluation of breastfeeding self-efficacy is required before any specific conclusions can be drawn.

The evidence for construct validity is consistent with the results of previous research (Alus Tokat et al., 2010; Creedy et al., 2003; Dennis, 2003; Dennis & Faux, 1999; McCarter-Spaulding & Dennis, 2010; Molina Torres et al., 2003) and with breastfeeding self-efficacy theory (Dennis, 1999). In particular, multiparous women who had breastfed previously had significantly higher breastfeeding self-efficacy than primiparous women. A negative correlation between breastfeeding self-efficacy and depressive symptoms has also been found previously (Dai & Dennis, 2003; Dennis, 2003; Zubarán et al., 2010), suggesting that depressive symptoms influence maternal breastfeeding cognitions and behaviours.

The negative relationship between depressive symptoms and infant-feeding method was identified in a time-sequence analysis whereby women with depressive symptoms at 1 week postpartum were significantly more likely to discontinue breastfeeding by 4 or 8 weeks postpartum (Dennis & McQueen, 2007). Similarly, a qualitative systematic review found that women with depressive symptoms in the early postpartum period may be at risk for negative feeding outcomes, including decreased breastfeeding duration, decreased levels of exclusive breastfeeding, decreased breastfeeding self-efficacy, and increased breastfeeding difficulties (Dennis & McQueen, 2009). Thus, identification of women with depressive symptoms is required not only to reduce the negative effects of postpartum depression but also to promote increased rates of breastfeeding duration and exclusivity.

Perhaps the most clinically significant finding of the present study is the predictive validity of the BSES-SF. This finding is consistent with those of other studies that have reported a strong relationship between breastfeeding self-efficacy and duration (Alus Tokat et al., 2010; Dai & Dennis, 2003; Gregory et al., 2008; Molina Torres et al., 2003; Mossman

et al., 2008; Oria et al., 2009; Wutke & Dennis, 2007; Zubaran et al., 2010). It is also congruent with the breastfeeding framework (Dennis, 1999) and provides health professionals an opportunity to identify women in hospital who are at high risk for discontinuing breastfeeding.

The benefit of using the scale with Aboriginal women is twofold. First, health professionals can use the BSES-SF as a tool for identifying Aboriginal women at risk for early discontinuation of breastfeeding due to low breastfeeding self-efficacy so that supportive interventions can be initiated. Extensive research suggests that the addition of support (professional and/or peer) is effective in increasing rates of breastfeeding duration and exclusivity (Britton, McCormick, Renfrew, Wade, & King, 2007; Hannula, Kaunonen, & Tarkka, 2008). This finding is consistent with that of a chart audit conducted among First Nations women in Sagkeeng, Manitoba, on the effectiveness of two community breastfeeding initiatives: prenatal instruction by a community health nurse, and postpartum support by a peer counsellor (Martens, 2002). The women who received postpartum peer counselling were significantly less likely to wean by 8 weeks postpartum and reported fewer problems with breastfeeding and greater satisfaction with breastfeeding. Second, the individual items of the BSES-SF can be used to identify specific areas of high or low breastfeeding self-efficacy. This type of assessment focuses on the individual needs of women so that interventions can be woman-centred and based on maternal goals (Hoddinott, Craig, Britten, & McInnes, 2012). In particular, noting women's individual responses to each of the 14 BSES-SF items can identify where a woman scores high (4–5) and where she scores low (1–3). This fosters a strengths-based approach (Smith, Edwards, Martens, & Varcoe, 2007) whereby the new mother's confidence (high-scoring items) can be acknowledged and reinforced. Strategies to specifically address low-scoring items such as difficulty latching, perception of insufficient milk, or discomfort feeding in the presence of family members may also be implemented using the four sources of self-efficacy information: (1) performance accomplishment (past experience), (2) vicarious experience (observation of others), (3) verbal persuasion (encouragement), and (4) physiologic states (emotional arousal) (Bandura, 1977). This type of intervention has been pilot tested, with preliminary findings identifying a trend towards improved breastfeeding self-efficacy, duration, and maternal satisfaction (McQueen et al., 2011).

However, some caution is warranted in developing breastfeeding interventions for Aboriginal women. While this study provides preliminary evidence of the reliability and validity of the BSES-SF, interventions for Aboriginal women who are breastfeeding must be culturally sensitive as well as effective. Historically, Aboriginal women breastfed their infants and learned traditional childbearing and breastfeeding methods from

members of their community, including their mothers and grandmothers (Dodgson & Struthers, 2003). Thus, strategies such as community-based approaches that include grandmothers, Elders, and/or peers may be appropriate (Martens, 2002). Smith and colleagues (2007) suggest that key factors in developing breastfeeding programs are acknowledging and incorporating cultural values and norms, tribal customs, and intellectual traditions.

Limitations of the study include self-report to obtain breastfeeding outcomes. Although researchers have documented a high level of accuracy in self-report feeding practices (Launer et al., 1992), others report that preventive health behaviours tend to be overestimated (Bowman, Redman, Dickinson, Gibberd, & Sanson-Fisher, 1991). Additionally, while the sample size was theoretically adequate for analysis, the loss to follow-up from baseline to 8 weeks postpartum was high, at 21.5%. Finally, the sample comprised Aboriginal women who were breastfeeding their healthy term infants and residing in northwestern Ontario. Many women were not eligible to participate because they had decided to formula feed and/or had an infant who was premature or in neonatal intensive care. Thus, the findings are not generalizable to all Aboriginal women.

### **Conclusion**

Psychometric testing of the BSES-SF revealed that it is both a reliable and a valid tool for assessing breastfeeding self-efficacy in a sample of Aboriginal women. Further research is needed regarding variables affecting breastfeeding among Aboriginal women and effective interventions that are culturally sensitive.

