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EDITORIAL

Self-Plagiarism: Some Common Sense, Some Reasonable Accommodation — Please!

There are words and acts in scholarly publishing that are considered unethical, immoral, and in some cases even illegal. When such breaches of conduct occur in scientific publishing, they challenge the moral order of the scientific community by undermining the integrity of the literature and violating the rights of others — colleagues, subjects, readers, the public. When I think of such acts in the academy and in the publishing world, the ones that immediately spring to mind are plagiarism, duplication, cheating, misrepresentation, fabrication, and falsification of data (Mauer, 2007). And every day new acts are added to the list. One of the most recent to make it onto editors' lists of offences is self-plagiarism. I have trouble adding it to mine.

I still recall the first time I heard the term self-plagiarism. It was just a few years ago, when it was the subject of lively debate at a meeting of nursing editors. I was unfamiliar with the practice and confused by the term. I thought I knew what *plagiarism* meant, and I also thought I knew what *self* meant, but I had never put the two words together. It had never occurred to me that one could plagiarize oneself. To me this was an oxymoron. How did these two concepts go together? What was the misconduct here — the scientific transgression?

Since then the issue of self-plagiarism has been debated among editors of medical journals, and recently it has been the subject of editorials and commentaries (Dellaville, Banks, & Ellis, 2007; Scanlon, 2007), with editors of nursing journals weighing in (Baggs, 2008; Broome, 2004). The positions on self-plagiarism have ranged widely. Some view it as a form of ignorance, others as an act of deception by a “transgressor,” and still others as a form of serious scientific misconduct. I have tended to side with those who consider it a minor offence, if an offence at all, and so we at *CJNR* have never adopted a screening system to detect self-plagiarism.

But now the issue has hit home. A few months ago self-plagiarism came calling at *CJNR*. We received an irate letter from a reviewer about a manuscript he had been sent. The reviewer stated that the author had

self-plagiarized from a paper she had already published. He advised that the manuscript be withdrawn immediately and the author be admonished. We investigated. Yes, the manuscript involved overlap with a published paper. The methods and data collection drew heavily from that paper and a table was to be essentially reprinted. However, the manuscript under review related to an aspect of the study that was not covered in the published paper — and indeed the author had cited that paper. When the issue was raised with the author — who by all accounts was a responsible, highly ethical person — she was shocked. She had never heard of self-plagiarism. Moreover, it had never occurred to her that it would be wrong for her to use her own published material in subsequent publications. A lengthy discussion ensued and cautions were issued to the scholar. We decided it was time for *CJNR* to clarify our position and develop policy accordingly.

The World Association of Medical Editors is an invaluable resource for editors of medical and biomedical journals. In its policy and guidelines (www.wame.org/resources/publication-ethics-policies-for-medical-journals), the Association defines plagiarism as

the use of others' published and unpublished ideas or words (or other intellectual property) without attribution or permission, and presenting them as new and original rather than derived from an existing source. The intent and effect of plagiarism is to mislead the reader as to the contributions of the plagiarizer. This applies whether the ideas or words are taken from abstracts, research grant applications, Institutional Review Board applications, or unpublished or published manuscripts in any publication format (print or electronic). Plagiarism is scientific misconduct and should be addressed as such.

It defines self-plagiarism as

the practice of an author using portions of their previous writings on the same topic in another of their publications, without specifically citing it formally in quotes. This practice is widespread and sometimes unintentional, as there are only so many ways to say the same thing on many occasions, particularly when writing the Methods section of an article. Although this usually violates the copyright that has been assigned to the publisher, there is no consensus as to whether this is a form of scientific misconduct, or how many of one's own words one can use before it is truly "plagiarism." Probably for this reason self-plagiarism is not regarded in the same light as plagiarism of the ideas and words of other individuals.¹

Now, make no mistake, plagiarism is a serious offence. It amounts to both theft and fraud. Scientists who fail to disclose an original source, misappropriate the work of another, or pass another's work off as their

¹ All italics in the preceding quotes are mine.

own are in fact stealing. They are committing an act of deception for the purpose of defrauding the scientific community and the public. There can be no doubt that scientific plagiarism ought to be subject to sanctioning by the scientific community and even legal action.

But what about self-plagiarism? Where is the violation or crime? What is being stolen, and from whom? What fraud is being committed? What is the nature of the misconduct?

As with many issues in research ethics, it is a question of intent or degree. The worst-case scenario is duplicate or redundant publication resulting from the submission of the same manuscript to two or more journals without the knowledge of the editors concerned. The author may have elected to alter the title or to make minimal changes, but for the most part the text is the same. One can speculate on the motivation here: padding one's publication record or curriculum vitae. The misconduct occurs when a journal believes it is presenting an original, unpublished work when in reality it is not. The author has in fact plagiarized his or her own work and defrauded the publisher. Moreover, the author more than likely has contravened copyright law. The prevailing practice is for authors to relinquish copyright to the journal in exchange for publishing and disseminating their work. The work is owned by the journal, not the author. Duplication and redundant publication meet the criteria for plagiarism (theft and fraud) even in the case of an author's own work, for they are in violation of the author's contract with the publisher.

Nothing is quite so clear-cut of course. There are exceptions to the rule of redundant publication. For example, a paper may merit republication in a different language. In this case, the publisher will have to secure translation rights from the original publisher or secure permission to republish and cite the original source. When there is transparency and disclosure among all parties (i.e., the author, the publishers, the readership), duplication and redundant publication move out of the realm of fraud and scientific misconduct and into the realm of scientific integrity.

That was an easy one!

The murky water, and where I have difficulty with the idea of self-plagiarism, is when authors quote or repeat small sections of their own published work. Sometimes a study's findings are carved up into so many publications that the actual study gets lost. The root problem here is not so much self-plagiarism as what is called "salami publication." That said, there are instances when reporting on a single study in several publications is warranted. For example, a multi-site, multidisciplinary study may call for multiple publications, each addressing different issues and using different data. In such a case, why would repeating the Methods section or describing the study's rationale and background be considered self-plagiarism? Why is this practice considered self-plagiarism rather than a

useful linking of various parts of a study that when put together form a whole?

There's something in the publishing world called "fair use." Fair use allows an author to cite and quote from a publication without having to seek permission from the publisher or pay a copyright fee. We need to consider what constitutes fair use by an author drawing from his or her work. Authors should not only be allowed to liberally quote from their own work but be encouraged to do so. Productive, creative thinking is built on years of experience, knowledge acquisition, insight, and reflection. Ideas need to be honed, developed, incubated, and refined, and this takes time. A worthwhile idea has depth, texture, and nuance. It is only through well-considered and deliberate language, well-constructed sentences, and well-chosen examples and metaphors that one can trace the development, evolution, and transformation of an idea. Given the current climate of suspicion, scholars may be afraid to use previously published work and thinking may fall victim to discontinuity and disjointedness. If ideas have to be reworked and reworded for each new publication, it could become increasingly difficult to trace them and make links among them.

At *CJNR* we have a policy governing duplication and redundant publication. We ask authors to sign a form stating that their submitted work is original and has never been published. We are now considering mechanisms for enabling authors to link submissions to previous publications, to improve ease of reading and reviewing. Authors will be allowed to repeat some sections of a published work without having to revise and reword, so long as this adheres to the rules of fair use and does not violate the agreement with the journal that holds copyright.

We are well aware that scholars and editors work in an environment where easy access to online information and the heightened pressures of the academy are converging to produce new forms of plagiarism and "cheating." This has given rise to a culture of mistrust and suspicion in the scientific publishing community. Editors are on high alert for fraud and are under increasing pressure to subject manuscripts to software capable of detecting ingenious forms of misconduct — which for some include self-plagiarism.

Plagiarism is number one on my list of publishing offences. Self-plagiarism doesn't make it onto the list at all.²

In dealing with self-plagiarism, we at *CJNR* choose to steer a course of transparency and disclosure. We rely on a spirit of partnership with our authors — putting stock in their competence and their commitment to

²My list grew longer just last week, when I read for the first time, in the *Guardian*, about "contract cheating" — the hiring of another person to write one's papers.

responsible authorship — on the conscientiousness of our reviewers, and on our own wits to help ensure the integrity of both the literature and scientific practice. In short, we choose common sense and reasonable accommodation.

Laurie N. Gottlieb
Editor-in-Chief

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GUEST EDITORIAL

Renegotiating the Social Contract? The Emergence of Knowledge Translation Science

Carole A. Estabrooks

Unlike routine applied (or operations) research, which may identify and address barriers related to performance of specific projects, implementation science creates generalizable knowledge that can be applied across settings and contexts to answer central questions. (Madon, Hofman, Kupfer, & Glass, 2007, p. 1728)

This morning I received an unexpected phone call from Alison Kitson in the United Kingdom. This caused me to remember and reflect on a number of things. First, it brought to mind our meeting in 1998 in Toronto, at a conference where I was presenting my dissertation findings. She came up to me after my talk and wondered if we might test some theory (to which I said, well, if we had data...). Second, I recalled that nearly 10 years ago Alison had written the Discourse for *CJNR*'s special issue on research utilization (Kitson, 1999). She opened that discussion by saying, "What is apparent in both the study and the application of research utilization principles and methods is that it is a social process" (p. 13). I reflected on how much and how little attention we have paid to this fairly well-accepted understanding. Third, her phone call reminded me of how much our world has changed in a decade, how much it has shrunk, how global we have become — we talked as if it were perfectly normal to ring someone across the Atlantic in the middle of their breakfast and chat with complete disregard for the long-distance minutes accumulating. I remember when a trans-Canadian call — let alone a trans-Atlantic one — was an event of some note and its minutes carefully restricted. Fourth, Alison's call got me thinking about colleagues and friends nearby and far-flung around the globe, and about the generosity with which Alison has opened her network of friends and colleagues to me. Fifth, I thought about the first knowledge utilization colloquium we organized in Edmonton in 2001 — a bit by accident, as she was "passing through." I recall her urging me to contact this young fellow Lars Wallin

in Sweden and invite him to the colloquium, and then continuing on her journey, leaving me (so it seemed at the time — albeit with good cheer) to organize a meeting and wonder if anyone would come. We built it and they came; we are into our eighth annual colloquium this year. Lars did not make it to Canada in 2001, but he was in Oxford in 2002 and meeting him there launched one of the most enjoyable collaborations of my career.

Ten years ago the three of us barely knew each other. Today we are all mixed up in a set of international collaborations in the knowledge translation¹ field. Those collaborations span joint research, shared trainees, chance encounters, writing together, arguing and laughing together, international meetings, cross-national and international funding, and other boundaries. Some of what we are mixed up in will likely make a difference and some of it will no doubt just be part of living on this earth. Which is the more important is not always entirely clear to me — I suspect the latter.

Ten years after Kitson published her Discourse in *CJNR*, Lars Wallin presents his in this issue. Wallin's arguments for more intervention work in the field of implementation science in nursing are timely. He touches on how far we have come and how far we have yet to go. His comments come from a deep understanding of and much reflection on the issues in this field and should be weighted accordingly. We see evidence of Wallin's commitment to intervention work in a recent article describing the baseline work for a research-implementation intervention project in Vietnam (Målqvist et al., 2008). In this work he and his colleagues are also tackling developing-world issues such as those addressed recently in *Science* (Madon et al., 2007). Lars calls for more intervention work in nursing, and, despite its difficulties and challenges, he calls straightforwardly for us to get on with it. I agree with this call; we are much in need of intervention work in the knowledge translation field in nursing. The literature remains replete with descriptive studies from which we are unable to modify practice or plan to improve outcomes.

We received few submissions on intervention studies in response to our call for papers for this issue of the Journal, and even fewer reporting on attempts to evaluate an intervention. We chose to publish one such report. In that article (Rashotte et al.), we get a stark picture of how truly challenging it is to design a study that is both scientifically meaningful and practically relevant. I would like to say a few more things about this

¹ While there are important differences between and among terms, I am using a number of terms synonymously: knowledge translation, research utilization, research implementation, implementation science, innovation diffusion.

article. It is not a perfect article about a flawless study — there are, of course, no such things. This team encountered what researchers working in clinical settings encounter every day. They report on it forthrightly and tell us what they have learned — and what we can learn. We would do well to heed these lessons. Lars Wallin taught me to respect how difficult this kind of work is — I watched him struggle throughout his postdoctoral fellowship with complex and messy data from a complex and challenging study. He taught me to have high regard for this kind of work. Rashotte and colleagues — you will see if you read their discussion carefully — raise critical points for both future refinement of design and future clinical studies in this area. Their work also raises questions about who should conduct such research and under what circumstances. These are questions that we as a discipline need to grapple with. Finding workable solutions to the difficulties inherent in real-time clinical work will not be easy, but this does not mean that we can avoid it.

Echoing Kitson's call nearly 10 years ago (Kitson, 1999), one of the most fundamental requirements for the translation of knowledge into action is social interaction. We have a number of articles on this topic in the pages that follow. McWilliam and colleagues, reporting on a pilot study, engage in an empirical discussion of an area of increasing importance in knowledge translation — social interaction. We will be reading more about social interaction. In addition, these authors are working in what will be a defining area for investigators over the next three decades in Western countries — a predictably and steadily aging population that will peak in 2031. Conklin and Stolee also write about research in the area of aging and about social interaction through networks. We will be reading much more about networks as well. Social network analysis, actor network theory, and sociometric and bibliometrics areas are robust, active fields whose proponents are increasingly turning their attention to knowledge translation.

We also have contributions that will challenge readers to think outside of their usual comfort zones. They are published deliberately in this issue of *CJNR* because it is important for us to think broadly and creatively. We have a strong review of “appreciative inquiry” by Kavanagh and colleagues. This knowledge translation intervention will not suit everyone, but it is being used in some centres and shows some potential; it should be put to the tests of science — traditional and non-traditional. Poole offers a much-needed feminist critique within knowledge translation science. Mason discusses theatre as a possible mode of intervention. Estey offers a perspective on Aboriginal knowledge translation — an area noticeably absent from the mainstream knowledge translation literature. If any of these contributions makes us uncomfortable, then the authors

have done their jobs well. If we had received a class analysis relevant to knowledge translation, we would have published that too. A thoughtful class analysis or series of class analyses is long overdue, and is of particular relevance to nurses working in the rigidly hierarchical systems still found in hospitals and other health-care organizations.

Gibbons (1999) argues that we are in the midst of a far-reaching renegotiation of the social contract between science and society. The arguments of Gibbons and colleagues (Gibbons et al., 1994; Nowotny, Scott, & Gibbons, 2001, 2003) form a backdrop for the emergence of knowledge translation or implementation science — perhaps (finally) as a legitimate field of scientific inquiry. Gibbons and colleagues argue for what they term “Mode II knowledge production.” Mode II knowledge production involves non-hierarchical relationships among stakeholders who collaborate on a research issue in a specific health-care context. It is based on the needs of end users in the health-care system and is argued to be a particularly socially accountable form of knowledge production. Gibbons and colleagues’ “Mode I knowledge production” reflects the traditional, academic norms of scholarship found in disciplines and institutions (e.g., academic tenure and promotion based on high-impact, peer-reviewed publication (Gibbons et al., 1994; Nowotny et al., 2001). Its foundations rest on principles of scientific expertise, peer review, and non-interference. It is important for nurse scientists in particular to realize that knowledge production and knowledge translation are being reshaped by political will and funder policy and turned explicitly to Mode II production. While the forces that have led us to this point were in place before the end of the Cold War, certainly the legislation that created the Canadian Institutes of Health Research in 2000 was an index event, with its clear emphasis on knowledge translation as well as knowledge production. There is much in the following pages and elsewhere in nursing literature and practice that can be characterized as activity more aligned with Mode II forms of knowledge production or translation. The challenge as I see it is to find an appropriate *balance* between Mode I and Mode II activities and to realize the full implications of embracing a Mode II agenda. Mode I science has, after all, given the world some glorious discoveries and betterments. Mode II science, while holding much promise, is unlikely to be any more of a panacea than Mode I was for all of our problems. Let us hope of course that it too will give us its share of glorious discoveries and betterments.

As we move to this Mode II world, measured caution is probably a wise approach. We would also do well to heed a recent reminder: “Our biggest challenge in this field of research is to avoid rushing to solutions and certainty and to resist the belief that there will be straightforward replicable explanations” (Kitson, 2007, p. S2).

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Discourse

A Descriptive Feast But an Evaluative Famine: Implementation Research in Nursing

Lars Wallin

When invited to write a discourse, I felt an immediate need to gain a better understanding of the concept of discourse. Wikipedia suggested the following:

In the social sciences (following the work of Michel Foucault), a discourse is considered to be an institutionalized way of thinking, a social boundary defining what can be said about a specific topic, [sometimes even constituting]...“the limits of acceptable speech”...; it is not possible to escape discourse. (<http://en.wikipedia.org/wiki/Discourse>)

I consider this definition to be highly applicable to the field of nursing research. In nursing there exists a dominating descriptive research tradition that is firmly ingrained in many university nursing departments, impacting on how we think about ways of doing research. In my view, this descriptive research posture is a paradox, largely because nursing practice encompasses a large number of interventions and procedures. Because nursing is a practical profession, there is always room for improvement, which, in turn, should increase its contribution to patient well-being and health. Such a development, however, cannot be supported solely by a research approach that focuses on enhanced understanding of the perceptions and experiences of nurses and patients. There is also a profound need for evaluative and experimental research to enhance knowledge about what works in practice and its impact on patient outcomes — that is, the effectiveness of nursing interventions (Rahm-Hallberg, 2006). In discourse terms, it is time for a shift.