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*Karen A. McQueen, RN, PhD, is Associate Professor, School of Nursing, Lakehead University, Thunder Bay, Ontario, Canada. William J. Montelpare, PhD, is Professor and Margaret and Wallace McCain Chair in Human Development and Health, Department of Applied Human Sciences, University of Prince Edward Island, Charlottetown, Canada. Cindy-Lee Dennis, PhD, is Professor, Lawrence S. Bloomberg Faculty of Nursing, University of Toronto, and a Senior Scientist, Women's College Research Institute, Toronto, Ontario.*

*Résumé*

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**Résultats en matière de santé maternelle  
et infantile et pratique infirmière  
dans une communauté des Premières Nations  
en région éloignée au Canada**

**Denise S. Tarlier, Joy L. Johnson, Annette J. Browne, Sam Sheps**

Notre article présente des conclusions touchant la santé maternelle et infantile obtenues dans le cadre d'une étude ethnographique sur la pratique infirmière, la continuité des soins et les résultats de santé dans une communauté autochtone éloignée située au nord du Canada. L'usage de sources de données multiples suivant une méthode ethnographique a permis d'interpréter les résultats de santé quantitatifs en les situant dans le contexte particulier de la communauté à l'étude. L'échantillon comprenait les dossiers médicaux de 65 mères et de 63 nourrissons sélectionnés aléatoirement aux fins d'une étude rétrospective. On constate des résultats sous-optimaux en matière de santé maternelle et infantile pour plusieurs des critères indicateurs retenus. Les auteurs abordent les séquelles à long terme de l'état de santé de la mère et de l'enfant relativement au diabète et à d'autres maladies chroniques chez les Premières Nations. Ils explorent les implications découlant de ces observations en ce qui a trait à la préparation des infirmières en matière de prestation des soins primaires pré- et postnataux dans les communautés autochtones éloignées.

Mots clés : Autochtones, Premières Nations, communauté éloignée, soins primaires, continuité des soins, santé maternelle, santé infantile

# **Maternal-Infant Health Outcomes and Nursing Practice in a Remote First Nations Community in Northern Canada**

**Denise S. Tarlier, Joy L. Johnson, Annette J. Browne, Sam Sheps**

This article reports those findings related to maternal-infant health outcomes of an ethnographic study that explored nursing practice, continuity of care, and health outcomes in one remote First Nations community in northern Canada. Use of multiple data sources within an ethnographic design ensured that quantitative health outcomes data were interpreted within a contextualized understanding of the remote First Nations community. The sample comprised the charts of 65 mothers and 63 infants randomly selected for retrospective chart review. The findings suggest suboptimal maternal-infant health outcomes on several of the health indicator criteria identified for the purposes of this study. The authors discuss long-term sequelae of prenatal and infant health in terms of diabetes and other chronic health conditions in First Nations populations. They explore the implications of these findings in relation to nurses' preparation to offer prenatal and infant primary care in remote First Nations communities.

**Keywords:** Aboriginal, First Nations, remote communities, nursing practice, primary care, continuity of care, maternal health, infant health, health outcomes, health indicator conditions

The exponential increase of type 2 diabetes and other chronic health conditions in Canadian Aboriginal populations (Adelson, 2005; Romanow, 2002; Shah, Hux, & Zinman, 2000; Young, Reading, Elias, & O'Neil, 2000) demands a close examination of factors experienced during pregnancy and infancy that potentially contribute to the development of these conditions. Ensuring optimal maternal-infant health care is a key strategy for decreasing risk factors that predispose individuals to chronic health challenges in later life (Cianfarana, Germani, & Branca, 1999; Eriksson, Forsén, Tuomilehto, Osmond, & Barker, 2000; Weindrich, Jennen-Steinmetz, Laucht, & Schmidt, 2003). Indeed, improved maternal-infant health care may help to break the cycle of diabetes as well as other chronic health conditions being perpetuated in successive generations (Health Council of Canada, 2011).

The purpose of this article is to report the findings related specifically to maternal and infant health outcomes in one remote First Nations community in the northern region of a western Canadian province. We

discuss some of the long-term sequelae of maternal and infant health in terms of prevalent chronic health conditions in First Nations populations, and we explore the implications of these findings in relation to nurses' role as providers of maternal and infant primary care.

Our intent is not to contribute to the growing body of health literature that tends to pathologize Aboriginal people and health concerns. Also, we wish to be clear that nurses' practice is but one of several complexly interwoven factors that influence health outcomes in the "bigger picture" of the context, structure, and processes of health-service delivery at the study site. The policies and structures that have shaped health services for Aboriginal people in Canada, including the preparation of nurses to provide primary care in remote Aboriginal communities, demand critical examination (Tarlier & Browne, 2011). Significant maternal-infant health inequities persist within some Aboriginal populations (Luo et al., 2004, 2010; Wassimi et al., 2010). Nurses, as the main providers of primary care in remote communities, have an important role to play in redressing such inequities (Tarlier, Browne, & Johnson, 2007).

## **Background**

Nurses employed in remote First Nations communities are responsible for not only the provision of primary care but also for community health nursing, public health care, and, often, the non-nursing health services that in more urban centres are generally provided by an interdisciplinary team of health providers (Tarlier & Browne, 2011). Historically, nurses working in remote northern settings were recognized for the quality of their care (Robertson, 1973), although there have been no evaluative outcome studies conducted to substantiate this claim.

The World Health Organization (1978) has long recognized maternal and infant health as a cornerstone of healthy communities and the primary health care model. Improving maternal and infant health outcomes remains one of the key United Nations Millennium Development Goals (United Nations, 2010). Providing primary care for infants and women has traditionally been an integral component of nursing practice in remote Aboriginal communities (Tarlier et al., 2007). First Nations women carry a disproportionate burden of prenatal and perinatal risk compared to other Canadian women (Reading, 2009), further suggesting that primary prenatal care is a critical element of health services in First Nations communities. For example, framing these within a context of socio-economic and geographic inequity, Reading identifies gestational diabetes, obesity, smoking, and alcohol use as maternal risk factors of particular relevance to the development of chronic disease in First Nations populations.

Two recent studies of birth outcomes and infant mortality in rural and remote populations in the Canadian provinces of Manitoba (Luo et al., 2010) and British Columbia (Luo et al., 2004) found that, in these provinces, the risk of infant mortality in First Nations populations is almost twice that of non-First Nations populations. In a study of community remoteness, perinatal outcomes, and infant mortality in First Nations communities in the province of Quebec, Wassimi et al. (2010) found similar results:

Living in more remote First Nations communities was associated with a substantially higher risk of fetal and infant death, especially postnatal death, indicating a need for more effective perinatal and infant care programs, as well as improvement in the underlying social determinants of health in such communities. (p. 37)

In light of these gaps, an ethnographic study was undertaken for the purpose of examining nursing practice, maternal-infant health outcomes, and continuity of care within the context of one remote First Nations community in northern Canada. Recognizing that nurses do not work in a vacuum, but within a community context and a structure of health-services delivery that predictably influences continuity of care and patient health outcomes, we also explored aspects related to the context of the local community and health-services system. Thus, the research was guided by two secondary research objectives: (a) to explore how specific aspects of the community and the health-care delivery system at the study site supported or hindered informational, management, and relational continuity of care (Reid, Haggerty, & McKendry, 2002),<sup>1</sup> as well as nurses' ability to influence clinical health outcomes; and (b) to explore the clinical, procedural, and cultural core knowledge that nurses demonstrated in the process of providing primary care to mothers and infants.

The findings related to clinical health outcomes presented in this article represent only one component of the broad, mixed-method ethnographic study. This study was informed by critical perspectives of social justice and equity in health care (Anderson et al., 2009; Browne, Smye, & Varcoe, 2005; Browne & Tarlier, 2008; Reimer-Kirkham & Browne, 2006). As discussed in Browne and Tarlier (2008), a critical social justice lens draws attention to why certain individuals and groups bear a disproportionate burden of illness and suffering, what social conditions contribute to disparities in health and social status, and what role nurses can play in responding to these inequities (p. 83).

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<sup>1</sup> "Relational continuity" refers to ongoing patient-provider relationships and consistency of providers. "Informational continuity" refers to the transfer of information and the accumulated knowledge of a patient. "Management continuity" refers to coordination and consistency in treatment approaches, and flexibility, or an individualized approach to care (Reid et al., 2002).

In a previous article (Tarlier et al., 2007), we describe how nursing practice and continuity of care were influenced by the geographical and social location of the study site: a nursing station located in a remote First Nations community. Nurses were often challenged to provide primary health care within the historical and sociopolitical context of health-service delivery to Aboriginal people in Canada, as well as in the context of remoteness, isolation, difference, and inequity. For example, nurses' experiences were shaped by First Nations community and cultural contexts and the need to respond to the social and economic circumstances of people's lives, including inequitable access to the social determinants needed to support good health. The nurses' lack of preparation for these differences and for the social inequities and burden of ill health they encountered contributed to a process of social distancing and relational disengagement (Tarlier et al., 2007).

When this study was conceptualized, collecting data from a variety of sources was considered key to our understanding of the social and community context that influenced not only continuity of care and health outcomes, but also nurses' practice at the study site. Exploring health outcomes specific to the study site offered one window onto the contextual, structural, and process issues at the site that influenced nurses' practice and the continuity of patient care.

## Methods

In order to examine the key health outcomes of mothers and their infants, we collected qualitative and quantitative data through a systematic chart review. The practice setting was a primary health care facility serving a First Nations population living on a reserve in a northern region of a western Canadian province.

This research was guided by the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*, and in particular by Section 6, Research Involving Aboriginal Peoples (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada, 1998).<sup>2</sup> Prior to commencement of the study, ethical approval was obtained from an accredited University Behavioural Research Ethics Board. Approval to conduct the research at the site was obtained from the appropriate stakeholders at the regional administrative level as well as from the band council on behalf of the community.

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<sup>2</sup> The version of the *Tri-Council Policy Statement* in effect at the time this study received ethical approval was the 1998 first edition, prior to the 2005 amendment. A more recent edition is now in effect.

### **Sample**

The charts of 65 mothers and 63 infants ( $N = 128$ ) were randomly selected for retrospective chart review based on infant delivery date. The intention was to review the charts of mother-infant dyads. However, early in the chart-review process, data had already been extracted from the charts of two mothers when it was determined that the charts of their two infants could not be located. The data extracted from the two maternal charts was retained in the sample on the basis that each provided rich data at the individual level. However, future sampling ensured that both charts for a mother-infant dyad were available prior to reviewing either one. A dyad was eligible for inclusion in the study if the infant had been delivered within the 2-year period preceding data collection, in fall 2004, and if the mother was a “treaty” member of the local First Nations band and a resident of the study site community. Each of the 65 women had received some or all of her prenatal care at the nursing station, which was operated by the First Nations and Inuit Health Branch (FNIHB),<sup>3</sup> the branch of Health Canada responsible for providing health services to First Nations people living on rural and remotely located reservation lands in Canada. Of the 63 infants in the sample, approximately half were male (33) and half female (30).

### **Data Abstraction and Analysis**

Data collection and analysis were directed and guided by the research objectives and the adaptation of the Nursing Role Effectiveness Model (NREM) (Irvine, Sidani, & McGillis Hall, 1998) conceptual framework that guided this study. The adapted NREM, itself an adaptation of Donabedian’s (1980) work, specified structure, process, and outcome factors identified in the literature that were thought to influence the practice of nurses working in remote First Nations settings. It was further adapted to the purposes of this study by incorporating conceptual work on relational, informational, and management continuity of care (Reid et al., 2002). Specific questions designed to target the collection of data addressing each identified factor were explicated in the data-collection protocol.

Two data-abstraction tools were developed to guide extrapolation of clinical health outcomes data, one for each of two health indicator conditions: (a) maternal prenatal care, and (b) care of the infant through the first year. The decision to base chart data collection on these two indicator conditions was founded on the expectation (confirmed during pilot

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<sup>3</sup> Since renamed First Nations and Inuit Health (FNIH). For the purposes of this article we will continue to refer to this branch of Health Canada by the name in use when the study was conducted.

testing) that these two groups of patients would provide a sufficiently large sample for the purpose of this study. Each indicator condition was managed primarily by nurses at the study site, although referral to a physician or other health-care provider as an appropriate intervention was an option, allowing us to explore continuity of care as well as clinical health outcomes. Moreover, as discussed above, maternal-infant health is considered one of the core activities of nurses' practice in remote primary health care settings.

Data-abstraction tools were based on health indicator conditions and criteria originally developed for the Burlington Randomized Trial of nurse practitioner practice (Sibley et al., 1975). Subsequent studies supported the validity of using these health indicator conditions and criteria to assess the effectiveness of primary care delivered by physicians (Sheps & Robertson, 1984; Sibley, 1976) and midwives (Buhler, Glick, & Sheps, 1988). The criteria were further updated and modified to reflect current evidence-based clinical practice guidelines (e.g., Canadian Medical Association guidelines) and clinical practice expectations of nurses providing primary care in FNIHB health centres. Each data-abstraction tool included items related to patient demographic variables as well as criteria-based items related to completeness of chart documentation, routine and non-routine interventions, referrals and follow-up, and prenatal and infant clinical outcomes. The prenatal data-abstraction tool contained 50 items; the infant tool contained 22 items. Data were manually abstracted from patient charts in accordance with data-abstraction instrument protocols developed for this study.