Narrowing the focus to knowledge translation and implementation research in nursing, the scenario described above is all too familiar. In an overview of the literature on research utilization in nursing and allied

health professions, only 1.3% of 544 identified articles evaluated implementation strategies (Estabrooks, Scott-Findlay, & Winther, 2004). Approximately 60% of the 544 articles were classified as general opinion pieces. Another example is the approximately 45 studies that have been conducted using the BARRIERS Scale for measuring barriers to research use among nurses (Hutchinson & Johnston, 2006). Only one of these studies reported on the evaluation of an intervention (Fink, Thompson, & Bonnes, 2005). A third example is the large body of literature examining predictors of research use among nurses. The predictors studied have preponderantly been individual characteristics (Estabrooks, Floyd, Scott-Findlay, O'Leary, & Gushta, 2003), but even a number of organizational factors have been investigated (Meijers et al., 2006). Only in exceptional cases have such studies involved interventions. A comparison with the medical profession is thought-provoking and telling. A systematic review of guideline implementation in the medical field included 235 studies (Grimshaw et al., 2006). In contrast, only four studies were reported in a recent systematic review of interventions to enhance research use in nursing (Thompson, Estabrooks, Scott Findlay, Moore, & Wallin, 2006). The small number of studies in the latter review can partially be explained by the inclusion criteria — for example, research use had to be explicitly measured. Yet the great difference between these two reviews in terms of number of studies underscores the divergence in the ways of approaching this field of research. We lack a recent systematic review of implementation of evidence-based nursing practices that looks at outcomes, such as changes in practitioner behaviour and patient outcomes. Such a review would certainly include more than four studies, but it would be highly surprising if it included more than 30.

Why do we have this situation of a descriptive feast but an evaluative famine? Some possible explanations include the youth of nursing research as a discipline, the strong tradition of qualitative research, the current power structures in health-care organizations, and the resources required to set up experimental studies. Furthermore, my experience points to a troublesome lack of relevant nursing outcome measures as a major obstacle in designing good intervention studies. The purpose of this discourse, however, is not to analyze the paucity of intervention research, but rather to touch upon some issues that need to be addressed in moving from a descriptive emphasis to efforts aimed at better understanding what interventions work (and why) in integrating research evidence into practice.

To set up a conceptual framework in this research field, I prefer to use the concepts of knowledge translation (KT) and implementation research (IR). The Canadian Institutes of Health Research defines KT as “the

exchange, synthesis and ethically-sound application of knowledge — within a complex system of interactions among researchers and users — to accelerate the capture of the benefits of research...through improved health, more effective services and products, and a strengthened health care system” (<http://www.cihir-irsc.gc.ca/e/29418.html#The>). Implementation research is “the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice, and, hence, to improve the quality and effectiveness of health services and care” (Eccles & Mittman, 2006, p. 1). The KT definition is general, covering central aspects of the use of research-based knowledge, whereas the IR definition emphasizes the need to study research uptake scientifically, calling for evaluation of which methods are helpful in implementing evidence in practice.

Let us look more closely at the issue of implementation methods. It is a field challenged by a number of urgent questions. First, what do we know about which methods are working? Unfortunately, not much. As has been pointed out, we do not have a current and comprehensive review in the nursing field on this topic. In a somewhat outdated review, based on papers of mainly poor quality, Thomas, McColl, Cullum, Rousseau, and Soutter (1999) conclude that educational interventions might be effective for implementing guidelines. In a recent review, Thompson and colleagues (2007) report on educational interventions as the main approach for putting evidence into practice. The findings are inconclusive, however, and the limited sample size and the poor methodology of the reviewed literature make interpretation especially difficult. Neither do the systematic reviews in the medical field provide the guidance that might be expected. In the most recent and most complete review, Grimshaw and colleagues (2006) are unable to offer recommendations on when to use a specific intervention to support implementation in a particular setting. Moreover, because there are several differences between nursing and medicine in terms of the work and the organization of work, it may not be wise to draw firm conclusions for nursing practice based on this review. On the other hand, I think it would be helpful to evaluate, in nursing settings, the strategies that have shown promise for changing behaviour among physicians (e.g., reminders and audit and feedback). Another issue is the choice of a single or multiple interventions to support the use of new knowledge in practice. Even if the use of multiple components intuitively appears logical for enhancing the strength of the intervention, it must be noted that it is extremely difficult to determine which components, if any, are effective. Experiences in the medical field further suggest that multifaceted interventions are no more effective than others (Grimshaw et al., 2006). This striking uncer-

tainty about the effectiveness of various implementation strategies underlines the need for innovative thinking and extensive intervention research.

Interrelated key elements in the advancement of implementation research involve finding ways to conduct and analyze the often complex interventions used and to understand how various contextual factors interact with the current intervention and affect the outcome variables of interest. “The greater the difficulty in defining what, exactly, are the ‘active ingredients’ of an intervention and how they relate to each other, the greater the likelihood you are dealing with a complex intervention” (Medical Research Council, 2000, p. 1). These conditions have caused authors to challenge the usefulness of randomized controlled trials (RCTs) in evaluating complex social interventions, such as guideline implementation. Walshe (2007), for instance, claims that in these kinds of studies there is too much variance in context, content, application, and outcomes for RCTs to yield valid results. I think he has a point, in that these circumstances might explain why the extensive research on guideline implementation in the medical field cannot provide recommendations on when to use a specific implementation strategy. Still, I consider the experimental design, and preferably the RCT, to be superior to other methods in assessing cause-and-effect relationships. A well-conducted RCT will generate the most accurate estimation of the effectiveness of an implementation intervention — that is, answering the question *Does it work?* However, to increase explanatory power and understand the generalizability of a specific intervention, the trial design must be completed with process evaluations and measurement of contextual factors — that is, answering the question *Where does it work, and why?* (Blackwood, 2006; Seers, 2007). In evaluating process and measurement of context, quantitative and qualitative methods should be used (e.g., individual interviews with key stakeholders, questionnaire surveys, observations, and focus groups with staff and/or patients). Extending an experimental study with such components increases the opportunities to illuminate the process of change and enhances the understanding of important ingredients in that process (Oakley, Strange, Bonnell, Allen, & Stephenson, 2006).

Most would agree that while there is a need for empirical studies to evaluate different approaches to the application of evidence-based practice in nursing, we still have to make greater use of the existing literature. A parallel to complete intervention studies with process evaluation is “extension” of the systematic review to what has been termed “realist review.” Although systematic reviews can produce estimations of the effectiveness of different implementation strategies, it has been shown that effects vary greatly for the same intervention and that the systematic

review approach tells us little about this variation. The realist review has a different theoretical base from the systematic review. Its proponents claim that its results “combine theoretical understanding and empirical evidence, and focus on explaining the relationships between the context in which the intervention is applied, the mechanisms by which it works and the outcomes which are produced” (Pawson, Greenhalgh, Harvey, & Walshe, 2005, p. S21). This approach might have greater potential to provide useful information, especially when applied to the implementation literature in nursing, with its large number of descriptive and single-site studies. However, even the realist review requires studies of acceptable methodological quality, which has been shown to be a recurrent problem in nursing implementation studies. A realist review by a multinational research team is now underway, aimed at identifying the interventions and strategies that are effective in enabling evidence-informed health care (McCormack et al., 2007).

To conclude this discourse I would like to argue for the necessity of linking implementation studies with appropriate theory — or, rather, basing them on appropriate theory. The main argument for using theory is the need for a more comprehensive understanding of the multitude of factors at different levels that interact and determine whether and to what extent an implementation intervention results in change (Grol, Bosch, Hulscher, Eccles, & Wensing, 2007). In planning an intervention study, it is crucial that such factors and their potential interaction and effect be identified. Theories can help in systematically describing and deriving these factors, setting up testable hypotheses, and discussing outcomes of a study. Estabrooks, Thompson, Lovely, and Hofmeyer (2006) and Grol and colleagues provide useful reviews of theoretical perspectives for developing testable implementation interventions. In nursing, two theoretical frameworks are often used: Rogers’s Diffusion of Innovations (Rogers, 2003), and Promoting Action on Research Implementation in Health Services (PARIHS) (Rycroft-Malone et al., 2002). These frameworks are general and comprehensive in character. Because individual learning and behavioural change in individuals are key ingredients in any change process, I think there is potential for more specific theories on such issues in implementation studies.

It is not obvious that we will immediately obtain successful results by using relevant theory, process evaluations, or the other ingredients I have proposed for a research agenda that is more directed to intervention studies. However, I am thoroughly convinced that we must change the current research orientation. We need to reverse the trend of a descriptive abundance and an evaluative dearth. This requires no less and no more than determined, multifaceted, and sustained work.

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La traduction des connaissances, dans le contexte de la santé autochtone

Elizabeth Estey, Andrew Kmetic et Jeffrey Reading

Dans la littérature conventionnelle portant sur la santé, on remarque un intérêt croissant en ce qui a trait au concept de traduction des connaissances (TC), l'un des nombreux termes utilisés pour décrire le(s) processus de conversion des connaissances en interventions. Malgré les besoins pressants, peu d'efforts ont été faits pour se pencher sur les implications des théories et des stratégies en évolution, en lien avec la TC en contexte autochtone. Les auteurs tentent de réduire l'écart en étudiant la documentation portant sur la TC autochtones et en explorant des façons d'élargir la portée de ce travail en se penchant sur la littérature de recherche traitant de santé autochtone et sur la documentation traitant de TC. Selon eux, l'inclusion de perspectives multiples et l'étude du contexte social et politique dans lequel la TC autochtones évolue constituent des éléments importants quant à l'élaboration conceptuelle de la TC autochtones. Cet article intéressera notamment les intervenants qui œuvrent à l'interface de la pratique infirmière et des efforts pour améliorer la santé de cette population.

Mots clés : traduction des connaissances, autochtone, santé, recherche

Knowledge Translation in the Context of Aboriginal Health

Elizabeth Estey, Andrew Kmetc, and Jeffrey Reading

Interest in the concept of knowledge translation (KT), one of the many terms used to describe the process(es) through which knowledge is transformed into action, is increasingly prevalent in the mainstream health literature. Despite a pressing need, little has been done to address the implications of evolving theories and strategies for KT in an Aboriginal context. The authors attempt to narrow the gap by reviewing the literature on Aboriginal KT and exploring ways to extend this work by engaging with the Aboriginal health research literature and the KT literature. They argue that the inclusion of multiple perspectives and an examination of the social and political context in which Aboriginal KT takes shape are important for the conceptual development of Aboriginal KT. This article is particularly relevant for those involved at the interface between nursing practice and efforts to improve Aboriginal health.

Keywords: knowledge translation, knowledge exchange, knowledge transfer, Aboriginal, health, research

Introduction

The literature on health research and policy documents a growing “gap between what is known and what gets done in practice” (Pablos-Mendez & Shademani, 2006). The existence of a “know-do gap,” a term coined by the World Health Organization (2006), is a serious concern because it points to the unrealized potential of evidence-based knowledge to improve the health of populations (Davis et al., 2003). Thus, understanding how knowledge is, can, or should be translated into practice has become the focus of an emerging body of literature generally known as knowledge translation (KT). The goal of KT in health contexts is the utilization of knowledge gained through research to positively influence individual and community health (Canadian Institutes of Health Research [CIHR], 2004). Knowledge translation is of interest to the nursing research community, central aspects of which are the development of knowledge for the discipline itself and the application of this knowledge in nursing practice (<http://cjni.mcgill.ca/about.html>).

Despite increased attention to KT in many of the health disciplines, little time has been invested in examining the relevance and impact of the evolving KT discourse for Aboriginal health. This is surprising considering that the health disparities and health inequities experienced

by Aboriginal populations in Canada are well documented (Adelson, 2005). The limited literature that does address KT in an Aboriginal context highlights the need for further exploration of this complex area (Hanson & Smylie, 2006; Kaplan-Myrth & Smylie, 2006; Martin, Macaulay, McComber, Moore, & Wien, 2006; Ranford & Warry, 2006; Smylie et al., 2003; Wien, 2006).

The aim of this article is not to develop a model for KT in Aboriginal contexts but to encourage discussion in this regard by examining three key questions: What is KT? Why is KT, in the context of Aboriginal health, an important component of the KT debate? What is unique about KT with regard to Aboriginal health?

These questions will be addressed by reviewing the literature on Aboriginal KT and engaging with the related Aboriginal health research literature and mainstream KT literature. The article will be relevant for those involved at the interface between nursing practice and efforts to improve Aboriginal health. Equally important, the knowledge gained by elucidating the emerging ideas about Aboriginal KT will inform our understanding and practice of KT in non-Aboriginal contexts and thus contribute to efforts aimed at improving health and well-being both nationally and globally.

What Is Knowledge Translation?

KT has received such an enormous amount of attention in the health research and policy literature that it is often considered a buzzword in the field (Cochrane Musculoskeletal Group, 2007). Increased attention and interest in the topic is also indicated by a rise in the number of relevant publications: from fewer than 100 articles in 1990 to several thousand by February 2006 (Cordeiro, Kilgour, Liman, & Jarvis-Selinger, 2007). Ironically, the simple question What is knowledge translation? remains unanswered. For example, KT is one of many terms used to describe the process(es) through which knowledge is transformed into strategic action. In fact, a study by Graham et al. (2006) identified a total of 33 terms that have been used synonymously. Some of the most common are knowledge transfer, knowledge exchange, dissemination, and research utilization. Consequently, the majority of the literature debates the appropriateness of these terms and their definitions, as well as the models and methods that have been developed to examine the connections between research, policy, and practice domains (Estabrooks, Thompson, Lovely, & Hofmeyer, 2006; Landry, Amara, & Lamari, 2001; Lavis, Lomas, Hamid, & Sewankambod, 2006; Lavis, Robertson, Woodside, McLeod, & Abelson, 2003).

Against this background, the following Canadian Institutes of Health Research (CIHR) definition of KT is recognized both nationally and internationally and is often used as a baseline definition (Cordeiro et al., 2007):

The exchange, synthesis and ethically-sound application of knowledge — within a complex system of interactions among researchers and users — to accelerate the capture of the benefits of research for Canadians through improved health, more effective services and products, and a strengthened health care system. (CIHR, 2004)

Because of the popularity of this term, and in the interests of clarity and consistency, the term knowledge translation will be used throughout this article in discussing the knowledge-to-action interface.

Why Study Aboriginal Knowledge Translation?

As discussed above, KT has been the subject of increased attention in the general health literature but has received comparatively little attention in Aboriginal health contexts. While this is reason enough to study KT in Aboriginal health contexts, an even more compelling reason is the disproportionate burden of ill health borne by Aboriginal populations relative to the general population of Canada.

The health disparities and inequities experienced by Aboriginal peoples have been documented in the academic literature (Adelson, 2005; Waldram, Herring, & Young, 2007) and the “grey” literature (Indian and Northern Affairs Canada, 1996; Romanow, 2002). These disparities have led authors to liken Aboriginal peoples in Canada to “developing societies within [a] developed nation” (Epstein, 1982). Knowledge and documentation of the disparate health conditions of Aboriginal peoples cause one to ask why evidence of ill health in Aboriginal communities is not leading to improved health outcomes and how research can be employed to improve the health and well-being of Aboriginal peoples. The sociopolitical importance of focusing on these questions, and others linked to KT, is fully recognized by the Aboriginal community: “We’ve been researched to death...it’s time we started researching ourselves back to life” (Brant-Castellano, 2004, p. 1); this statement highlights the need for ways to make research more relevant and actionable for Aboriginal communities — in other words, the need for KT.

In drawing attention to the need to conceptualize Aboriginal KT, we point out that in this article the phrase Aboriginal health refers to the specific health issues and health status of Aboriginal peoples, as documented in the literature, along historical, cultural, and epidemiological dimensions, often in comparison to Canada’s non-Aboriginal population (Waldram et al., 2007). When discussing Aboriginal health, however, one

must keep in mind that Aboriginal peoples are not a homogeneous group. As defined by the Canadian Constitution, the term Aboriginal refers to First Nations, Métis, and Inuit populations. Despite a shared history of colonization and dependence on the state, each Aboriginal community has its own unique cultural, political, and linguistic history (Adelson, 2005). The study of Aboriginal health and KT must therefore be developed, evaluated, and understood in the context of each Aboriginal community (Hanson & Smylie, 2006; Smylie et al., 2003). But while it may not be possible to conceptualize a common meaning of KT for Aboriginal health, it *is* possible to describe some principles, ideas, and perspectives that are common to Aboriginal KT.