Descriptive statistics related to outcomes of maternal prenatal health were collected on four clinical health outcomes: (a) gestational age at delivery, (b) birth weight, (c) labour and/or delivery complications, and (d) postpartum follow-up. Descriptive statistics related to outcomes of infant care through the first year were collected on three clinical health outcomes: (a) up-to-date routine immunizations at 12 months (or at the time of the chart review if an infant was under 12 months at the time of the review), (b) satisfactory weight gain at 12 months (or at the most recent documented weight if under 12 months at the time of the chart review), and (c) a documented hemoglobin within normal parameters between 6 and 12 months of age. Data related to health outcomes were collected nominally; that is, the criteria for each outcome were met or not met. The adapted and modified instruments were pilot tested with a small sample ( $n = 20$ ) of patient charts that were sampled from a time outside of the defined study period. These charts were identical, in format and type of content, to the charts of patients later included in the sample. Findings of the pilot study were consistent with the findings of the larger study.

Quantitative data related to patient demographics and health outcomes were extracted from patient charts and analyzed using both Excel and SPSS 10 software. Statistical data were primarily categorical and ordinal; therefore, statistical analysis was limited to descriptive and comparative statistics. This analytic approach was sufficient to meet the purposes of the study, which was to describe patient health outcomes on the two indicator conditions and to complement and enrich the qualitative data analysis related to continuity of care and nursing practice (Tarlier et al., 2007).

Qualitative data were abstracted from patient charts in narrative form, as “contextual notes”: a brief synopsis of each chart based on review of the chart as a whole. The meaning of a contextual note was reflected upon in an accompanying interpretive memo. The contextual notes and interpretive memos provided context and an analytical strategy to help “explain” the quantitative data and missing or unclear chart information. The quantitative data described what was found on chart review; the contextual notes created the possibility for also understanding the *how* and *why* of the quantitative data. While a full report on the narrative data is beyond the scope of this article, two examples of how the contextual notes informed and enriched the quantitative data analysis are offered in Figure 1.

| <b>Figure 1 Contextual Notes Data</b>   |
|---|
| <b>Example A: Maternal Health Outcomes</b>  |
| 27-year-old grand multip. Pregnancy diagnosed about 7 weeks gestational age, initial work-up done at 18 weeks. Seen by four different RN providers on a total of four visits for prenatal care. Gestational diabetic. Anemic throughout pregnancy: hemoglobin less than 80 g/L at 30 weeks despite iron therapy. Induced vaginal delivery at 40 weeks due to gestational diabetes. Babe weighed less than 3500 grams. “Small” postpartum hemorrhage: hemoglobin 86 g/L after delivery. Developed unspecified postpartum infection requiring IV antibiotics prior to hospital discharge [to home community]. No evidence of postpartum follow-up re: infection or anemia, or of a routine postpartum check at 6 weeks. |
| This patient had requested a referral for tubal ligation [TL] prior to this pregnancy. A referral was sent to a gynecologist at about the same time that the patient became pregnant again. There is no evidence that options to terminate the pregnancy were discussed with the patient at the time she had the pregnancy diagnosed at 7 weeks’ gestation. An RN documented during a routine prenatal visit that the patient stated she did not desire further pregnancies. The referral gynecologist was also the attending obstetrician [i.e., at delivery]. There was no evidence in the chart of postpartum follow-  |

up or of a postpartum check at 6 weeks. [At the time of chart review] this woman is currently pregnant again, having conceived about 9 months post delivery. Did the communication re: desired TL fall through a gap and if so, where and how?

**INTERPRETIVE MEMO:** This case is an exemplar of fragmented care between providers, with very significant consequences. This woman was at-risk for further [high risk] pregnancies due to several risk factors, including diabetes, anemia, and parity, and had requested a TL. Yet she has gone through at least 2 further pregnancies since her initial request, due to fragmented care. Why was no one listening and acting to expedite her request?

### **Example B: Infant Health Outcomes**

Infant delivered at term, 3200 grams, healthy. Adolescent mom. No maternal prenatal care until 35 weeks' gestation. Followed by Public Health Nurse in [urban referral centre] during first two weeks. Referred infant for close follow-up when back in home community due to slow weight gain in the first 2 weeks and also concerns noted re: parenting. Referral letter from PHN was on the patient chart. The infant was rarely seen at the nursing station during the first ten months but then marked increase in frequency of visits for minor illnesses. Poor weight gain was evident by the 3-month visit; MD advised monthly follow-up of growth, which was not done. Hemoglobin was not checked in the first year. Some chart entries note "well child," yet failure to thrive was diagnosed at 13 months. Child was eventually referred to a pediatrician before age 17 months due to growth concerns and a draining ear. By the time the referral took place, weight had reached the 10th percentile, which was interpreted by pediatrician as an improvement. Hemoglobin was 109 g/L (i.e., low) when checked at 17 months.

**INTERPRETIVE MEMO:** It was difficult to reconstruct the sequence of care experienced by this infant due to the quality of documentation available. However, what was clear was that this infant was identified as at-risk at age 2 weeks and a referral was made which was evidently not followed through on in the community. I suspect the growth chart was not completed at all until a visit for minor illness at age 9 months. It looks like one nurse then transferred previous chart entries (i.e., from the narrative notes and the Child Health Record) of the infant's weight to a growth chart, and determined that the infant was not gaining weight satisfactorily. Significantly, the infant had been seen by the community PHN about 2 weeks prior to this visit; she had not noted any concern re: weight gain, and had noted that the child could be seen "after 1st birthday for MMR vaccine." Thus, this was an at-risk infant, identified as such early on at 2 weeks yet somehow fell through the cracks time after time, and received care that might be most generously characterized as haphazard. This was likely due to a combination of factors, one of which was possibly caregiver compliance. However, it seems that health providers dropped the ball on several occasions as well. There is no evidence of a proactive approach being taken.

## Results

### Maternal Health Outcomes

Maternal age and gravida status are presented in Table 1. The rate of births to adolescent mothers (i.e., 19 years and younger) in the sample was high (almost 31%). Close to 28% of the mothers were primigravid, while 6% had experienced five or more previous viable births.

| Variable               | %    | Range | Median |
|------------------------|------|-------|--------|
| <b>Age (years)</b>     |      | 14–39 | 22     |
| 14–19                  | 30.8 |       |        |
| 20–25                  | 41.5 |       |        |
| 26–29                  | 21.5 |       |        |
| 30–39                  | 6.2  |       |        |
| <b>Gravida status</b>  |      | 1–12  | 2      |
| Primiparous            | 27.7 |       |        |
| Para 2–4               | 66.1 |       |        |
| Grand multiparity (5+) | 6.2  |       |        |

The data related to maternal health outcomes are presented in Table 2. Notably, while close to three quarters (73%) of the women in the sample achieved satisfactory perinatal outcomes on two or more of the criteria, only four (6%) achieved a satisfactory outcome on all four criteria.

Premature births (i.e., births occurring before 37 completed weeks gestation) accounted for 21.5% of births in the sample. Births past 42 weeks gestation accounted for 3% of births.<sup>4</sup>

Birth weight ranged from 1,347 to 4,936 grams, with a mean of 3,498 (*SD* = 642) and a median of 3,577. Of the sample, 6% had low birth weight (under 2,500 grams) and 19% had high birth weight (over 4,000 grams). Thus, while 75% of birth weights fell within the desirable range of 2,500 to 3,999 grams (i.e., the range associated with better long-term health outcomes; Health Canada, 2011), 25% fell outside the desirable range.

<sup>4</sup>Planned interventions such as induction of labour or Caesarean section were routinely implemented past 42 weeks gestation. It should also be noted that since sample selection was dependent on recorded live births, any premature or post-date births that resulted in fetal death would not have been included in the chart review; therefore, the number of pregnancies that terminated in premature or post-date delivery may be higher than indicated by these data.

| Clinical Health Outcome Criteria                                     | Range       | Median | SD   | Frequency | %    |
|--|-------------|--------|------|-----------|------|
| <i>Gestational age at delivery between 38 and 41 completed weeks</i> | 34–42       | 39     | 1.98 | 49/65     | 75.4 |
| <i>Birth weight between 2,500 and 3,999 grams</i>                    | 1,347–4,936 | 3,577  | 642  | 49/65     | 75.4 |
| <i>Delivery free of complications</i>                                |             |        |      | 39/65     | 60.0 |
| <i>Postpartum visit made</i>   |             |        |      | 10/65     | 15.4 |
| 3 outcomes achieved (100%)   |             |        |      | 4/65      | 6.2  |
| 2 outcomes achieved (67%)  |             |        |      | 32/65     | 49.2 |
| 1 outcome achieved (33%)   |             |        |      | 12/65     | 18.5 |
| 0 outcomes achieved (0%)   |             |        |      | 13/65     | 20.0 |
| <i>Gestational age at delivery (completed weeks)</i>                 |             |        |      |           |      |
| < 37   |             |        |      | 14/65     | 21.5 |
| 38–41  |             |        |      | 49/65     | 75.4 |
| > 41   |             |        |      | 2/65      | 3.1  |
| <i>Birth weight (grams)</i>  |             |        |      |           |      |
| < 2,500  |             |        |      | 4/65      | 6.2  |
| 2,500–3,999  |             |        |      | 49/65     | 75.4 |
| > 3,999  |             |        |      | 12/65     | 18.5 |

| Description of Complication  | Age | Para |
|--|-----|------|
| Postpartum hemorrhage, anemia postpartum                               | 22  | ★    |
| Multiple gestation, premature delivery at 36 weeks                     | 20  | ★    |
| Multiple gestation, premature labour, C-section at 34 weeks            | 20  | 2    |
| Postpartum hemorrhage  | 23  | ★    |
| DM, macrosomia, 2-degree tear, hemoglobin 55 postpartum                | 21  | 0    |
| Type 1 diabetes, multiple gestation, C-section at 34 weeks             | 24  | ★    |
| Uncontrolled HTN, type 1 diabetes, macrosomia, C-section at 37 weeks   | 26  | 2    |
| Persistent anemia, low birth weight, C-section for failure to progress | 19  | 0    |

*Health Outcomes in a Remote First Nations Community*

|   |    |   |
|---|----|---|
| Anemia, HTN, induced at 37 weeks  | 17 | 0 |
| Renal failure, multiple gestation, HTN > PIH, SVD at 37 weeks   | 27 | 4 |
| Persistent UTIs, septic infant, NICU x < 1 week   | 17 | 1 |
| Anemia, elevated BP, macrosomia, C-section at 41 weeks for failure to progress  | 24 | 1 |
| Grand multiparity, anemia, GDM, induced 2° GDM, postpartum hemorrhage, infection  | 27 | 8 |
| Uncontrollable postpartum hemorrhage > hysterectomy, anemia, wound infection  | 18 | 1 |
| Untreated UTI > premature delivery at 34 weeks in nursing station   | 17 | 1 |
| C-section at 34 weeks for PIH and GDM > infant NICU x < 1 week  | 34 | 4 |
| Primiparous SVD in nursing station at 37 weeks (39 weeks per fetal assessment)  | 17 | 0 |
| Anemia, DM, macrosomia, induced at 41 (42) weeks 2° oligohydramnios, C-section for failure to progress, CPD   | 27 | 0 |
| PIH, induced at 39 weeks  | 18 | 1 |
| Anemia, PROM at 36 weeks, induction   | 29 | 1 |
| GDM, elevated BP, C-section (breech)  | 18 | 1 |
| Type 1 diabetes, delivery at 35 weeks, infant had significant congenital abnormalities  | 30 | 3 |
| DM, premature delivery at 36 weeks, C-section   | 23 | 0 |
| Anemia, PROM, premature delivery at 37 weeks, medevac   | 20 | 0 |
| Anemia, DM, elevated BP   | 29 | 3 |
| Anemia, spotting at 34 weeks, labour at 41 weeks, C-section for failure to progress, fetal distress > anesthetic complications (GA) > ongoing maternal sequelae | 23 | 3 |
| Postpartum hemorrhage   | 17 | 0 |
| Persistent UTIs, PIH, pre-eclampsia, failed induction, C-section at 36 weeks  | 20 | 0 |
| Grand multiparity, renal failure, anemia, premature delivery at 36 weeks  | 29 | 6 |
| <i>Note: * indicates missing data.</i>  |    |   |