A preliminary conceptualization of Aboriginal KT is enabled in this article through a brief examination of the relevance of the mainstream KT debate for Aboriginal health contexts and a consideration of what is unique about KT in Aboriginal contexts. The examination draws on the literature that does address the topic of KT in Aboriginal contexts (Hanson & Smylie, 2006; Kaplan-Myrth & Smylie, 2006; Smylie et al., 2003), as well as on the Aboriginal health research literature that discusses various components of KT.

What Is Aboriginal Knowledge Translation?

The question What is Aboriginal KT? poses the same challenges as the mainstream KT discourse — that is, the need to investigate and comprehend the complexities and intricacies of what it means to translate research into improved health. These challenges are reflected in the assertion by the Aboriginal health research community that it currently is in a “state of uncertainty in respect to knowledge translation and what it means” (IPHRC, 2005, p. 9). This uncertainty is particularly strong in Aboriginal contexts because those interested in understanding KT in such contexts are challenged to examine whether and how the mainstream debate is even relevant to Aboriginal health.

An examination of the relevance of the mainstream KT debate must begin with the terminology. The term knowledge translation has received considerable attention in Canada as a result of its definitional development and usage by the CIHR. Since one of the CIHR’s 13 institutes is the Institute of Aboriginal Peoples’ Health, the term has also been at the forefront of the literature on Aboriginal KT (Hanson & Smylie, 2006; Kaplan-Myrth & Smylie, 2006; Smylie et al., 2003). Nevertheless, the term knowledge transfer is also in common usage among Aboriginal health research organizations (Ranford & Warry, 2006; <http://www.nearbc.ca/about.html>). In many cases, however, knowledge transfer and knowledge translation are not differentiated, and when they are differen-

tiated the balance of support frequently lies with knowledge translation, as knowledge transfer is thought to imply a one-way transfer of information, from academic to Aboriginal settings (Ranford & Warry, 2006); this is problematic in Aboriginal contexts because it reinforces the historically paternalistic relationship between Aboriginal and non-Aboriginal populations (Adelson, 2005), devalues the knowledge held in Aboriginal communities, and disregards the potential for exchange between equals (Ranford & Warry, 2006). Knowledge translation is thought to represent a more holistic and palatable definition of the interactions between research, policy, and practice in Aboriginal health (Ranford & Warry, 2006). Despite the general favourability of the term, there are concerns that the mainstream definition of KT needs to be further adapted to ensure that this translation is understood, is part of a truly two-way process, and incorporates the unique aspects of KT in Aboriginal contexts (Ranford & Warry, 2006). These concerns beg two questions: How is this two-way process enabled? What are the unique aspects of Aboriginal KT? These questions are addressed in the following section.

The Aboriginal Health Context

The Aboriginal health context presents two unique challenges for KT. The first is related to the influence of the historical relationship between Aboriginal peoples and the Canadian state with respect to the conceptualization and practice of KT. The second challenge, which is closely related to the first, has to do with the influence of the cross-cultural setting of KT in Aboriginal health settings.

Historical Influences

As noted by a number of authors, the poor health experienced by Aboriginal peoples in Canada is a product of the continuing colonial and paternalistic relationship between the Canadian state and the First Peoples of the land (Adelson, 2005). The evolving field of Aboriginal health research has sought to tackle concerns about this history through engagement in ethical research with Aboriginal peoples (Brant-Castellano, 2004; CIHR, 2007). The landscape of research with Aboriginal peoples that has developed as a result includes a number of protocols for research at the community (Kahnawake Schools Diabetes Prevention Project, 2007), regional (BC ACADRE, 2007; University of Victoria Indigenous Governance Program, 2003), and national (CIHR, 2007; Government of Canada, 2005; Schnarch, 2004) levels. These protocols call for the development of robust, principled partnerships between researchers and Aboriginal peoples, which are essential to the success of Aboriginal health research (Brant-Castellano, 2004).

The mainstream KT literature suggests that the development of partnerships and trust is related to many different aspects of KT (Bowen & Martens, 2005). A Web-based survey conducted by the Indigenous Health Research Knowledge Transfer/Translation Network found “a close relationship between KT and the establishment of partnerships between communities and researchers” (Ranford & Warry, 2006, p. 13). This is because research that recognizes and incorporates Aboriginal peoples as full research partners is “grounded in mutual respect that ensures mutual benefit in all KT related initiatives” (Hanson & Smylie, 2006, p. 7). It is also why community-based research approaches¹ are believed to facilitate KT: They provide a structure through which researchers and Aboriginal peoples can come together to define and implement research and influence practice through evidence-based policy.

Where KT is understood to evolve from relationship-building, dialogue, and discussion, emphasis is placed on the KT process. This reflects the idea of integrated or embedded KT, which is defined and discussed in the mainstream literature (Gold, 2006; Graham, 2007). With integrated KT, the transmission of research into policy and practice is an ongoing process: It begins prior to submission of the research proposal and ends after the data have been destroyed (Graham, 2007). As a result, partnerships and interdisciplinary interactions are seen as particularly important (Gold, 2006). It is from this understanding that researchers and users, such as researchers and Aboriginal peoples in Aboriginal health contexts, are viewed as partners in the generation and dissemination of knowledge. The conceptualization of integrated KT “as an ongoing process, not a one-time act” (Pyra, 2003, p. 14) sits in contrast to the more traditional view of KT as occurring at the end of the research project (Graham, 2007). This is an important distinction with respect to Aboriginal KT, because integrated KT stresses the importance of process and partnership for ensuring that research is ethical, relevant, and actionable for Aboriginal communities.

Cross-cultural Influences

The development of ethical guidelines to ensure effective and appropriate interactions within the research community in Aboriginal health research contexts is connected to the (often) cross-cultural nature of Aboriginal health research. This is reflected in the requirement that researchers meet international standards of excellence in Western science while simultane-

¹The terms community-centred and community-based and the terms participatory research, involved research, and collaborative research are used interchangeably in the literature to describe an approach to research that involves the community at all stages of process and design (Israel, Schulz, Parker, & Becker, 1998).

ously integrating and balancing Aboriginal “ways of knowing.” The inclusion of both Aboriginal and mainstream perspectives is intended to create an environment for sharing best practices in research interpretation and to transform innovative knowledge products, derived from different points of view, to improve Aboriginal health. The challenge is in reconciling these two seemingly opposed worldviews:

Western and native science traditions are very different in terms of the ways in which people come to know, the ways in which knowledge or understanding is shared, how knowledge is transferred from one generation to another and how knowledge is handled legally, economically, and spiritually. (Cajete, 2000, p. 287)

The belief that Western science and Indigenous ways of knowing represent separate and incompatible worldviews, however, ignores the relationship between the two worldviews and the benefits that can be drawn from the use and incorporation of both (Smylie et al., 2003). This perspective is evident in the Aboriginal health research literature on the concepts of “ethical space” (Ermine, Sinclair, & Jeffrey, 2004; Ford, 2006) and “two-eyed seeing” (Wiber & Kearney, 2006) described below.

The term ethical space was coined by Roger Poole in 1972 (Ford, 2006). Its articulation in Aboriginal health contexts is facilitated by the work of Willie Ermine (Ermine et al., 2004; Ford, 2006). What ethical space means is that when two worldviews intersect or interact, space must be created to allow for discussion and dialogue. During this dialogue, the two systems can move from talking about or to one another to talking together (Ford, 2006). Two-eyed seeing, on the other hand, refers to the ability to see “via the strengths of both Indigenous and Western scientific knowledge and ways of knowing” (Wiber & Kearney, 2006). This is a mindful process of learning the strengths of both systems and how to use them together in academic and community settings (Wiber & Kearney, 2006).

It is evident even from this brief discussion of these rich ideas and their relationship to KT that there are ways to conceptualize interactions between the two worldviews. Integrating the perspectives of the mainstream health research community and the Aboriginal community requires balance and synergy to inform innovations for improving the health and well-being of individuals and populations. Presently, the balance of influence regarding the use of Western science and Aboriginal ways of knowing favours Western science, yet Aboriginal knowledge is having an impact. For instance, while the application of Western research has been the focus of KT studies and practices, it must be recognized that the translation of Aboriginal knowledge into research is also needed (Ranford & Warry, 2006, p. 5).

The Two-Communities Approach

When reviewing the key concepts discussed in the Aboriginal health research literature and their relation to KT in Aboriginal health contexts, there is a tendency to examine KT in terms of the favourability of interaction between researchers and Aboriginal peoples. The two-communities theory (Dunn, 1983) has historically grounded the conceptualization of KT in mainstream health contexts. This theory is based on the view that cultural differences between researchers and policy-makers hinder the use of knowledge and the transmission of knowledge between the two groups (Dunn, 1983). While useful and relevant in many ways, the two-communities theory has been criticized for the simplicity of its focus and for its view of KT as a one-way process involving two distinct groups (van Kammen, de Savigny, & Sewankambo, 2006; Wingens, 1990). Because Aboriginal KT is conceptualized as occurring between researchers (employing Western Scientific perspectives) and Aboriginal communities (informed by Aboriginal ways of knowing), it could be seen as simply a reinvention of the two-communities theory.

In order to move beyond the research-Aboriginal community conception of KT and avoid this tendency, one should examine how and why a researcher-community focus is limiting. In situating Aboriginal health research in a broader context, one can see how the expertise of other groups could benefit the conceptualization and implementation of KT. While the scientific and methodological expertise of researchers and the cultural and local expertise of communities are essential to KT, practitioners and policy-makers can bring important skills to the table (National Centre for the Dissemination of Disability Research, 2008). For instance, frontline workers can bring their practical experience of KT, while policy-makers and decision-makers in fields relevant for Aboriginal health can provide resources, skills, and knowledge of the political context governing the implementation of research. In addition to the need for relationships between these communities at a personal level, there is a need to share literature and take advantage of the interdisciplinary nature of KT. For example, the nursing research literature demonstrates that nurses use many different types of evidence (Estabrooks, 1998; French, 1999), that definitions of evidence need to be reviewed and related to practice (Kirkham & Baumbusch, 2007), and that the lack of access to and support for the use of research findings can create barriers for nurses attempting to apply research evidence in practice (Retsas, 2000). The connection between research and policy is also evident in a number of subfields of policy studies. The environmental policy literature, for example, comprises a number of sub-literatures that ask whether and under what conditions scientific findings are used to

create policy change (Andresen, Skodvin, Underdal, & Wettestad, 2000; Bocking, 2004; Harrison & Bryner, 2004).²

The overlapping focus of these literatures suggests that all stakeholders should be incorporated into KT processes and should interact and associate with each other to ensure the success of KT (Gowdy, 2006). The development of a model of such interactions requires communication strategies. Language use is not consistent across professional and cultural groups (Research Impact, 2008). Differences in language use are often accentuated in cross-cultural contexts. For instance, non-Aboriginal health-care workers “are at a particular disadvantage in that they are often only able to communicate through the language and culture of biomedicine” (Adelson, 2005, p. S46). Information can get lost in translation, as words may not mean the same thing or may be interpreted differently (Research Impact, 2008). This is evident in the KT debate itself, where KT is used as an abbreviation for both knowledge translation and knowledge transfer (Department of Business, Enterprise, and Regulatory Reform, 2007; Graham et al., 2006). While the differences between the two terms may be subtle, the terminology can obscure fundamental differences in one’s understanding of knowledge and practice, as well as the relationship between the two. What this suggests is that time should be built into discussions to allow for the resolution of these differences and perhaps for the development, at the outset, of a common understanding of terms and meanings.

While it is logical to argue that the optimal type of KT will involve and integrate the ideas and perspectives of all potential stakeholder groups, KT should also occur within each of the relevant communities — that is, between Aboriginal communities, between health researchers, between policy-makers, and between health practitioners. The role of individuals and groups that span one or more of these stakeholder communities, such as Aboriginal researchers or nurse researchers, in facilitating various aspects of KT will also need to be examined. Further, queries about whether research can or should integrate various stakeholder communities, and at what stages in the process each of the interactions take place, will have to be considered. For instance, it is logical to assume that research that does not affect the work of one or more of these groups would not need to facilitate interactions between all communities.

²Some examples of these large sub-literatures include a focus on the idea of policy learning (Haas, 2000); the role of ideas, relative to that of power and interests, in policy processes (Haas, 2004; Hoberg, 1996; Lertzman, Rayner, & Wilson, 1996); and, finally, the role of policy entrepreneurs and epistemic communities, or “experts,” in influencing and facilitating the promotion of policy ideas and the impact of science on policy (Haas, 1992; Mintrom, 1997).

In addition to discussing the various roles and relationships of different communities and stakeholder groups, a model of Aboriginal KT will have to take into account the social and political context in which the translation process takes place. It must include, for example, an examination of the response of the mass media and the public to Aboriginal health research, and the role of each in facilitating discussion about research, as well as the political climate and attitude towards Aboriginal health issues that will inevitably influence the course of KT.

Knowledge Translation in Practice

As Aboriginal KT is a complex and multidimensional phenomenon, its parameters are not easily defined. Based on the above discussion and the associated literature, however, one can argue that Aboriginal KT is an ongoing, ethical process of exchange between two or more parties. Knowledge translation is difficult to characterize. In the literature a number of different activities, practices, and processes are labelled as KT. These include “making research findings accessible; training and education; involving communities and individuals in shaping research; engaging in meaningful dialogues” (June Bold, quoted in Kaplan-Myrth & Smylie, 2006, p. 25). The lack of a clear definition has resulted in the labelling of even the most ordinary interactions as KT.

As KT continues to develop in health contexts, its definition and meaning will have to be clarified, as will its actualization. Aboriginal communities, health practitioners, and other professionals who have an intimate understanding of practice contexts can add greatly to the conceptualization of Aboriginal KT. The development of evaluation tools and methods will also be necessary if the concept of KT is to be sustained.

Conclusion

While we have sought to develop a preliminary understanding of what KT means for Aboriginal health, the discussion has shown that much more is needed before we can understand what KT means in the Aboriginal context, how it can be effectively implemented, and how it can be used to improve the health and well-being of Aboriginal peoples. Two certainties can be drawn from this brief exploration. First, KT must become a focus at all levels and from all perspectives. For instance, researchers, Aboriginal communities, policy-makers, and practitioners will have to work together in order to meet its goals. Broad partnerships and open communication at all stages of the research process have the potential to ensure that knowledge is used to positively influence the health of Aboriginal peoples at the community and individual levels. This

will require continual discussion, analysis, and examination of the meaning and practice of KT across disciplinary boundaries and cultural divides. The nursing community has a unique perspective to add to KT discussions; its understanding of the KT practice environment can serve to ensure that research is properly implemented and understood. Examination and exploration of the context of KT discussions and practices are important for the conceptualization of Aboriginal KT. They should include an examination of the influences of the political environment, the mass media, and public attitudes on the need for and importance of translatable and actionable research.

Second, KT is important for the future. If Aboriginal health continues to be pushed to the bottom of the political agenda, Canada will continue to be the object of shame internationally for its neglect and mistreatment of Aboriginal peoples (Epstein, 1982). This is more than just an embarrassment; it is a preventable tragedy. By striving to understand KT and implement it in the context of Aboriginal health, we can participate in the “quest to improve Aboriginal Peoples’ health in Canada” (Reading, 2006). Further, the knowledge gained about the connections and intersections between the worlds of research, policy, and practice in this context will likely serve to inform efforts aimed at improving the health and well-being of all Canadians.

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L'examen de la méthode de l'analyse positive en tant qu'intervention d'application des connaissances dans le traitement de la douleur

**Tricia Kavanagh, Bonnie Stevens, Kate Seers,
Souraya Sidani et Judy Watt-Watson**

Malgré les solides données probantes qui existent en matière de traitement de la douleur, dans la pratique, la douleur n'est pas toujours bien traitée. L'orientation des interventions d'application des données probantes doit être changée, pour passer des caractéristiques individuelles à des stratégies d'application des connaissances qui reposent sur la théorie et tiennent compte du contexte organisationnel et de la dimension sociale de l'application des données probantes à la pratique. Les auteures examinent la méthode de l'analyse positive en tant qu'intervention d'application des connaissances novatrice dans le domaine du traitement de la douleur en soins infirmiers. Elles ont pour objectifs d'améliorer la situation actuelle des interventions d'application des connaissances au traitement de la douleur et d'examiner l'utilité des interventions potentielles selon leur congruence avec la théorie. La théorie et la pratique de l'analyse positive sont comparées avec la notion d'application des connaissances et avec les éléments du cadre *Promoting Action on Research Implementation in Health Services* [encouragement à agir pour l'application de la recherche dans les services de santé]. L'analyse se fonde sur le traitement de la douleur en soins infirmiers.