| <b>Table 4 Infant Health Outcomes (N = 63)</b>                  |                  |                      |
|---|------------------|----------------------|
|   | <b>Frequency</b> | <b>%</b>             |
| <b>Clinical health outcome criteria</b>                         |                  |                      |
| Weight gain satisfactory at 12 months (or for age)              | 37/63            | 59                   |
| Hemoglobin within normal limits (6–12 months)                   | 23/58            | 40                   |
| Immunizations up to date for age <sup>a</sup>                   | 24/63            | 38                   |
| <b>Number of infant health outcomes achieved by each infant</b> |                  |                      |
| 3 (100%)  | 7/63             | 11                   |
| 2 (67%)   | 21/63            | 33                   |
| 1 (33%)   | 21/63            | 33                   |
| 0 (0%)  | 14/63            | 22                   |
| <b>Infant immunization rates</b>                                |                  |                      |
| Up to date at   |                  |                      |
| 2 months  | 23/63            | 36.5                 |
| 4 months  | 7/60             | 11.7                 |
| 6 months  | 3/59             | 5.1                  |
| 12 months <sup>a</sup>  | 17/51            | 33.3                 |
|   |                  | <b>Unimmunized %</b> |
|   |                  | 63.5                 |
|   |                  | 88.3                 |
|   |                  | 94.9                 |
|   |                  | 66.7                 |

<sup>a</sup> The apparent discrepancy in the data related to "up to date for age" (38%) and rate at 12 months (33.3%) is explained by the fact that a few infants in the second round of sampling had not reached their first birthday at the time of the study. In these cases, infants were deemed to have up-to-date immunization status if their immunizations were up to date for their age at the time of the chart review.

The Prenatal Data Abstraction Protocol defines several specific “complications” of pregnancy, labour, and delivery. Review of the descriptive data related to perinatal complications revealed that pre-existing health conditions (e.g., diabetes, hypertension) and conditions that developed during pregnancy (e.g., infections, anemia, pregnancy-induced hypertension, gestational diabetes mellitus, macrosomia) were frequently associated with premature labour and delivery and with interventions such as induction of labour and Caesarean section (see Table 3). These interventions in turn carried a higher degree of risk of poor outcome, such as wound infection and anesthetic complications.

Of the 65 women in the sample, 29 (44.6%) experienced a complication of pregnancy, labour, or delivery. Caesarean section was included as a complication only if there was reasonable evidence in the patient’s chart to suggest the procedure was related to a complication of pregnancy or labour. For instance, elective C-sections or planned C-sections for certain malpresentations (e.g., breech, transverse lie) were not included as complications, whereas C-sections for macrosomia or fetal distress were. Of the 65 women, 11, or just under 17%, underwent C-section as a complication of pregnancy, labour, or delivery. However, because of the inclusion of planned C-sections, the C-section rate in this sample increased to 24.6%.

Complications of pregnancy were often found in conjunction with pre-existing maternal chronic health conditions or illnesses such as diabetes or renal disease. Of the 65 women, 10 (15%) had a diagnosis of diabetes during pregnancy, either pre-existing, gestational, or undetermined. Similarly, nine (13.8%) were identified as having elevated blood pressure in pregnancy, either pre-existing or pregnancy-induced. Anemia during pregnancy was not included as a complication unless it appeared to be persistent or profound. Thus the prevalence of anemia in the sample was in fact higher than indicated in Table 3.

### ***Health Outcomes in Infancy***

Data on infant health outcomes are presented in Table 4. At age 2 months, 36.5% of infants were fully immunized. However, by 4 months less than 12% were fully immunized and by 6 months only 5% were fully immunized. While immunization rates increased again by age 12 months, over two thirds of infants were not fully immunized at the time of their first birthday.

Of the 58 infants who had passed 6 months of age at the time of the chart review, 23 (40%) had a documented hemoglobin value that was within normal parameters for the infant’s age at the time of screening (i.e., 110–150 g/L at age 12 months, or 105–145g/L if screened at age 6 months only). Of the sample, 60% had either not been screened in

accordance with FNIHB clinical guidelines or had been screened and identified as having low hemoglobin. Of the 37 infants who had been screened, 14 (38%) had a low hemoglobin value. The lowest infant hemoglobin value noted was 82 g/L. Contextual Notes Data Example B provides contextual data related to anemia and poor weight gain in infancy (see Figure 1).

## Discussion

The clinical health outcomes described here and their implications are disturbing on three levels. The findings reflect not only sub-optimal clinical health outcomes but also sub-optimal outcomes in maternal and infant health specifically: two target areas of the Millennium Development Goals (United Nations, 2010). The possibility that the most basic of maternal-child health outcomes remain in jeopardy in a developed and wealthy nation such as Canada raises serious concerns; as a privileged nation, “Canada has led the world in understanding health promotion and population health” (Canadian Institute for Health Information, 2002, p. 1). These outcomes are at odds with a national philosophy of health care that espouses fundamental values of equity and high-quality care for all. Moreover, and on more immediate and pragmatic grounds, poor maternal-infant health outcomes are associated with the conditions and diseases of later life that increasingly challenge the health of Aboriginal people, such as diabetes.

A comprehensive discussion of the implications of each of the health outcomes described in the previous section is beyond the scope of this article. Thus, the discussion here will focus on the sequelae and implications of selected maternal and infant health outcomes and the implications related to nurses’ role in providing primary prenatal and infant care to First Nations women in remote communities.

### *Sequelae and Implications of Selected Prenatal and Infant Health Outcomes*

**Birth weight and gestational age.** While 75% of the infant birth weights in this sample were within the desirable range of 2,500 to 3,999 grams associated with better perinatal health outcomes, almost 25% were too low (6%) or too high (19%). These findings are comparable to national-level data on First Nations births: 5.7% of all First Nations births in 2001–02 were low birth weight and 20.8% were high birth weight (Health Canada, 2011). Both low and high birth weights are predictors of type 2 diabetes in later life (Public Health Agency of Canada [PHAC], 2008). Given the increasingly high rates of type 2 diabetes in the

Aboriginal population in Canada, this finding has significant implications for long-term health.

Similarly, while more than 75% of the women in the sample delivered after 37 and before 41 completed weeks gestation, premature births accounted for over one fifth (21.5%) of births in the sample, almost three times the pre-term birth rate of 8.2 per 100 live births in Canada overall in 2004 (PHAC, 2008). Births past 41 completed weeks gestation accounted for only 3% of births in the sample<sup>5</sup>; however, this figure is almost four times the national rate of 0.8% (PHAC, 2008).