Mots clés : données probantes, application des connaissances, douleur, méthode de l'analyse positive, intervention, théorie

Examining Appreciative Inquiry as a Knowledge Translation Intervention in Pain Management

**Tricia Kavanagh, Bonnie Stevens, Kate Seers,
Souraya Sidani, and Judy Watt-Watson**

Despite a solid evidence base for pain management, pain is not always well managed in practice. Interventions to implement pain management evidence need to be shifted from a focus on individual characteristics to knowledge translation strategies that are grounded in theory and attend to the organizational context and social dimension of translating evidence into practice. The authors examine Appreciative Inquiry (AI) as an innovative knowledge translation intervention in the area of pain management in nursing. Their aims are to advance the current state of knowledge translation interventions in pain management and to examine the usefulness of potential interventions based on their congruence with theory. The theory and practice of AI are compared to the concept of knowledge translation and the elements of the Promoting Action on Research Implementation in Health Services framework. Discussion is grounded in pain management in nursing.

Keywords: nursing practice, evidence-based; knowledge translation; pain; Appreciative Inquiry; intervention; theory

Despite a solid evidence base for pain management, pain is not always well managed in practice (Twycross, 2007). Although pain management is a multidisciplinary responsibility, nurses' play a pivotal role in pain management; therefore nursing practices are the focus of this article. Instead of taking the traditional view that the persistence of suboptimal pain management is a knowledge-deficiency problem on the part of nurses, we see the core issue as a failure to use available evidence in practice (Scott-Findlay & Estabrooks, 2004). The challenge is therefore one of knowledge translation, not knowledge building alone. Innovative interventions are needed to translate pain management evidence into practice. Grounding knowledge translation interventions in theory is integral to advancing knowledge translation in health care (Eccles, Grimshaw, Walker, Johnston, & Pitts, 2005; Estabrooks, Thompson, Lovely, & Hofmeyer, 2006). Currently there are no interventions for translating pain evidence into nursing practice that have been grounded in knowledge translation theory. The Promoting Action on Research Implementation in Health Services (PARIHS) framework identifies

evidence, context, and facilitation as critical factors in translating evidence into practice (Kitson, Harvey, & McCormack, 1998; Rycroft-Malone, 2004). The theoretical perspective of the PARIHS framework is congruent with the understanding of implementing evidence in practice as organizational change (Reay, Golden-Biddle, & Pablo, 2002).

Appreciative Inquiry (AI) is an approach to organizational change that appears to be consistent with the elements of the PARIHS framework. The uniqueness of AI lies in its focus on the strengths rather than the weaknesses of an organization and innovative ways to improve practices. Appreciative Inquiry has yet to be examined as a knowledge translation intervention or to be applied to clinical issues, such as pain, in inpatient settings. In this article we examine the use of AI as a knowledge translation intervention to implement pain management evidence in nursing practice. The aims are to (1) advance knowledge translation efforts in pain management by considering an innovative intervention, and (2) explore the usefulness of interventions based on their congruence with knowledge translation theory. The theory and process of AI are examined in relation to the concept of knowledge translation and the elements of the PARIHS framework. Discussion is grounded in the clinical example of pain management in nursing.

Appreciative Inquiry

Appreciative Inquiry is an effective approach to organizational change in the business literature. A meta-analysis of cases that applied AI found that all 20 cases achieved change in social processes and seven cases achieved change in “how people thought” and “what people do” (Bushe & Kassam, 2005). However, results may be biased because those writing the cases were also consultants to the organizations. Randomized controlled trials have been conducted to evaluate the effect of AI on restaurant management retention (Jones, 1998) and student team development (Bushe & Coetzer, 1995). Although significant favourable effects of AI on outcomes were indicated, results should be viewed with caution due to the methodological limitations of the studies (e.g., methods of randomization were not elaborated and sample size calculations were not performed). Also, it was suggested that AI might be more suited to generating positive group dynamics than promoting simple task performance (Bushe & Coetzer, 1995). Change efforts using AI are emerging in health-care research addressing administrative issues (e.g., Farrell, Douglas, & Siltanen, 2003; Keefe & Pesut, 2004). Although AI has been applied to develop clinical practices (Carter, Cummings, & Cooper, 2007; Reed, Pearson, Douglas, Windburne, & Wilding, 2002), its effectiveness has not yet been well established.

Theoretical Principles

Appreciative Inquiry is an approach to change where the strengths and achievements (positive factors) in an organization are used to promote and sustain change. It is a way of being with and directly participating in an organization. Its purposes are to generate knowledge (or ideas) within social systems and to use this knowledge to promote dialogue that leads to congruence between values and practices. Collective action and vision are considered critical to the evolution of group behaviour. Appreciative Inquiry is rooted in action research and is therefore a participatory, collaborative process. However, in contrast to action research, it is focused more on knowledge generation than on action; ideas are assumed to be the most powerful vehicles for inspiring and effecting change in social systems. Appreciative Inquiry also contrasts with the traditional problem-based perspective of action research (and typical organizational change initiatives) through its positive, strengths-oriented focus. A focus on successes and achievements is fundamental to AI and is hypothesized to result in effective and sustained change efforts (Cooperrider & Srivastva, 1987; Cooperrider, Whitney, & Stavros, 2005).

Appreciative Inquiry is based on the paradigm of sociorationalism, in which all patterns of social action are considered amenable to change. Thus, it is premised on the social constructionist notion that social reality is a product of shared meanings within a social system. Alterations in conceptual practices are thought to have great potential for guiding changes in the social order. Social constructionism underlies the five core principles of AI: (1) what is known about an organization is inseparable from its future; (2) inquiry and intervention are one and the same; (3) members of an organization are constantly co-authoring its story; (4) the image of the future guides the behaviour of individuals and organizations; and (5) momentum for change requires positive affect, social interaction, and inspiration (Cooperrider & Srivastva, 1987; Cooperrider et al., 2005).

Intervention Model

The AI process is captured in the 4D cycle: Discovery (positive elements of practice are illuminated), Dream (an ideal practice environment is envisaged), Design (processes that support the articulated ideal are created), and Destiny (strategies to strive towards the ideal are implemented) (Cooperrider et al., 2005). The Affirmative Topic is at the core of the 4D cycle and provides a positive rather than problem-based focus for inquiry (Cooperrider et al., 2005). Using the AI process to implement pain management evidence in nursing practice would involve a facilitator leading the nursing staff in a series of workshops addressing the question

Table 1 *AI Intervention Activities Applied to Evidence-Based Pain Management*

Phase	Activities	Application to Evidence-Based Pain Management
Discovery	Introduce the Affirmative Topic; conduct Appreciative Interviews	Facilitators present an overview of AI, evidence-based pain management, and the affirmative topic by posing a question: <i>What is working well for practising evidence-based pain management on your unit?</i> Dyads discuss an instance when they or a colleague managed pain based on evidence and the factors that made this possible; facilitators help the group to uncover themes or circumstances that enabled them to practise evidence-based pain management.
Dream	Consider a Miracle Question	Dyads discuss the contextual factors that would exist on their unit if they were able to practise evidence-based pain management all the time; facilitators guide participants to select key factors that would enable them to practise evidence-based pain management.
Design	Make a Provocative Proposition	Facilitators guide participants to apply key factors from the Dream phase and write a realistic, affirmative, present-tense statement that indicates a clear vision for using pain management evidence on their unit, specific to a particular practice of interest.
Destiny	Develop an action plan	Facilitators guide participants to develop a plan that can be realistically achieved, within a given period, to implement the evidence-based pain management practice on the unit.

What is working well for practising evidence-based pain management on your unit? Based on the action research nature of the intervention, participants would select an area of evidence-based pain management to develop on their unit and the strategies for doing so. The activities of each AI phase applied to evidence-based pain management are shown in Table 1.

Appreciative Inquiry: A Knowledge Translation Intervention?

Appreciative Inquiry is an innovative possibility for an intervention to implement pain management evidence in nursing that addresses organizational rather than individual factors. The positive focus of AI makes it an attractive alternative to deficit-based ways of implementing pain management evidence in practice. However, before AI can be used as a knowledge translation intervention, its congruence with knowledge translation theory must be examined. In the following discussion, the theory and process of AI are explored in relation to the concept of knowledge translation and the elements of the PARIHS framework.

Appreciative Inquiry and Knowledge Translation

Knowledge translation is broadly defined as “the exchange, synthesis and ethically-sound application of knowledge — within a complex system of interactions among researchers and users — to accelerate the capture of the benefits of research for Canadians through improved health, more effective services and products and a strengthened health care system” (Canadian Institutes of Health Research [CIHR], 2005). The concept of knowledge translation is distinct from that of the earlier and more traditional knowledge transfer. Although in some fields knowledge transfer is implicitly considered a two-way process (Graham et al., 2006), in health care it typically refers to the unidirectional flow of knowledge from researcher to user (CIHR, 2005; Graham et al., 2006). Supplier push models (Davis et al., 2003; Dickinson, 2004) are examples of knowledge transfer. In these models, knowledge is viewed as a product created by researchers and pushed out for use by practitioners, stressing the linear and unidirectional sequence of research supply to research use (Landry, Lamari, & Amara, 2003). Many knowledge transfer interventions can be characterized as passive dissemination. Passive dissemination involves neither personal contact nor engagement with participants in the implementation process, and it includes traditional methods such as publication, guideline implementation, and didactic education (Bero et al., 1998). The majority of interventions to implement pain management evidence in practice are methods of knowledge transfer focused on providing education to increase nurses’ knowledge and challenge misconceptions. In general, knowledge transfer interventions have had limited

success in increasing the clinical application of evidence (Bero et al., 1996; CIHR, 2005). Researchers have frequently attributed this failure to the distinct and irreconcilable natures of the research and practice communities (CIHR, 2005).

Knowledge translation interventions take a relatively comprehensive approach to implementing evidence in practice. For example, they are not limited to education because their focus extends beyond building individual knowledge to changing behaviour and overcoming barriers to change. Neither are they limited to individual persuasion, because they are meant to be contextually relevant by virtue of their location in the clinical, social, organizational, and policy contexts of practice. Lastly, the objectives of knowledge translation go beyond identifying evidence to facilitating its use in practice (Davis et al., 2003).

The theory and practice of AI appear to be aligned with the concept of knowledge translation. Due to its roots in action research, AI is compatible with the concept of knowledge translation as a dialogic and interactive process that unites individuals from the research and practice communities for the common purpose of using current, relevant research (CIHR, 2005). The action research orientation of AI makes it compatible with interactive models of knowledge translation, such as pragmatic models. These models are premised on the need for cooperation between researchers and clinicians to promote the use of evidence in practice (Dickinson, 2004). The distinction between knowledge translation and knowledge transfer is that the former, instead of appreciating knowledge as a product, considers knowledge generation and use as social processes. Similarly, the purpose of AI is to generate knowledge and foster learning by promoting democratic dialogue within a social system (Cooperrider & Srivastva, 1987; Cooperrider et al., 2005). Knowledge is valued not as an outcome but as collective construction through inquiry. Knowledge within both interactive models of knowledge translation and AI theory is viewed as socially constructed through communicative processes of learning that occur in contexts with established meaning systems, role structures, and values (Cooperrider & Srivastva, 1987; Dickinson, 2004).

An objective of knowledge translation is mutual understanding between researchers and clinicians, which is achieved by considering individuals' needs, interests, values, beliefs, and responsibilities as types of knowledge to be translated (Dickinson, 2004). This objective resembles the focus of AI on eliciting group values and interests through social interaction to achieve collective vision and action (Cooperrider & Srivastva, 1987). The AI focus on interaction and dialogue complements evidence that nurses prefer interpersonal and interactive sources of knowledge (e.g., dialogue with colleagues) over traditional modes of

dissemination (e.g., printed materials) (Estabrooks et al., 2005). Participatory interventions such as AI may therefore be a sound alternative to traditional knowledge transfer as a means of changing pain management practices in nursing.

Appreciative Inquiry and the PARIHS Framework

The theory and process of AI seem to be congruent with the concept of knowledge translation. We will now examine AI using the elements of the PARIHS framework, considering complementary knowledge translation theory where relevant to more thoroughly examine its use as a knowledge translation intervention.

Evidence, in the PARIHS framework, is defined as “knowledge derived from a variety of sources that has been subjected to testing and has been found to be credible” (Higgs & Jones, 2000, p. 311). As opposed to evidence, the term knowledge more aptly reflects the many sources that clinicians rely on to make clinical decisions (Rycroft-Malone et al., 2004). The PARIHS framework incorporates four sources of evidence from which knowledge is generated in clinical practice: research, clinical experience, patient experience, and local contextual information (Rycroft-Malone, 2004).

Although AI theory does not contain the word evidence, it is replete with the word knowledge. The concept of knowledge as a social construction co-produced by members of a social system is central to AI theory and practice, the implications being that knowledge depends on the values and beliefs of a social system and the locus of knowledge is the relationship between individuals rather than an isolated individual (Cooperrider & Srivastva, 1987; Cooperrider et al., 2005). In the PARIHS framework, similarly, knowledge and evidence are viewed as socially constructed and dynamic (Rycroft-Malone et al., 2004). Even research is seen as a derivative of social processes and is therefore not value-free. Furthermore, evidence is amenable to different interpretations (Rycroft-Malone et al., 2004). This is consistent with the understanding of knowledge in AI as open to any interpretation, filtered through the prevailing values and beliefs of a culture (Cooperrider & Srivastva, 1987).

Internal knowledge generated by and applicable to group members is valued in AI. The PARIHS framework includes clinical experience, patient experience, and local contextual data as types of evidence from which nurses derive meaningful and useful knowledge for their practice. Through a focus on interactive knowledge generation, AI may be a means to discuss these sources of internal knowledge. The articulation of nurses’ clinical knowledge is an important first step in making it credible evidence through critique and reflection (Rycroft-Malone et al., 2002). However, according to the definition of evidence in the PARIHS

framework, the AI process must also incorporate research (or external knowledge) to be a knowledge translation intervention. Pain management research could be introduced to nurses in the Discovery phase of AI and further incorporated into the intervention based on their interests and needs. For example, pain assessment or management research could be given to nurses based on the evidence-based practice they choose to implement on their unit.

Modifying the AI process to include research appears to contradict the focus of AI on generating internal knowledge as opposed to implementing externally validated knowledge (Bushe & Kassam, 2005). However, this may not be the case, as the emphasis in AI on creating applicable, contextually relevant knowledge suggests that it is an intervention capable of negotiating with the “soft periphery” of research. Innovations are suggested to have a hard core that is fixed and a soft periphery that is amenable to manipulation by the adopting system (Lewis & Seibold, 1993). The soft periphery refers to the ways in which evidence can be implemented (Denis, Hebert, Langley, Lozeau, & Trottier, 2002). For example, the soft periphery of pain management evidence could include organizational arrangements to facilitate use of the evidence on a unit and defining when and how to apply it, as well as which particular elements of the evidence would be implemented.

Negotiation with the soft periphery may give meaning to an innovation and render feasible practices that might otherwise be destined for failure (Denis et al., 2002). Reinvention, defined as modification of an innovation by users during the implementation process (Rogers, 2003), is a critical step in knowledge use (Donaldson, Rutledge, & Ashley, 2004; Rogers, 2003) and may have great value for implementing evidence-based pain management practices in nursing; typically, pain management research has been considered user-friendly and applicable across settings without the need for contextualization. Attending to the soft periphery of pain management research may lead to the production of “situated knowledges,” which promote knowledge translation and use by making remote evidence contextually relevant (Lave & Wenger, 1991). Practitioners do not simply apply abstract, disembodied research; they actively interpret and reconstruct its local validity and usefulness (Wood, Ferlie, & Fitzgerald, 1998).

Context is the setting in which the proposed change is to be implemented (McCormack et al., 2002; Rycroft-Malone, 2004). It is dynamic and complex and implies an understanding of the forces that give an environment its particular character and atmosphere (McCormack et al., 2002). The characteristics of context include organizational culture, leadership, and evaluation (Rycroft-Malone, 2004).

The theory of AI resonates with the conceptualization of context as dynamic and complex in the PARIHS framework, while the practice of AI aims to address the complexity of context in effecting change. The roots of AI in organizational change and action research make it an intervention specific to the environment in which change is to be initiated. Of the three context sub-elements of the PARIHS framework, culture has particular relevance for AI. Appreciative Inquiry aims not only to generate applicable, context-specific knowledge but also to create a culture that will support the application of generated knowledge (Cooperrider & Srivastva, 1987). According to the PARIHS framework, culture must be understood if meaningful and lasting change is to be achieved (McCormack et al., 2002). Appreciative Inquiry seeks to understand the local culture by determining the values, beliefs, and needs of individuals within the social system. Its theory and practice are also congruent with the PARIHS tenet that staff as a resource is central to the transformation of organizational culture (McCormack et al., 2002).

People provide the context of practice in AI, with organizations defined as “living, human constructions” (Cooperrider & Avital, 2004, p. 2). The focus on the human component of context in AI contrasts with the emphasis on physical setting and organizational infrastructures in the PARIHS framework. However, it is this focus that gives AI particular value as a knowledge translation intervention in pain management: It addresses the importance of staff as agent of change and the social process of knowledge translation, in contrast with traditional knowledge transfer interventions in pain management, which focus on changing isolated individual characteristics of nurses, such as knowledge.