Birth weight and gestational age at birth are important indicators of perinatal health. Low birth weight includes both premature infants and small for gestational age (SGA) infants. Premature birth is a risk factor for low birth weight and is associated with an increased risk of neonatal morbidity and complications due to immature respiratory, renal, and gastrointestinal function and susceptibility to infection (PHAC, 2008). SGA infants delivered at term are also at increased risk for neonatal morbidity and mortality (PHAC, 2008). Premature and SGA infants are at increased risk for failure to thrive (Krugman & Dubowitz, 2003) and anemia (Willows, Morel, & Gray-Donald, 2000).

Potential longer-term sequelae of low birth weight include impaired learning ability that may extend into school age (Weindrich, Jennen-Steinmetz, Laucht, & Schmidt, 2003), as well as the development of hypertension (Eriksson et al., 2000) and type 2 diabetes in adulthood (Cianfarana et al., 1999).

Of this First Nations sample, 19% of infants were high birth weight, compared to 11.6% in the Canadian population overall (PHAC, 2008). Maternal diabetes, both gestational and pre-existing, is a risk factor for high birth weight and macrosomia. Aboriginal women have high rates of pre-existing type 2 diabetes in pregnancy and are at two to three times the risk for gestational diabetes mellitus compared to non-Aboriginal women in Canada (Harris, Bhattacharyya, Dyck, Hayward, & Toth, 2013); 15% of the women in the study were identified as having diabetes in pregnancy.

High birth weight is associated with increased incidence of perinatal intervention, including induction, operative vaginal delivery, and C-section (Jolly, Sebire, Harris, Regan, & Robinson, 2003; Stotland, Hopkins, & Caughey, 2004), with implications for maternal health post-partum. The total C-section rate of 24.6% found in this study was com-

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<sup>5</sup> As stated previously, it is important to note that planned interventions such as induction of labour or C-section were routinely implemented past 42 weeks gestation and, because sample selection was dependent on recorded live births, any premature births that resulted in fetal death would not have been included in the chart review.

parable to the rate of 25.6% estimated for C-sections nationally (based on 2004–05 data; PHAC, 2008). Interventions are associated with further perinatal complications such as anemia and postpartum infections. Macrosomia is a clinical risk factor for postpartum hemorrhage (Jolly et al., 2003). A recent study of macrosomia in a First Nations population in Quebec found that it was associated with a significantly increased risk of postneonatal death, although not with perinatal death (Wassimi et al., 2011).

**Anemia in infants.** Data from the contextual notes (e.g., see Figure 1, Example B) suggests that several of the infants in the sample who had not received hemoglobin screening by age 12 months had one or more risk factors for low hemoglobin. These included maternal anemia during pregnancy (Willows, Iserhoff, Napash, Leclerc, & Verrall, 2005), low birth weight, prematurity (Abdullah, Zlotkin, Parkin, & Grenier, 2011), and being primarily breastfed without supplemental iron or being fed cow's milk or milk prepared from powder, as opposed to iron-enriched infant formula (Christofides, Schauer, & Zlotkin, 2005; Willows et al., 2005). Low socio-economic status and *Helicobacter pylori* infection have also been identified as risk factors for anemia in infancy (Abdullah et al., 2011; Christofides et al., 2005). The finding that 36% of infants in the sample had not been screened is concerning.

Equally concerning is the finding that 38% of the infants in the sample who had been screened had a hemoglobin value of less than 110 g/L. In a study of the prevalence of anemia among Cree First Nations infants, Willows et al. (2000) found that 31% of infants had a hemoglobin value of less than 110 g/L at 9 months of age. A value of 110 g/L is the 2.5 percentile for healthy infants, while a value of 100 g/L “corresponds with at least moderately severe anemia” (Willows et al., 2000, p. 324). Willows et al. note that the prevalence of hemoglobin value lower than 110 g/L in Canadian non-Aboriginal infants is 8%. Christofides et al. (2005) found that the prevalence of iron deficiency anemia was eight times higher in residents of First Nations and Inuit communities than in the general population. The high rates of iron deficiency anemia in some First Nations communities suggest that routine hemoglobin screening of infants is indicated in communities where risk factors are prevalent.

The potentially significant sequelae of iron deficiency anemia demand not only aggressive treatment and follow-up of identified cases of low hemoglobin, but also effective primary preventive strategies (Abdullah et al., 2011). Sequelae of iron deficiency anemia in infants include poor weight gain, irritability, decreased attention span, and decreased physical activity, as well as cognitive and psychomotor developmental impairments that may persist into school age (Lozoff, Jimenez, Hagen, Mollen, & Wolf, 2000). The evidence base supporting a causal relationship between iron

deficiency anemia in infants and cognitive delay has been challenged on the basis of confounding factors such as poverty and low socio-economic status (Grantham-McGregor & Ani, 2001). However, the authors of this large review of studies conclude that “it is clear that iron deficiency identifies children at concurrent and future risk of poor development” (p. 665S). At this time, it remains generally accepted that the long-term consequences of iron deficiency anemia can have profound implications for the physical, mental, and emotional health of infants and children into school age and even into adulthood.

**Infant immunization.** Immunization coverage is a key component of preventive infant health care and infectious disease management. Immunization is of particular importance in Aboriginal populations, where the rates of infectious disease, including vaccine-preventable infectious disease, are substantially higher than in non-Aboriginal Canadian populations. In 1999, “rates of mumps, pertussis and rubella [in Aboriginal populations] were three times higher than the overall Canadian rate” (FNIHB, 2003, p. 35). National immunization coverage goals range from 95% for pertussis to 97% for diphtheria, tetanus, polio, invasive *Haemophilus influenzae* type b (H. flu), measles, mumps, and rubella. Coverage rates at age 12 months for First Nations infants in Canada overall in 1999 ranged between 70% and 75% (excluding measles, mumps, and rubella) — not high enough to meet the estimated threshold to achieve herd immunity in First Nations populations. In the present study, data collected during the 2002–04 study period revealed significantly lower immunization rates than the 1999 rates in First Nations overall, with implications for herd immunity at the study site.

The consequences of low immunization rates are obvious: Infants are susceptible to the vaccine-preventable diseases of infancy and childhood. These are the diseases that prior to the availability of effective vaccines were among the most significant causes of infant and child mortality and morbidity. For example, invasive H. flu type b is the major causative organism of bacterial meningitis and epiglottitis. Prior to the availability, in 1998, of an effective vaccine for invasive H. flu type b, there were several hundred cases annually in Canada, with a case-fatality rate of 5% and neurological sequelae or deafness in up to 15% to 20% of cases (National Advisory Committee on Immunization, 2006). Fully 85% of invasive H. flu type b infection occurs in children younger than 5 years, with the peak age being 6 to 12 months. Despite routine infant immunization across Canada, in 2001 there were five cases of invasive H. flu type b disease in Aboriginal children in northern communities, with one death (FNIHB, 2003). It was therefore disturbing to find that 95% of infants in the study sample were not fully immunized against invasive H. flu type b between 6 and 12 months of age.