The understanding of context within the theory and practice of AI is aligned with the theory of communities of practice. Communities of practice are groups of interdependent individuals that provide a work context where members generate a shared perspective (Brown & Duguid, 2001). They acknowledge the importance of people and their interactions in practice and assume that they do not learn in isolation (Wenger, 2000). Applied to nursing, the theory of communities of practice suggests that nurses interact with their colleagues and employ the resources that are available, instead of acting in prescribed and predictable ways (Estabrooks, 2003). Appreciative Inquiry is compatible with this theory because it promotes collaborative learning and is responsive to the interests and needs of participants (Coghlan, Preskill, & Tazavaras Catsambus, 2003; Cooperrider et al., 2005). Nurses can collaboratively generate strategies for using pain management evidence in practice that capitalize on the organizational strengths of their unit, their preferred ways of practising, and the resources available to them.

The literature on communities of practice highlights the importance of social networks in the acceptance of ideas and knowledge (Dopson, Fitzgerald, Ferlie, Gabbay, & Locock, 2002). The objective of AI is to create not only context-specific knowledge but also an environment that will support its everyday application (Cooperrider & Srivastva, 1987). Rogers (2003) points out the importance of restructuring when diffusing innovations within organizations. Diffusion is optimal not only when an innovation is reinvented to accommodate the needs of the social system, but also when the structure of an organization is modified to fit the innovation. An AI intervention may go beyond enabling nurses to define evidence-based pain management practices that would suit their practice community, to encourage dialogue around organizational modifications that would support evidence-based pain practices in the local context.

The concepts of leadership and evaluation in the PARIHS framework are less a focus in AI but are addressed indirectly. Appreciative Inquiry promotes the informal, internal evaluation of unit practices by encouraging nurses to focus on and develop pain management practices. With respect to leadership, the AI process is aligned with the concept of transformational leadership in the PARIHS framework; it seeks to generate a shared vision for evidence-based practices in nursing, and it challenges and enables group members to realize that vision (McCormack et al., 2002). The objective is to build a network of local transformational leaders (i.e., participating nurses) who will together create a unit that is more conducive to the use of pain management evidence in practice.

However, an AI intervention cannot rely only on the creation of leaders; it also needs supportive leadership. The participatory nature of AI requires that nurses be supported by local leaders to engage in the intervention and implement the action plan. In the PARIHS framework, leaders are critical to creating contexts that are receptive to change (Rycroft-Malone, 2004). The AI process calls for representation from various levels within an organization (Cooperrider et al., 2005). Local nurse leaders (e.g., advanced practice nurses, nurse educators, and nurse managers) should therefore be included in an AI intervention. Gaining the support of leaders, however, may depend on the relevance and organizational fit of evidence-based pain management with respect to the unit and the organization (Rycroft-Malone et al., 2004).

Facilitation is the process of enabling the use of evidence in practice (Harvey et al., 2002; Rycroft-Malone, 2004). Effective facilitation is the result of matching the purpose of facilitation, the role of the facilitator, and the skills of the facilitator to the situation. The purpose of task-oriented facilitation is to support the achievement of a concrete task, while that of enabling facilitation is to enable others to change their attitudes and behaviours (Rycroft-Malone et al., 2002).

Appreciative Inquiry can be characterized as an enabling method of facilitation because the focus is on guiding nurses to challenge their attitudes and behaviours by evoking participation, rather than dictating the outcome in a one-way transfer of information (Kitson et al., 1998; Rycroft-Malone et al., 2002). An internal-external facilitator partnership is a model of enabling facilitation (Rycroft-Malone et al., 2002). An AI intervention to implement pain management evidence in practice could use this model with facilitators in high-intensity roles employing interactive learning strategies (Rycroft-Malone et al., 2002). The external AI facilitator could be a researcher familiar with the AI process who would guide group members towards innovations in organizational processes and support participants in generating momentum for effective change (Cooperrider & Srivastva, 1987; Cooperrider et al., 2005). The internal facilitator could be local to the unit (e.g., an advanced practice nurse) who assumes a task-based role by demonstrating pain management skills and presenting pain management research to the group according to the chosen area of practice change. This task-based role is critical to the implementation of pain evidence because of the complex nature of pain and the abundance of pain management research (Kavanagh, Watt-Watson, & Stevens, 2006). During the AI intervention, the internal facilitator could keep the focus of discussion on evidence-based pain management and ensure that current, relevant research is incorporated into the practice change of interest. The use of a dedicated facilitator would prevent the group from basing discussion on anecdote rather than evidence.

A potential problem with using an external facilitator (i.e., researcher) in an AI intervention is that AI is not meant to address organizational processes that have been identified by an outside expert (Bushe & Kassam, 2005). This implies that AI should not be used for the predetermined purpose of implementing pain management evidence in practice. In health care, however, AI has been used to reframe researcher-identified issues or practices that might benefit from change (e.g., Carter et al., 2007; Reed et al., 2002). Though these approaches strive towards predefined objectives, the change process is loyal to the principles of AI in that a positive perspective is maintained and group participation is used to generate applicable knowledge.

Implications and Conclusions

The complexity of interactions between clinicians and the practice context means that there is no magic formula for translating evidence into practice (Dopson et al., 2002). Theoretically, AI is useful as a knowledge translation intervention for pain management. This use

initiates a shift from the assumption that the underlying problem of suboptimal pain management practices in nursing is a lack of knowledge. Rather, AI engages group members and approaches the implementation of pain management evidence in practice as organizational change. The theory and practice of AI incorporate characteristics of knowledge translation, including (a) an understanding of knowledge generation and translation as social processes; (b) a valuing of and ability to access knowledge related to clinicians' values, needs, beliefs, and responsibilities; (c) a specificity to the context of practice; and (d) a focus on the process of facilitating the clinical use of evidence.

The PARIHS framework is useful for critiquing potential knowledge translation interventions because it addresses the complexity of implementing evidence in practice. Facilitation may be a key variable in the PARIHS framework, as the production and use of evidence are social processes and little organizational change is possible without key drivers (Kitson et al., 1998; Rycroft-Malone et al., 2002). Appreciative Inquiry can be characterized as an enabling approach to facilitation, with the potential to address the nature of the evidence and the context of the practice where it is to be implemented. Knowledge derived from clinical and patient experience, as well as the local context, can be elicited from participants, challenged when appropriate, and incorporated into the AI intervention. Appreciative Inquiry is also contextually specific, with a focus on the human element of context and the culture of an organization.

Using AI as a knowledge translation intervention requires supportive leadership, which likely depends on the relevance and organizational fit of evidence-based pain management in the clinical setting (Rycroft-Malone et al., 2004). The process must be modified to include pain management research. However, this contingency does not contradict the focus of AI on creating internally generated knowledge. Appreciative Inquiry has the capacity to negotiate with the soft periphery of research, which enhances the opportunity to reinvent (Rogers, 2003) research to create "situated knowledges" (Lave & Wenger, 1991) internal to the unit of practice. It is an opportunity for researchers and clinicians to unite for a common purpose and to co-construct knowledge that will be shared by the two communities. Social interaction between members of research and practice communities that has a positive focus may lead to compelling exchange and the creation of knowledge that is based in research yet is contextually meaningful.

The strengths-oriented nature of AI may make it an appealing intervention for nurses, as traditional problem-oriented approaches to change can serve to demoralize, limit inquiry, and breed apathy and resistance to change (Coghlan et al., 2003). This positive focus may be particularly

relevant in the area of pain management, where researchers have tended to focus on nurse deficits as the root of the problem instead of capitalizing on strengths and supportive organizational modifications. A potential limitation of using AI as a knowledge translation intervention in pain management is that participants feel they have little to contribute in terms of examples. According to AI theory, though, every social system has positive elements, however small, and the primary task of research is to discover and describe them (Cooperrider & Srivastva, 1987). Examples can therefore be small and few and come from a nurse's own practice or that of a colleague. Because language is fundamental to shaping reality, positive language (e.g., competency, learning, positive outcomes, visionary ideas) is used to maintain a positive focus (Cooperrider et al., 2005).

Although using AI as a knowledge translation intervention for pain management implies that the impetus for the intervention is problem-based, a distinction can be made between a problem-based catalyst for an AI intervention and the problem-based delivery of an AI intervention. In both the business and the health-care literature, problems and issues drive implementation of AI interventions. Also, AI theory states that members of an organization can choose which aspects of their organizational life, including problems and issues, they wish to study (Cooperrider et al., 2005). The critical feature of AI practice appears to be how the issue of interest is framed. It is essential that the topic of evidence-based pain management be framed in affirmative terms and that affirmative language be used during the intervention (Cooperrider et al., 2005). For example, facilitators should avoid using words such as suboptimal to describe the state of pain management in nursing.

In conclusion, AI appears to be an innovative theory-based approach to knowledge translation in pain management. Although some modifications are necessary, to make the AI process congruent with the elements of the PARIHS framework, the changes seem to be compatible with the theory and process of AI. Researchers should engage in a similar exercise when selecting knowledge translation interventions, to ensure that they are theory-based. Implementation of this intervention could contribute to knowledge translation theory by providing evidence on the construct validity of the PARIHS framework. Further work is needed to explore methodological issues in the use of AI as a knowledge translation intervention.

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**La multiplication des soins axés sur la clientèle :
une étude pilote mettant de l'avant
une approche de traduction des connaissances
fondée sur l'interaction sociale**

**Carol L. McWilliam, Anita Kothari, Beverly Leipert,
Catherine Ward-Griffin, Dorothy Forbes, Mary Lou King,
Marita Kloseck, Karen Ferguson et Abram Oudshoorn**

Cette étude a pour but de piloter un processus de traduction des connaissances qui met de l'avant une approche de soins à domicile fondée sur des données probantes et axée sur l'interaction sociale. Un total de 33 professionnels de la santé regroupés en cinq groupes d'intervention hétérogènes et géographiquement définis ont participé à cinq rencontres animées par les responsables de la recherche. Un modèle d'intervention participative a été utilisé dans le cadre de ces rencontres. Les données probantes afférentes à la traduction des connaissances reflètent une approche partenariale autonomisante en contexte de prestations de services. L'étude exploratoire comportait le mesurage quantitatif des résultats, avant et après l'intervention, ainsi que la description qualitative des données, le tout présenté dans cet article. Des réflexions importantes livrées par les groupes révèlent des obstacles au processus de traduction des connaissances et des difficultés éprouvées par les personnes responsables de l'animation, notamment à l'échelle macro, meso et micro. Des recommandations ont aussi été émises pour assurer une traduction des connaissances efficace. Selon des constatations issues des résultats, les interventions en matière de traduction des connaissances doivent tenir compte des trois échelles, pour ce qui est des obstacles et des personnes chargées de l'animation. De plus, le processus doit reposer sur une volonté de transcender les tendances de « poussé-tiré » et sur un leadership transformateur. Les résultats suggèrent une nécessité de mener une étude longitudinale plus prolongée et d'assurer une participation davantage élargie.

Mots clés : traduction des connaissances, processus de traduction des connaissances

Accelerating Client-Driven Care: Pilot Study for a Social Interaction Approach to Knowledge Translation

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This study piloted a knowledge translation (KT) intervention promoting evidence-based home care through social interaction. A total of 33 providers organized into 5 heterogeneous, geographically defined action groups participated in 5 researcher-facilitated meetings based on the participatory action model. The KT evidence reflects an empowering partnership approach to service delivery. Exploratory investigation included quantitative pre-post measurement of outcomes and qualitative description of data, presented herein. The critical reflections of the groups reveal macro-, meso-, and micro-level barriers to and facilitators of KT as well as recommendations for achieving KT. Insights gleaned from the findings have informed the evolution of the KT intervention to engage all 3 levels in addressing barriers and facilitators, with a conscious effort to transcend “push” and “pull” tendencies and enact transformative leadership. The findings suggest the merit of a more prolonged longitudinal investigation with expanded participation.

Keywords: knowledge translation (KT), KT intervention, evidence-based practice, social interaction KT

Knowledge translation invites innovative social interaction interventions. Defined as the exchange, synthesis, and ethically sound application of knowledge within a complex system of relationships among researchers and users (Canadian Institutes of Health Research, 2006), KT is not a series of unilinear, rational actions (Nutley, Walter, & Davies, 2003) but a dynamic process. People from diverse disciplines and with diverse roles and statuses come together to co-create knowledge (Mykhalovskiy, 2001; Mykhalovskiy & Weir, 2004), blending research evidence with their experiential knowledge. They develop mutual understandings, amplify knowledge, solve problems, test ideas, validate strategies, and adapt the knowledge to their own culture, context, and situation (Ellerman, Denning, & Hanna, 2001). Over time, this process can generate “communities of practice,” informal groups through which people develop and share the ability to create and use knowledge for the purpose of improving practice (Wenger & Snyder, 2000).

Scott-Findlay and Golden-Biddle (2005) argue that KT strategies need to include organizational-level changes to values and assumptions, emphasizing critical reflection and continuous learning, as well as a practical team-level shift towards managerial recognition of the potential long-term KT outcomes and an individual-level shift towards integrating reflection on research and its application. Recently, theorists have described two social interaction approaches for KT, Promoting Action on Research in Health Services (PARiHS) (Kitson et al., 2008; Rycroft-Malone et al., 2004) and the Knowledge to Action model (Graham et al., 2006).

While these approaches are informative, there is limited evidence to support social interaction KT. In particular, greater attention should be paid to collaborative partnering approaches that might address the perception of researchers as self-serving. In this qualitative investigation we present an innovative multilevel social interaction process for KT.

Literature Review

The evidence to date leads to the conclusion that KT requires attention at three levels: micro (individual), meso (team), and macro (organizational and environmental) (Estabrooks, Midodzi, Cummings, & Wallin, 2007; Grimshaw, Eccles, & Tetroe, 2004; Grol & Grimshaw, 2003). Gaps between the possession and the application of knowledge are particularly problematic (Reuben, 2002). Professionals have been found to learn through their own grassroots efforts and to reject organized learning opportunities (George, Iacono, & Kling, 1995). Professional managers have been found to rank knowledge sources as (1) experience, (2) association, and (3) involvement (Simmonds, Dawley, Ritchie, & Anthony, 2001), two of which are clearly dependent on social interaction. Also, the intensity of the linkages between scholars and users has been found to consistently predict knowledge uptake (Landry, Lamari, & Amara, 2003). Knowledge translation is promoted through exposure to research evidence (Jones et al., 2004), opinion leaders (Dopson & Fitzgerald, 2005; Grimshaw et al., 2001), active involvement in KT (Grimshaw et al., 2001; Majumdar, McAlister, & Furberg, 2004; Thompson, Estabrooks, Scott-Findlay, Moore, & Wallin, 2007), and attention to the priorities and needs of providers (Rivera & Rogers, 2004).

Investigators have directed less attention to identifying team-level facilitators of KT (Bapuji & Crossan, 2004). Having the opportunity and time for communication is essential (Rivera & Rogers, 2004). Facilitation by people both internal and external to the organization has been found to result in greater change (Kitson, Harvey, & McCormack, 1998). Use of a knowledge broker is not always effective, as KT groups have been

found to have their own motives, achieving individual rather than organizational KT goals and outcomes (Kramer & Cole, 2003).

Established linkages amongst organizational colleagues may serve to facilitate KT (Dopson & Fitzgerald, 2005) or to impede it (Ferlie, Fitzgerald, Wood, & Hawkins, 2005). Professional membership has been found to create social and cognitive boundaries that impede interprofessional KT, suggesting the need for uniprofessional initiatives (Ferlie et al., 2005). Efforts to build upon existing social structures need to consider both hierarchical and peer-group relationships. It has been found that some groups, such as nurses, promote KT more effectively through hierarchical structures while others, such as physicians, use more egalitarian peer relationships affording discussion and influence (West, Barron, Dowsett, & Newton, 1999). However, peer relationships also may contribute to resistance to change, fostering conformity to practice norms (McWilliam & Ward-Griffin, 2006).

Researchers have identified several organizational attributes that merit attention. Opportunities for group membership (Dopson & Fitzgerald, 2005; Greenlaugh, Robert, Macfarlane, Bate, & Kyriakidou, 2004), participation (Amara, Ouimet, & Landry, 2004), and managerial support (Grimshaw et al., 2001) have been found to promote KT. Workplace social structures and approaches promoting participatory decision-making, involvement, a sense of belonging, and minimal simultaneous change have been found to facilitate organization-wide learning (London, 2001). Social influence strategies (Goldberg et al., 1998; Thomson-O'Brien et al., 2000) and continuous quality improvement action cycles (Wakefield et al., 2003) can also lead to improved outcomes.

In general, the evidence suggests the importance of regular, ongoing, facilitated (Kitson et al., 1998) face-to-face encounters permitting questioning, clarification, and shared valuing of the knowledge. Overall, however, the barriers, facilitators, outcomes, possible elements, and approaches of social interaction KT are not well understood.

Study Context

The participants included six home care programs about to be amalgamated into one organization serving an urban/rural home care jurisdiction in southwestern Ontario, Canada. Each program comprised a government-mandated in-home service brokerage agency providing care and case management as well as multiple agencies contracted to supply a diversity of professional and paraprofessional nursing, therapy, social work, and personal support services, often provided by part-time employees paid only for hours spent in direct service. With extensive role overlap-

ping, service providers primarily worked in isolation despite shared involvement and espousal of a team approach to care.

These home care programs had participated in an 18-year applied research project that developed and tested, through qualitative (Brown, McWilliam, & Ward-Griffin, 2006; McWilliam et al., 1997; McWilliam, Brown, Carmichael, & Lehman, 1994; McWilliam, Ward-Griffin, Sweetland, Sutherland, & O'Halloran, 2001) and quantitative (McWilliam et al., 1999; McWilliam et al., 2004; McWilliam et al., 2007; McWilliam, Stewart, Desai, Wade, & Galajda, 2000) investigation, an empowering partnering approach called "client-driven care." Despite organizational efforts to adopt and promote client-driven care, however, in-home providers generally resisted the change (McWilliam & Ward-Griffin, 2006). As part of their amalgamation, the leaders of these home care programs undertook this KT initiative to create an evidence-based philosophy, strategic plan, and service delivery applying the principles derived from the research on client-driven care.

Intervention

A participatory action approach (Stringer & Genat, 2004; Walton & Gaffney, 1991; White, Nary, & Froelich, 2001) was adopted to create a cyclical social interaction KT process uniting researchers and those who might apply the new knowledge (Walton & Gaffney, 1991) in five steps: (1) critically reflect on the research evidence and its implications for practice, (2) use this evidence to identify opportunities for change, (3) use the evidence and personal knowledge of the work and context to formulate strategies for change, (4) implement and evaluate the desired change, and (5) institutionalize and diffuse the changes. The approach incorporated knowledge about social interaction KT (Graham et al., 2006; Kramer & Cole, 2003; Rycroft-Malone et al., 2004), transformative learning (Mezirow, 1991), organizational learning (Senge et al., 1999), and change (Ackerman-Anderson & Anderson, 2001).

Accordingly, practitioners from geographically proximate areas and the research partners were engaged within cross-disciplinary teams as co-learners and co-constructors of knowledge through a process of facilitated critical reflection (Harvey et al., 2002; Mezirow, 1991), interaction, and action related to the evidence. Publications, PowerPoint presentations, case studies applying the principles of client-driven care, and researchers served as resources on the evidence. The action groups set their own meeting times and adapted their action meeting agendas to incorporate KT into their everyday work. The groups explored and integrated the principles of client-driven care in designing an action strategy, thereby fostering within-group partnering, interest in the research

evidence, and revised perspectives on practice and service delivery. This approach was designed to promote the relevance, applicability, and ease of implementing the knowledge and organization-wide ownership of and autonomy in the processes and outcomes of everyday evidence-based practice, thereby building communities of practice and, ultimately, a learning organization.

Methods

The study was approved by the University of Western Ontario Research Ethics Board. Thirty-three providers were organized into five heterogeneous groups of five to seven people, constituting five geographically defined action groups. Each group had a mix of case managers ($n = 9$; 27%), nurses ($n = 8$; 24%), therapists ($n = 4$; 12%), social workers ($n = 1$; 3%), and personal support workers ($n = 11$; 34%). The participants were all female and ranged in age from 32 to 60 years ($mean = 46$ years). On average, they had 15 years of experience in health services delivery and 6 to 20 years in home care. Sixty-one percent had a college diploma; the remaining 39% had one or more university degrees.

The groups completed the full action cycle over approximately 5 months. All group meetings were facilitated by a researcher, using a semi-structured guide to focus discussion on the participatory action steps, which took five meetings. Over the first three meetings, held once every 2 to 3 weeks, participants reviewed and reflected on the relevance, quality, and applicability of the research evidence, considered barriers and facilitators to implementation, and brainstormed and prioritized strategies for promoting knowledge uptake and application (step 1). At the fourth meeting, participants planned the implementation of their selected strategy (step 2), subsequently implemented over a 3-month period. The groups met a fifth time to evaluate this implementation (step 3) and make recommendations (step 4) for an expanded repeat action cycle to encourage the further involvement of KT. In addition, all groups participated in a Knowledge-to-Action Workshop, at which they presented their strategies, findings, and recommendations to 192 organizational participants, including policy- and decision-makers and providers from all disciplines.

Qualitative description (Sandelowski, 2000) was used to explore the KT process in depth. All meetings of the five action groups were audio-taped and transcribed verbatim as field data. Additionally, the researchers recorded field observations of the KT process during these meetings and during the workshop. Individual and team analyses followed an “editing analysis” approach (Miller & Crabtree, 1992). Ultimately, themes and sub-themes of barriers, facilitators, strategies, and recommendations related to

the KT process were identified. An audit trail of analysis activities, member checking with all groups, and peer review by researchers and stakeholders not involved in the analyses helped to ensure intelligibility of the findings (Kuzel & Like, 1991).

Findings

Reflecting attention to macro-, meso-, or micro-level change, the five groups ultimately implemented strategies in four areas: piloting client-driven case conferencing (micro- and meso-level), improving client-centred team communications (meso-level), refining the in-home client record to allow for a more client-driven approach (macro-level), and meeting with administrators to promote work assignments that optimize provider time for engaging with clients (macro-level; two groups). The groups' critical reflections revealed organizational, team, and individual barriers and facilitators to achieving KT through social interaction on client-driven care.

Organizational Barriers and Facilitators

Their real-life macro-level context meant that even though action groups were formalized, mobilizing human and fiscal resources for KT activities was a challenge. Groups also identified a lack of direction at times. This impeded KT and made it difficult to sustain. Participants made the following observations:

At times it's not enough people to do the work.... It's really hard for us all to meet.

Nobody has the money to pay for the meetings, conferences, and planning sessions... The only thing that the service providers are paid for is the visit.

It would have been helpful to have more direction...you know, assign the group [work]...give us some direction...assign a chairperson.

Participants described a facilitative context as one enabling geographically proximate teams to participate in KT and be both remunerated for their efforts and recognized for outcomes achieved. Several acknowledged that some agency leaders espoused the client-driven care philosophy and had attempted to create a context for it, despite limited resources.

Team Barriers and Facilitators

At the meso level, participants identified a key barrier as not knowing colleagues and therefore being unable to readily work with them. Generally, however, participants saw the opportunity to work together in

teams as highly facilitative of KT. They indicated that spending time together to achieve an adequate level of trust facilitated KT. They viewed trust as particularly attainable within smaller groups. Other facilitators included a team orientation, face-to-face meetings, team-building exercises, supportiveness, preparedness for and focus throughout meetings, group ownership of the KT process and content, egalitarian relationships, and strategy evaluation:

As soon as you have...people at the table, you have faces attached to names and then it opens up the communication so that you think, well...I'm going to call [participant] because she would possibly have the answer to that question.

I think that's what we have to really focus in on, everybody coming as an equal partner with their concerns...strengths...weaknesses...and being able to communicate that to each other and to see how we can...go forward.

Overall, the numerous team-level facilitators suggested that team effort was essential for KT. Despite concerns about contextual barriers, these practitioners appeared to be positive about this KT opportunity. Nevertheless, they felt impeded by hierarchical relationships and practices, their geographic dispersion, and a lack of expertise, experience, and direction in group processes:

Sometimes the case managers are seen as the big authority.

"Authorize" — that's a very top-down word... That's the way it works... here.

Individual Barriers and Facilitators

Just as the organizational context was seen as impeding KT at the meso level, the action groups at this level identified challenges arising from individuals within them. While consensus supported the KT initiatives of groups, the attitudes of individuals often did not. Some participants saw their work as done when assigned care tasks were completed. As the organization paid employees for these tasks on a piece-work basis, and not all KT activities appeared to be remunerable client care, the time participants spent in KT was not consistently accounted for and remunerated. Thus KT was sometimes impeded by participants' attitudes about taking on unpaid work. Additionally, many participants were accustomed to autonomous, isolated practice and were either unenthusiastic about or inexperienced in social interaction consistent with KT. Sometimes they blamed the organization for this barrier:

We get this feeling we're nobody, we're nothing, we're underneath, because nobody is communicating to us...why we're doing this... That's not communicated to us, so we aren't communicating because we feel we're not being heard anyway, so why would we do it?

Adding to this reluctance was an assumption by some participants that they had nothing further to learn. Such barriers were offset by two facilitators: a personal valuing of continuing education, and the self-assessed effectiveness of KT in enhancing the quality of their work and/or their work life.

Participant Recommendations for Refining the KT Process

While some participants suggested the need for traditional education about the research evidence, all favoured continuing the social interaction approach to KT. From their perspective, the KT intervention could best be promoted by mobilizing more systemic support, including consistent remuneration for time spent on KT, better scheduling of activities to implement KT strategies, and more active involvement by decision-makers. Overall, they recommended that KT “project leaders” create more opportunities for relationship-building, foster group discussion, and improve mechanisms for and channels of communication. While they conceded that communities of practice appeared to be developing, they indicated that further effort is required if KT is to become fully integrated into everyday work.

Discussion

The findings of this study are limited to description by a small group of participants from the home care sector. Nevertheless, several new insights may inform the refinement of social interaction approaches to KT.

Most importantly, as has been described by others (Dopson, 2007), this KT initiative was co-constructed by interacting, self-determining individuals *and* the multidimensional, multifaceted forces throughout the meso and macro levels that constituted their work context. That is, the individuals and the forces at the meso and macro levels of this work context were equally and inextricably a part of the co-construction of knowledge translation: neither was foreground; neither was background.

While the barriers and facilitators have been identified to illuminate factors at each level, in reality these environmental/organizational, team, and individual factors constituted an integrated phenomenon. At the macro level, the bureaucratic structure and functioning of large publicly funded health and social service organizations clearly challenged this social interaction KT initiative. System priorities, urban/rural structural and cultural differences, and the organization's focus on cost-efficient

service delivery all served to impede KT. Similar challenges are identified in the literature (Bapuji & Crossan, 2004; Dopson & Fitzgerald, 2005). The present findings suggest that if health and social service organizations are to nurture KT, senior administrators and managers will have to participate actively throughout the process. Careful consideration will have to be given to the allocation of resources to KT. The organization's components may have to be restructured so that they better promote communities of KT practice relevant to the KT content. In addition, ongoing evaluation of the effectiveness of KT may serve to promote accountable resource commitment.

Meso-level findings reveal that teamwork in health and social service delivery is still more a theoretical ideal than a practical reality, perhaps especially so in the home care sector. This result is consistent with the findings of previous research (Gantert, 2007; Gantert & McWilliam, 2004; Shaw, De Lusignor, & Rowlands, 2005). There were no apparent multidisciplinary communities of practice that might have facilitated within-discipline or impeded cross-discipline KT (Ferlie et al., 2005). In fact, individuals' pursuit of their own priorities meant inconsistent attendance at KT meetings, disrupting the work flow. Thus if health and social service professionals are to benefit from social interaction approaches to KT, a culture of team functioning may need to be developed and supported.

Micro-level barriers and facilitators further suggest that all KT efforts need to be considered in light of the work orientation and work ethic of the individuals expected to fulfil the KT aims. Organizational learning can be improved only through the individuals who make up the organization. Consistent with previous research findings (Estabrooks, Floyd, Scott-Findlay, O'Leary, & Gushta, 2003), the individual-level barriers and facilitators identified were largely attitudinal. This may reflect individuals' inability or unwillingness to recognize and/or develop their human potential. Alternatively, it may reflect how individuals feel about the knowledge itself (McCombs, 2004) and hence how and whether they apply it in practice (Corte, 2003).

Consistent with recent thinking (Dopson & Fitzgerald, 2005; Grimshaw et al., 2004; Kitson et al., 2008), these findings reveal the inextricability of barriers and facilitators and the people who create or overcome them at all three levels of workplace KT. This finding warrants particular consideration in the development of social interaction approaches to KT. The participation of senior decision-makers and managers along with frontline providers in heterogeneous action groups could lead to shared confrontation of macro-, meso-, and micro-level barriers, shared identification of facilitators, co-creation of knowledge and strategies, and shared problem-solving and actions to ensure the

successful implementation of strategies. Such collaboration could enhance both the efficiency and the effectiveness of the KT process and KT outcomes.

Such a level of involvement is challenging, however. Not all participants believed they had the ability to change the macro- and meso-level context. Furthermore, they intimated that the KT process was the responsibility of “project leaders.” These findings suggest that the participants felt disempowered, which is incompatible with this KT initiative and an impediment to the KT process (Berta et al., 2005). Also, despite the fact that the KT approach was designed to avoid top-down “push” and to promote grassroots “pull,” the participants actually asked for more direction and managerial involvement while simultaneously blaming “the organization” for impeding KT.

These findings also inform the theory and practice of social interaction approaches to KT. Specifically, the social interaction process needs to transcend organizational-level “science push” (Landry, Amara, & Lamari, 1998) and individual-level “demand pull.” This too suggests the merit of creating action groups that include representatives of all levels of the organizational hierarchy as well as the cross-section of disciplines.

In an effort to transcend “push” and “pull” through social interaction, and in keeping with the recommendations of the participants, in the second action cycle (currently in progress) the KT action groups feature a heterogeneous mix of frontline and managerial staff who together confront and work through “push” and “pull” forces. Social interaction includes a conscious effort to illustrate and role model transformative leadership principles. Ongoing investigation during this second action cycle might expose additional elements of interrelationships and interactions across different layers of the organization, thus indicating how best to address these challenges.

This KT intervention placed heavy demands on the time, energy, and abilities of everyone involved, including the research partners. The KT process had to take into account a diversity of expectations as well as the enactment of hierarchical relationships, team functioning, and interdisciplinary ways of knowing. It also had to accommodate boundary spanning and role blurring. Contributions, time availability, and outcome achievement varied greatly. All involved, including the research partners, confronted many competing expectations. In particular, the study’s researchers faced the challenge of seeing their contributions to KT devalued and less recognized.

The viability of social interaction models of KT requires conscious attention to the fostering of mutual understanding and respect. “Seeing below the waterline” (Golden-Biddle et al., 2003, p. 22) is critical to the success of KT. Sustained group efforts to confront the challenges and

engage in relationship-building were essential to the success achieved in this first KT cycle. These observations indicate the potential of programmatic collaborative research with sustained partnerships over multiple studies to optimize KT through social interaction.

Above all, however, the findings invite the development of social interaction models of KT beyond current frameworks, which conceptualize separate roles for knowledge brokers, facilitators, and research consultants. The identification of mutually exclusive roles may simply reify hierarchical structures that impede KT. Social interaction models, in contrast, could serve to engage all parties in sharing responsibility and accountability for the processes and outcomes that they construct together, and to foster acceptance of the consequences — for the results may not necessarily be those anticipated by any one individual or group, including the researchers.

Conclusion

The findings of this study highlight the importance of simultaneously integrating participants and their actions at the macro, meso, and micro levels throughout the KT process. They also illuminate the importance of using social interaction to create and sustain transcendence of the “push” and “pull” tendencies and traditions embedded in KT. In addition, the findings suggest a need to promote transformative leadership that encourages all parties to share responsibility and accountability for both the process and the outcomes of KT. Overall, however, the findings indicate that this social interaction KT intervention warrants more prolonged longitudinal investigation with expanded participation. An issue not yet addressed is how to include those who are ultimately served by any KT intervention aimed at promoting evidence-based practice in the health and social services sector — namely, clients and their caregivers.

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L'application de principes de sensibilisation pour améliorer les pratiques modernes de traduction des connaissances en matière de santé des femmes

Nancy Poole

Dans le cadre des modèles traditionnels de traduction des connaissances portant sur les soins de santé, le chercheur « expert » transmet des connaissances empiriques aux praticiens de façon descendante. De nouvelles approches redéfinissent les interlocuteurs qui participent à la traduction des connaissances, le type de preuves acceptées et la façon d'animer le processus de partage des connaissances. La participation multisectorielle et les processus de synthèse collective des données probantes multiplient les possibilités d'application des connaissances dans la pratique et à l'échelle des politiques selon des façons qui favorisent un renforcement mutuel et qui se penchent sur les inégalités structurelles. L'auteure examine l'application de pratiques de sensibilisation féministe dans des communautés de pratique virtuelles, en tant que cadre de travail viable pour la traduction des connaissances portant sur des problématiques de santé complexes. Utilisant les résultats préliminaires d'une étude, elle démontre comment l'application d'une analyse collective dans le cadre d'un processus collaboratif – qui constitue la base de la recherche axée sur l'action féministe – mène les participants à poser des gestes engagés.