### ***Implications Related to Nurses' Role in Providing Primary Prenatal and Infant Care***

Given that nurses' practice is but one of many interrelated factors influencing the maternal-infant health outcomes reported here, the ability of nurses to provide effective and responsive prenatal and infant care in the context of remote Aboriginal communities remains an integral link in the chain of continuity of care. Nurses must be prepared with the knowledge and competencies needed to provide primary maternal-infant care. Nurses also require skills in relational practice if they are to contribute to fostering patient trust and continuity of care, given that patients may see different nurses, sometimes at every visit. Moreover, to apply a cultural safety lens in their practice with First Nations people, nurses must be familiar with the historical and contextual knowledge that fosters critical thinking about the sociopolitical and historical circumstances that have shaped Aboriginal health (Browne et al., 2009; Canadian Nurses Association [CNA], 2010). In turn, access to and provision of high-quality care can influence health outcomes. Ensuring that nurses have the competencies to provide such care is therefore critical to the delivery of equitable primary care to mothers and infants in remote First Nations communities.

Other research has suggested that nurses at times may lack the knowledge and skills required for practice in remote First Nations communities. A large Canada-wide survey on nurses' practice in rural and remote regions revealed that while 13.5% of respondents worked in a remote community setting, fewer than 3% had "outpost certification"<sup>6</sup> and fewer than 6% had Advanced Practice Nurse preparation<sup>7</sup> (Stewart et al., 2005). In their study of continuity of care in three First Nations communities, Minore et al. (2005) determined that relief nurses, in particular, lacked adequate preparation, which was defined as "ideally" including both primary care and community nursing, "preferably with several years' experience" (p. 93).

The model of nursing that developed to meet the health-care needs of residents of remote communities provides a template for contemporary conceptualizations of the role of primary health care nurse practitioner in Canada. But, paradoxically, whereas nurse practitioner is now recognized as an advanced practice nursing role requiring graduate-level

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<sup>6</sup> "Outpost certification" is not defined but conceivably included nurses who had completed the 3-month Primary Care Skills course. Notably, nurses in the present study who had completed this course did not consistently demonstrate primary health care, community health, or cultural competencies.

<sup>7</sup> Advanced Practice Nurse preparation is defined as including both nurse practitioner and clinical nurse specialist education, not necessarily at a graduate-degree level.

education in many Canadian jurisdictions, including at the national level (CNA, 2008), most nurses employed in remote communities continue to be prepared at the diploma or baccalaureate level (Kulig, 2005; Stewart & MacLeod, 2005; Tarlier & Browne, 2011). Nurses providing primary care require a broad base of knowledge comparable to that of contemporary nurse practitioners (Tarlier & Browne, 2011). Yet many if not the majority of nurses employed in remote communities in these studies received little or no additional education to better prepare them to meet the expectations of an implicitly advanced and explicitly expanded scope of practice (Stewart & MacLeod, 2005; Tarlier et al., 2007).

Limitations of this study include its being restricted to a single site and its inability, in keeping with exploratory studies of this nature, to draw a clear association between nursing practice and health outcomes. However, the research has brought to light sub-optimal maternal-infant health outcomes that are particularly dismaying given the implications for long-term health beyond the individual level. The findings point to a pressing need for changes in health services delivered to Aboriginal people in remote communities. The interpretation of findings in the broader context of health and health-policy formulation suggests that sustainable change must be supported by fundamental shifts in perspective at the policy level (Fontaine, 2005).

Some points for future research, such as implementing and evaluating changes to broader health policy and integration of the various sectors from which the social determinants of health arise, would be best served by an interdisciplinary research perspective. However, there is still a need for research that focuses more narrowly on the role of nurses within the health-care system. We need intervention studies examining how specific nursing interventions influence outcomes, as well as studies exploring how standard nursing interventions may be better modified to meet the needs of Aboriginal people. For example, what difference does early home visiting to mothers of newborns make to outcomes such as immunization status and infant nutritional status (i.e., hemoglobin level and weight gain), and how might home visiting be modified so that it is more culturally acceptable and contextually appropriate?

The most pressing need for nursing research lies in exploring innovative models of nurse preparation and staffing to find models that address the challenges of recruiting, educating, and retaining nurses with the knowledge and competencies to facilitate continuity of care and improved health outcomes. New and more effective models of nurse preparation and staffing are desperately needed, not just to decrease the high rate of nursing turnover in remote Aboriginal communities, but also, and perhaps more importantly, to ameliorate the effects of turnover.

Almost 50 years ago the Hall Royal Commission on Health Services (Hall, 1964) recognized that nurses working in northern communities require complex knowledge and skills that encompass public health, preventive care, and primary care and recommended that professionals be adequately prepared to meet the challenges of northern practice. Yet in 2013 there is still no comprehensive strategy in place to ensure that nurses working in these roles have the requisite knowledge and skills. Similarly, 17 years ago the Royal Commission on Aboriginal Peoples (1996) called for greater quality and equity in health services delivered to First Nations people on reserves. The maternal-infant health outcomes found in the present study suggest that improvement is still needed. Nurses, whether employed full-time or on a relief basis, must possess the competencies necessary to support safe and effective practice in remote communities. Nurses with community-based primary care knowledge and competencies, as well as knowledge related to the historical and sociopolitical context of Aboriginal health in Canada, will be better positioned to exert a positive influence on continuity of care and more equitable maternal-infant health outcomes — and, ultimately, on the overall quality of primary health care delivered within remote First Nations communities.

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Denise S. Tarlier, NP(F), PhD, is a Family Nurse Practitioner in Kamloops, British Columbia, Canada (formerly Assistant Professor, School of Nursing, Thompson Rivers University, Kamloops). Joy L. Johnson, RN, PhD, FCAHS, is Professor, School of Nursing, University of British Columbia, Vancouver. Annette J. Browne, RN, PhD, is Professor, School of Nursing, University of British Columbia. Sam Sheps, MD, MSc, FRCP, is Professor, School of Population and Public Health, University of British Columbia.