Mots clés : traduction des connaissances, communautés de pratique, communautés virtuelles, sensibilisation féministe, recherche axée sur l'action féministe

Using Consciousness-Raising Principles to Inform Modern Knowledge Translation Practices in Women’s Health

Nancy Poole

In traditional models of knowledge translation in health care, the “expert” researcher disseminates empirical knowledge in a top-down manner to practitioners. Newer approaches extend our view of who needs to be involved in knowledge translation, what counts as evidence, and how knowledge exchange can be facilitated. Multisectoral participation and processes for collective synthesis of evidence increase the potential for the application of knowledge in practice and policy in ways that are mutually reinforcing and address structural inequities. The author examines the use of feminist consciousness-raising practices in virtual communities of practice as a viable framework for knowledge translation on complex health issues. Using the preliminary findings of a study, she discusses how collective analysis in collaborative processes — which is at the heart of feminist action research — leads to engaged action by participants.

Keywords: knowledge translation, communities of practice, virtual communities, feminist consciousness-raising, feminist action research

Introduction

The feminist practice of consciousness-raising (CR) can provide a framework for contemporary knowledge translation in virtual communities of practice (VCoPs). The British Columbia Centre of Excellence for Women’s Health (BCCEWH), in collaboration with the Canadian Women’s Health Network and the Canadian Centre on Substance Abuse, has successfully implemented VCoPs based on the principles of CR. This article considers their characteristics and processes in light of current conceptualizations of best practices in knowledge translation and illustrates how adopting CR as a framework can inform the evolution of modern knowledge translation practices.

Although the development and evaluation of these VCoPs are still in progress, this is a good time to present this CR-related virtual knowledge translation practice, for three reasons:

- It provides a view of knowledge translation related to health issues, such as substance use by pregnant women and mothers, which require

attention to social determinants of health and complex shifts in attitudes, practice, and policy in a range of settings.

- It uses the lenses of gender and diversity to examine “the divergences of gendered power” (Bradley, 2007, p. 36) within the knowledge translation approach. This largely uncharted territory is of increasing interest to women’s health advocates and health policy and research bodies such as Health Canada (2003) and the Canadian Institutes of Health Research (2007).
- It invites discussion as an approach that fosters the active involvement of all those in a position to influence health practices and policies in collective understanding, reflection, and action (Reimer Kirkbam, Baumbusch, Schultz, & Anderson, 2007, p. 36), supported by virtual technologies. This focus on involvement and action is linked to feminist-informed participatory action research as discussed in the nursing research and practice literature. It is also linked to the current discourse in the knowledge translation field related to facilitation and context as factors influencing the implementation of evidence (Rycroft-Malone, Harvey, et al., 2004).

Feminist Consciousness-Raising

In the late 1960s and early 1970s feminists put considerable thought into how women’s knowledge had been subjugated and how to bring forth evidence from women’s lived experience to promote social change. New York Radical Women has been credited with introducing the practice of feminist CR at the first National Women’s Liberation Conference in Chicago in 1968 (Shreve, 1989). The feminist CR model usually involved a three-stage process of sharing, analysis, and action planning. The first step was to gather the experiences of group members on a particular theme or issue. After each member had shared her experiences, the group would discuss the common elements in their experiences and how that commonality related to the overall status of women. Then the group would often strategize, take action, and assess the impact of this action in an iterative process. Keating (2005), in a recent discussion of modern CR practice, describes the pedagogic and movement-building contributions of this initial CR model as (1) making explicit the political implications of women’s so-called personal lives, (2) introducing non-hierarchical and transformative spaces for thinking about and acting upon one’s own and each other’s different situations, and (3) providing a model for creating knowledge and theory in a participatory and collective manner.

Keating (2005) goes on to show how the search for commonalities as the analytic focus of the second-wave feminist CR method could

downplay important racial, class, national, and other differences within this unity, and obscure inequitable power relations. To counter this homogenizing tendency, she proposes “coalitional consciousness building” as a contemporary CR model that would engender awareness and solidarity across multiple lines of difference, specifically:

1. locating experience (sharing experiences related to a theme while paying close attention to the contexts and histories in which the experiences being articulated are being played out)
2. seeing resistance to multiple oppressions (examining the experiences with an eye for the multiple relations of oppression and resistance at play) and
3. coalitional risk taking (exploring the barriers to and possibilities for coalitional action) (p. 94)

This model has proven to be relevant in current approaches to knowledge translation, specifically in the design of virtual communities being sponsored by the BCCEWH in Vancouver, Canada. In these VCoPs, participants examine the context of their own health and that of marginalized women, the multiple relations of oppression and resistance at play in these contexts, and the possibilities for coalitional action with regard to the analyzed experiences and contexts.

Contemporary Knowledge Translation Practices

Traditional knowledge translation models in health have been based on views of evidence, researcher, end users of knowledge, and processes of translating knowledge that differ from the feminist perspective. In early translation models, knowledge was typically seen as empirical in nature, created by the researcher as “expert,” transmitted from the top down, through one-way instructive learning processes, to practitioners who were not “epistemologically active” (Broner, Franczak, Dye, & McAllister, 2001).

Expanded Conceptualizations of End Users of Knowledge

A number of researchers have explored the limitations of uniprofessional (Ferlie, Fitzgerald, Wood, & Hawkins, 2005) and unisectoral engagement in knowledge translation. They have also argued for the inclusion of multiple types of care provider and for diversity among managers and administrators in particular health-care settings and among health-system decision-makers and policy-makers (Elliot & Popay, 2000; Gallop et al., 2006). Feminists have identified *women with health problems* and *women's health advocates* as important participants in integrated participatory action

research and knowledge translation processes (Kirby, Greaves, & Reid, 2006; Maguire, 1996). Expanded views of who should be involved in knowledge translation are linked to emerging work on how systemic conditions come together to reproduce conditions of inequality (Morris & Bunjun, 2007) as well as newer views of science and the construction of knowledge (Nowotny, Scott, & Gibbons, 2001).

Expanded Views of What Counts as Evidence

With multisectoral involvement in knowledge translation processes, it is important to consider evidence other than that produced by research (such as nurses' practice-based evidence) in any effort to improve health-care practice and policy (Chunharas, 2006; Pang, 2007; Rycroft-Malone, Seers, et al., 2004). Knowledge translation experts no longer view evidence as a commodity or as "a thing that can be 'put into' a system" (Kitson, 2008); they now view it as constructed from multiple sources and applied following negotiation (Reimer Kirkbam et al., 2007; Rycroft-Malone, Seers, et al., 2004). Accordingly, the researcher as a producer and interpreter of evidence has also shifted — and new forums are needed so that a range of participants can identify, co-construct, and consider multiple sources of evidence.

Expanded Conceptualizations of the Facilitation of Knowledge Translation

Although they are decreasing in prevalence, one-way didactic methods still characterize much of knowledge translation. This stands in contrast to efforts that involve and empower end users in the construction of knowledge. New approaches for facilitating knowledge exchange and application are characterized by nonlinear processes of exchange, interactivity, and longer-term relationships, such as communities of practice (Chunharas, 2006; Harvey et al., 2002; Kothari et al., 2006; Walter, Nutley, & Davies, 2006).

Wenger (1998) and others have argued for communities of practice as contexts for social learning. In these contexts people with a common interest/practice voluntarily come together for collective learning, knowledge creation, collaborative problem-solving, and other activities that involve reflection on practice (Cox, 2005). Communities of practice as collective, emancipatory social learning environments have the potential to address key barriers to research utilization in nursing. Such barriers include emotional exhaustion (Estabrooks, Midodzi, Cummings, & Wallin, 2007), lack of mental time and energy (Thompson et al., 2008), and lack of control (Jacobs, Fontana, Kehoe, Matarese, & Chinn, 2005), as well as the interaction of these barriers with organizational factors such as leadership, opportunity for nurse-to-nurse collaboration, and a positive

learning culture (Cummings, Estabrooks, Midodzi, Wallin, & Hayduk, 2007).

Greenhalgh and others (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004; Tugwell, Robinson, Grimshaw, & Santesso, 2006) have reported refinements outlining who needs to be involved in knowledge production and translation and how to address context-specific barriers to such involvement. However, these descriptions of knowledge translation strategies still do not involve multiple holders of different kinds of knowledge, support multidirectional collaborative learning processes, or attend to contextual barriers and supports in ways that are comparable to those of the CR model.

Linking Consciousness-Raising to Modern Knowledge Translation Practices in Women's Health

Over the past 11 years, researchers and knowledge translators at the BCCEWH have been facilitating multisectoral collaboration related to both research involvement and knowledge exchange on women's health issues. This multisectoral production and use of research has been critical to the creation of relevant, useful knowledge. In 1999 a group of 80 women's health researchers from across Canada met to discuss and develop the Fusion Model of integrated health research (Greaves & Ballem, 2001). In the fusion approach, researchers and their collaborators are invited to address (a) challenges associated with defining and creating authentic intersectoral research partnerships, (b) issues of power and conflict, (c) the integration of knowledge exchange at all stages of the research process, and (d) academic and bureaucratic obstacles. Using the Fusion Model, the BCCEWH has involved researchers, decision-makers, health-care providers, and women's health advocates in all research and knowledge translation endeavours. As technology has become available, BCCEWH researchers have used virtual methods for engaging other researchers and end users of evidence related to women's health. The use of technology has served to increase involvement and to bridge distances and other forms of diversity, with the potential for much broader exchange and application to practice and policy.

VCoPs: Coalescing on Women and Substance Use: Linking Research, Policy and Practice

The virtual community helped me feel less isolated and let me know that there was a community of experienced academic and practical experts that could provide me with information and assist in addressing questions and issues. (VCoP participant from Northwest Territories)

I liked discovering people who are doing work aligned with mine...and the potential for making ongoing connections with some of them. (VCoP participant from Nova Scotia)

The VCoPs are evolving in partnership with the Canadian Centre on Substance Abuse and the Canadian Women's Health Network, with the financial support of Health Canada. The project is national and engages geographically distributed, multisectoral participants, supported by technology, to build consensus on "better practice and policy" related to women's substance use and addictions in Canada. The VCoPs are facilitated by a BCCEWH researcher, drawing on CR, feminist-informed participatory action research (Brydon-Miller, Maguire, & McIntyre, 2004; Corbett, Francis, & Chapman, 2007; Kirby et al., 2006), and "appreciative inquiry" (Reed, 2007).

Researchers, service providers, policy advocates, community-based advocates, and women with substance use problems are invited (via electronic communication) to enter virtual learning venues, where they identify, organize, and synthesize research and other forms of evidence on emerging topics related to women's substance use and addiction. Following this exchange process, participants create and disseminate documents that describe key issues, resources, and points of provisional consensus for program and policy directions.

Six online learning communities are currently being created, involving participants from across Canada. Members are researchers, service providers, policy-makers, community advocates, and/or women with substance use problems. The six topics for discussion in the Coalescing on Women and Substance Use: Linking Research Practice and Policy virtual communities have been identified through a range of research, service provision, policy, and knowledge-exchange processes engaged in by the sponsoring organizations. These topics are as follows:

1. Integrating addictions support with support on violence/trauma issues in transition houses and other women-serving agencies, as well as promoting integrated violence and addictions policy.
2. Integrating determinants of women's health approaches into research and policy initiatives that are designed to prevent fetal alcohol spectrum disorder (FASD).
3. Integrating women-centred approaches into addictions treatment for mothers and into child protection policy and practice.
4. Integrating women-centred approaches into the understanding and practice of harm reduction and into drug policy and harm reduction frameworks for action.

5. Integrating women-centred approaches into addictions prevention and treatment services serving First Nations and Inuit women.
6. Integrating trauma-related support into addictions treatment settings for girls and women and into systemic treatment policy/guidelines/frameworks.

These topics form the basis for a body of knowledge synthesis, translation, and action, which is intended to have an impact on various elements of the field of substance use and women's health.

Each virtual community works collaboratively for approximately 6 months using a Web-based meeting infrastructure and a shared online workspace. Participants share their expertise and perspectives on women's substance use issues; examine evidence from research, grey literature, and other sources; synthesize the information they have gathered; examine barriers to and supports for change; and discuss how to translate what they have learned into action in the practice and policy spheres. Following this 6-month community-building period, a Webcast facilitates wider discussion of the project's findings. Print and Web-based distribution of consensus documents serves to further broaden the audience. Currently, one community's cycle has been completed, three are in progress, and two are being organized.

The Coalescing project has elicited interest across Canada. Table 1 shows the geographic diversity the communities have spanned to date. Table 2 provides a view of the multisectoral diversity of the Coalescing VCoP participants.

These early outcomes suggest that the Coalescing project has been successful in attracting participants from diverse sectors. The tangible products of the VCoPs are information sheets, articles, and presentations that reflect the broad base of knowledge and experience of participants from multiple sectors. On the topic of mothering and substance use, for example, the mix of representation from both the substance use treatment and child protection fields, as well as the geographical and sectoral mixes, has provided opportunities for enhancing understanding across fields and undertaking sophisticated syntheses of the issues and promising practices. Points of consensus and disagreement are found in the VCoPs' monthly synchronous Webmeetings and the asynchronous online discussions that take place over a 6-month period. Differences in perspective are assumed, welcomed, aired, and examined, and conflict has not disrupted the community processes. For these reasons the virtual environment may well be "pedagogically superior" to face-to-face environments (Alavi & Tiwana, 2002).

Table 1 VCoP Participation by Province/Territory, Showing Geographically Distributed Interest

	VCoP 1: Response to Violence	VCoP 2: FASD Prevention	VCoP 3: Services for Mothers and Children	VCoP 4: Women- Centred Harm Reduction
Alberta	1	4	1	2
British Columbia	10	15	10	12
Manitoba	1	4	0	1
Nova Scotia	1	0	2	0
Ontario	6	2	12	8
Saskatchewan	1	4	0	2
Yukon	1	2	1	1
Northwest Territories		5		

Note: Not all those who indicated interest were able to participate, because community size was initially limited to 25–30 people.

Table 2 VCoP Participation by Sector, Showing Multisectoral Interest

Type of Participant	VCoP 1: Response to Violence	VCoP 2: FASD Prevention	VCoP 3: Services for Mothers and Children	VCoP 4: Women- Centred Harm Reduction
Researcher	5	13	5	5
Service provider	13	11	12	15
System planner/ educator	3	13	7	3
Woman with health issue		2		2
Student			1	1
Women's health advocate			1	
	21	39	26	26

The VCoP participants have shared their findings with politicians and a large network of people with similar interests who have a potential role in acting on the synthesis of knowledge. Table 3 provides an overview of the dissemination, engagement, and uptake processes in progress for the first two communities.

Community participants have volunteered for ongoing, collective knowledge generation, illustrating shared commitment to evidence-based action and learning. For example, one VCoP has developed a grant application for forming a interdisciplinary and multijurisdictional research team that continues to undertake and study knowledge translation on FASD prevention as a women's health issue.

When we evaluate these VCoPs we will address questions being identified in the contemporary literature on knowledge translation, virtual learning, and feminist action research, such as:

- How/does the virtual environment support the involvement of more kinds of participants, the inclusion of more kinds of data, and learning and the application of learning?
- How/does the VCoP proximity help to lift the constraints of class, gender, nationality, and race (Papastephanou, 2005)?
- How/do reciprocity, trust, identification, shared vision, and shared language (Chiu, 2006) emerge to support learning and ongoing collaboration among community participants?
- How/does VCoP participation facilitate the application of evidence to practice by teaching participants how to navigate and collectively make sense of the sea of virtual information (Garrison & Anderson, 2003)?
- How/do participants identify the voluntary, democratic, and non-institutionally based characteristics of the VCoPs as important to their participation, decreased isolation, and ongoing interconnectivity?

Discussion

Evolving practices in the field of knowledge translation are increasingly using inclusive, participatory, and collaborative approaches. Communities of practice are promising exemplars in current knowledge translation. The VCoPs being implemented in the Coalescing project contribute to this evolving field, especially in how they intentionally apply three simple principles of the early radical democratic model of CR.

Sharing

In communities of practice, processes of democratic engagement are central and value personal experience. Wenger (1998) emphasizes the importance of “active involvement in mutual processes of negotiation of

Table 3 <i>Action Outcomes</i>		VCoP 1: Response to Violence (Completed)	VCoP 2: FASD Prevention (Ongoing)
Webcast	Two Webcasts, each with 60–100 participants	Four inquiries received post-Webcast in three provinces requesting further information and discussion to guide programming	
Information sheets prepared	Five information sheets prepared	Information sheets posted on four Websites	One information sheet prepared; two in progress
Information sheets distributed at conferences	<ul style="list-style-type: none"> • Regional and provincial conference of social workers in two provinces • Provincial videoconference on connections between violence and substance use • National conference on substance use issues 	<ul style="list-style-type: none"> • One international and two national conferences 	Information sheets posted on three Websites
Information sheets added to course readings	<ul style="list-style-type: none"> • Justice Institute of BC course on interconnections between violence and substance use • University of British Columbia nursing seminar 		<ul style="list-style-type: none"> • Professional training packages of ActNow BC – Healthy Choices in Pregnancy

<p>Findings discussed in presentations at conferences</p>	<ul style="list-style-type: none"> • Webinar sponsored by Yukon Women's Directorate • Three national and provincial conferences 	<ul style="list-style-type: none"> • Two poster sessions at national conferences
<p>Findings presented to policy-makers</p>		<p>Presentation to ministers in the Canada Northwest FASD Partnership</p>
<p>Findings used in briefings for policy-makers</p>		<p>Briefing for a provincial minister of child care and a children's advocate</p>
<p>Findings found to influence agency policy or practice</p>	<p>Prevention Toolkit of BC Specialized Victim Services and Counselling</p>	<p>Cross-site research planned</p>
<p>Collaborative preparation of research proposals</p>	<p>Proposal, submitted jointly with a sexual assault centre, on integrated trauma-informed tobacco treatment</p>	<p>Proposal to Canadian Institutes of Health Research in response to its call for new emerging teams on knowledge translation</p>
<p>Preparation of journal and newsletter articles</p>	<p>Articles published in two publications: <i>BC Mental Health and Addictions</i> and <i>CrossCurrents</i> (newsletter of the Centre for Addiction and Mental Health)</p>	

meaning” (p. 173) in communities of practice. Virtual communities of practice that are based on CR add another layer of shared experience in a way that closely attends to the contexts and histories in which the participants’ experiences are played out (Keating, 2005).

Feminists have a history of building forums in order to share diverse experiences and to examine and address relations of power. Promoting multisectoral participation instead of dyads (researchers and practitioners or researchers and policy-makers) increases the potential for co-constructed knowledge in practice and policy to be applied in ways that are mutually reinforcing and that address structural inequities. The participants in one VCoP, for example, included researchers, planners, service providers in child welfare and addictions treatment, and mothers with substance use issues. As a result it was clearly demonstrated that service barriers for these mothers will not be removed until we change child-protection policies that discriminate against them (Greaves & Poole, 2007; Hoyak, Poole, Salmon, & Network Action Team on FASD Prevention, 2007).

Analysis

In communities of practice, collaborative knowledge exchange, analysis, and synthesis are key. A community of practice is a unique combination of a domain of knowledge, a community of people who care about the domain, *and* the shared practice that they are developing to be effective in their domain (Wenger, McDermott, & Snyder, 2002). The community’s members draw upon multiple sources of information, evidence, and practice and emphasize the kind of analysis that elicits alignment with the experience of others.

The VCoPs examine experiences and other forms of evidence with an eye for the multiple relations of oppression and resistance at play (Keating, 2005). When discussing their practice, and the academic and grey literature on marginalized women’s health, VCoP participants have deliberated on issues of invisibility, marginality, stigmatization, oppression, and inaction on women’s substance use and addiction, as well as their own current position, agency, and self-efficacy. Participants tend to welcome diverse perspectives and see the “multiple and contradictory discourses, powers and subjectivities” (Ryan, 2001) as a resource for change.

Action Planning

The Canadian Institutes of Health Research (2004) describes the goal of knowledge translation as “accelerat[ing] the capture of the benefits of research for Canadians through improved health, more effective services and products, and a strengthened health care system.” Our work suggests that there is more to the “capture of the benefits of research” than this

goal would indicate. The third aspect of our CR model — actively promoting and supporting action — is often missing from current knowledge translation models.

The action focus of VCoP practice is clearly linked to the participatory action research tradition (Wallerstein & Duran, 2003), and specifically to feminist action research (FAR). As described by Reid (2007), FAR is similar to participatory research and knowledge translation. Specifically, FAR integrates subjectivity, involves participants in all phases of the research process, engenders empowerment combined with deepening of social knowledge, and involves a dialectical process of collective reflection and action. In so doing, FAR blends participatory research elements and feminist theory, enabling researchers to “center on women’s experience and diversity in practical and explanatory frameworks” (Reid, 2007, p. 35). In FAR there is a particular interest in “translating feminist insights into concrete actions aimed at achieving social change” (Maguire, Brydon-Miller, & McIntyre, 2004, p. xii).

The CR-based communities are designed to help participants “come to critical consciousness” (hooks, 2003, p. 2) — that is, to elicit subjugated knowledges, support reflection on the operation of power and domination, assist with critical thinking, *and* inspire hope, self-efficacy, and coalitional plans for making change in multiple contexts. This action-oriented approach to bridging the “know-do” gap (World Health Organization, 2006), in which complex and often systemic changes are required to improve women’s health, can be exemplary to the larger knowledge translation field.

Conclusion

As researchers in the health of marginalized women, we at BCCEWH are interested in what Letherby and Bywaters (2007) describe as “extending social research” to embrace the knowledge translation process. This means both rethinking the whole research process and engaging funders, partners, prospective beneficiaries, and end users as partners in the change process (Bywaters & Letherby, 2007, p. 5). We see the potential for employing feminist consciousness-raising and coalition-building to inform the overall practice of knowledge translation.

Consciousness-raising has been useful as a framework for understanding the core elements of knowledge translation in the development of contemporary *virtual* communities of practice on women’s health issues. The explicit focus of CR on action grounded in collaborative learning processes has been foundational in this work. Modern knowledge translation practices, evolving towards the use of multidirectional collaborative learning processes, are, we argue, informed by this virtual and dialogic process of engagement and action.

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La mise en œuvre d'une intervention multiple à deux volets, pratiquée dans un service : passer de la pratique fondée sur des données probantes à l'action

**Judy Rashotte, Margot Thomas,
Diane Grégoire et Sheila Ledoux**

Les auteures de cette étude ont examiné l'incidence d'une intervention multiple à deux volets, pratiquée dans un service, sur l'utilisation par les infirmières en soins intensifs pédiatriques de lignes directrices pour de meilleures pratiques de prévention des plaies de lit. Au total, 23 infirmier(ère)s ont participé à un plan à mesures répétées, appliqué avant et après une intervention, afin de répondre à deux questions : *Y a-t-il une différence entre les pratiques des infirmier(ère)s fondées sur des données probantes après la mise en œuvre d'une intervention instructive uniquement et celles fondées sur des données probantes après la mise en œuvre d'une intervention instructive et d'une intervention innovatrice? Les changements sont-ils maintenus six mois après la fin de l'intervention?* Un changement important est survenu après la mise en œuvre de 2 des 11 pratiques recommandées suivant les deux interventions : l'évaluation du risque de plaies de lit à l'aide d'un outil adapté à l'âge ($p \leq 0,001$) et la documentation de la même pratique ($p \leq 0,001$). Ces changements peuvent avoir été maintenus. Ces résultats mettent en lumière les vrais défis posés par la tentative de mettre en œuvre et d'évaluer des stratégies multiples de traduction des connaissances, associées à des lignes directrices complexes pour de meilleures pratiques dans une pratique clinique.

Mots clés : lignes directrices pour de meilleures pratiques, soins intensifs, traduction des connaissances

Implementation of a Two-Part Unit-Based Multiple Intervention: Moving Evidence-Based Practice into Action

Judy Rashotte, Margot Thomas,
Diane Grégoire, and Sheila Ledoux

This study examined the impact of a 2-part unit-based multiple intervention on the use by pediatric critical care nurses of best practice guidelines for pressure-ulcer prevention. A total of 23 nurses participated in a repeated-measures design pre- and post-intervention to address 2 questions: *Is there a difference in nurses' evidence-based practices following implementation of an educational intervention only versus implementation of both an educational and an innovative intervention? Are the changes sustained 6 months after completion of the intervention?* A significant change occurred in the implementation of 2 of 11 recommended practices following both interventions: assessment of risk of pressure ulcers using an age-appropriate tool ($p \leq 0.001$), and the documentation of same ($p \leq 0.001$). These changes may have been sustained. The findings bring to light the real challenges encountered when attempting to implement and evaluate multiple knowledge translation strategies associated with complex best practice guidelines in clinical practice.

Keywords: research utilization, evidence-based practice, best practice guidelines, pressure-ulcer prevention, critical care, knowledge translation, knowledge-to-action

Introduction

A current focus in health care is the movement of research and/or best evidence into clinical practice. Despite the considerable effort expended in the research and practice arenas, this movement has been demonstrated to be slow, unpredictable, inefficient, and ineffective (Agency for Health Research and Quality, 2001). This evidence, combined with the fact that patients are consequently at risk for harmful outcomes, has fuelled interest in finding ways to minimize what Graham et al. (2006) call the knowledge-to-action (KTA) gap.

Best practice guidelines (BPG) have been identified as a promising tool for translating best-quality research findings into accessible nursing practice recommendations (Ciliska, Pinelli, DiCenso, & Cullum, 2001). However, the effectiveness of BPGs in changing nurses' practices and the measures to promote their use have not been fully explored. The purpose of this article is to report the findings of a study examining the impact of

a two-part unit-based, multiple-intervention KTA program on pediatric intensive-care (PICU) nurses' use of a BPG for pressure-ulcer prevention. The Registered Nurses Association of Ontario (RNAO, 2002) BPG for pressure-ulcer prevention¹ was selected as the clinical focus in this study, for two reasons: (1) nurses were able to implement the interventions independent of medical orders, and (2) pressure ulcers are a patient problem that presents in PICU (Cockett, 2002).

One Canadian study found the prevalence of pressure ulcers (stages I through IV) to be 13.1% for pediatric patients, with over 75% of those ulcers assessed as stage I (Groeneveld et al., 2004). Pediatric intensive-care nurses can contribute to the prevention and early treatment of pressure ulcers by identifying patients at risk and implementing prevention strategies (Rycroft-Malone & McInnes, 2004).

Background

A large body of research has focused on exploring the KTA gap in clinical practice. Personal factors identified as influencing nurses' use of research in their clinical decisions include age, gender, and education; values and beliefs regarding evidence-based practice (EBP), change, and accountability; time spent on the Internet; level of emotional exhaustion; and the ability to understand research (Estabrooks, Floyd, Scott-Findlay, O'Leary, & Gushta, 2003; Estabrooks, Midodzi, Cummings, & Wallin, 2007; McCaughan, Thompson, Cullum, Sheldon, & Thompson, 2002). However, in their systematic review of the individual determinants of research use, Estabrooks et al. (2003) suggest that placing responsibility for research use only on the individual is misguided, as some practitioner characteristics, such as age and gender, are unchangeable.

Organizational context (e.g., culture, leadership, and evaluation) has been consistently identified as influential in research use (Gifford, Davies, Edwards, & Graham, 2006; Pepler et al., 2005). However, a systematic review of organizational infrastructure to promote EBP by the Cochrane Effective Practice and Organization of Care Group (Foxcroft & Cole, 2000) found no strong evidence to suggest that any one type of organizational infrastructural intervention is effective in addressing barriers and promoting KTA. Staff development, opportunity for nurse-to-nurse collaboration, and staffing and support services are hospital characteristics that positively influence research utilization (Cummings, Estabrooks, Midodzi, Wallin, & Hayduk, 2007). The availability of user-friendly and accessible resources, team work and collaboration, and BPG unit

¹ Although the RNAO BPG for pressure-ulcer prevention is not intended specifically for children, it has been suggested that measures identified in the adult literature are applicable to pediatric settings (Stewart & Box-Panksepp, 2004).

champions are factors that promote KTA at the unit level (Ploeg, Davies, Edwards, Gifford, & Elliott-Miller, 2007; Titler & Everett, 2001). On the other hand, it has been noted that nurses may choose not to implement BPGs for reasons such as unit norms, colleague expectations, clinical expertise, and experience in similar situations (Greenwood, Sullivan, Spence, & McDonald, 2000).

Passive single KTA strategies (e.g., educational interventions, reminders) are generally held to have limited success (Clarke et al., 2005), while multidimensional KTA interventions, such as written materials, educational meetings, clinical reminders, and coaching, are considered superior (Grimshaw et al., 2001). However, Grimshaw et al.'s (2004) follow-up review challenges these conclusions, finding multifaceted interventions to be no more effective than single ones and educational interventions to have a short-lived, modest effect on guideline implementation. Active educational strategies (e.g., educational meetings with discussions) were found to be more effective than passive dissemination of educational material. Despite these findings, the authors suggest that "multifaceted interventions built upon a careful assessment of barriers and coherent theoretical based may be more effective than single interventions" (Grimshaw et al., 2004, p. 65).

Research reveals that the KTA process is a complex, poorly understood, messy phenomenon (Kitson, Harvey, & McCormack, 1998), with no definitive prescriptive KTA interventions likely to result in nurses' use of BPGs. As a result, a number of conceptual frameworks concerned with EBP implementation have emerged to provide direction to change agents as to the issues that should be addressed and the activities that should be undertaken or to generate research questions that can be examined more systematically (Kitson et al., 1998). Several frameworks, such as the Ottawa Model of Research Use (Logan & Graham, 1998), Promoting Action on Clinical Effectiveness (Dopson, Locock, Chambers, & Gabbay, 2001), and Promoting Action on Research Implementation in Health Services (Rycroft-Malone et al., 2002), emphasize the interplay and interdependence of many factors and suggest that strategies for promoting KTA need to be multifaceted and targeted at specific cultural groups in the organization (Thompson & Learmonth, 2003).

We chose the Ottawa Model of Research Use (Logan & Graham, 1998) as an organizing framework for our study, as well as drawing on other theories relevant to KTA. The OMRU's elements include practice environment, potential adopters, evidence-based innovation, transfer strategies, adoption, and outcomes. To better elucidate the practice environment, we drew on Wenger's (1998) Communities of Practice Theory. This social learning theory guided the development of a questionnaire to examine the environmental factors that influence nurses' use or non-use

of a BPG. In addition, Wenger's social perspectives on learning principles, as elucidated in the theory, guided the development and delivery of the educational component of the intervention. These perspectives were congruent with the context of education and professional development within our PICU. Finally, we used the Socioecological Model (Stokols, 1992) and the Multiple Intervention Framework (Edwards, Mills, & Kothari, 2004) to inform the development of the interventional program. These models helped us to identify opportunities for integrated action across several levels of aggregation, such as individual, team, unit, organization, and profession, and provided direction for specific transfer strategies.

Purpose

The purpose of the study was to examine the impact of implementing a two-part unit-based multiple intervention called Pressure Ulcer Prevention Program in the PICU (PUPP). The study was guided by two questions: *Is there a difference in nurses' use of evidence-based pressure-ulcer prevention in the PICU following implementation of only part I of the intervention (educational component) versus parts I and II (innovative components)? Is any change in nurses' evidence-based pressure-ulcer prevention practices in the PICU sustained 6 months after completion of the PUPP?*

Intervention

Table 1 outlines the PUPP intervention program. Part I, targeted at the individual level, was a traditional educational component, consisting of both independent learning activities and a group learning session. The content delivery method was based on nurses' feedback from previous educational activities in our unit. Part II was designed to incorporate local and organizational strategies. At the local level, the unit-based champion promoted discussion of pressure-ulcer prevention during shift reports and daily clinical rounds and engaged in daily one-on-one coaching at the bedside. The hospital's Wound and Skin Care Specialist increased her visibility and accessibility by attending PICU clinical rounds once weekly. Each nurse received laminated pocket guides of the RNAO BPG interventions and the Braden (Braden & Bergstrom, 1988) and Braden Q skin assessment tools (Quigley & Curley, 1996). A decision-making algorithm identifying the appropriate interventions in response to the assessment of risk for pressure-ulcer formation was developed in consultation with the Wound and Skin Care Specialist and made available at each bedside. The PICU documentation record was revised to include the skin-assessment score. At the organizational level, standards of nursing care outlining EBP for prevention of pressure ulcers in critically ill children were developed and introduced on the unit.

Table 1 PUPP Intervention and Data-Collection Framework	
Time	Intervention and Data-Collection Activity
T1 (baseline)	<ul style="list-style-type: none"> • Collection of demographic data and baseline measures (self-reported and audited use of EBP) • Distribution to all eligible RNs
Part I (educational component) x 1 month ✓ independent learning activities (weekly article dissemination x 4, poster displays, FAQ sheet) ✓ group learning (standardized 1-hour didactic teaching session to all PICU staff)	
T2 (immediately after part I)	<ul style="list-style-type: none"> • Repeated measures (self-reported and audited use of BPG) • Distribution to all RNs who completed T1 questionnaire
Part II (innovative component) x 1 month ✓ unit-based champion (PICU Advanced Practice Nurse) ✓ hospital-based champion (Wound and Skin Care Specialist) ✓ introduction of practice tools and resources ✓ introduction of PICU standards of nursing care related to pressure-ulcer prevention	
T3 (immediately after part II)	<ul style="list-style-type: none"> • Repeated measures (self-reported and audited use of BPG) • Distribution to all RNs who completed T2 questionnaire
T4 (6 months after T3)	<ul style="list-style-type: none"> • Repeated measures (self-reported and audited use of BPG) • Distribution to all RNs who completed T3 questionnaire

Method

Design

Ethical approval for the study was obtained from the hospital's Research Ethics Board. This exploratory study used a quantitative, repeated-measures design.

Sample

All 48 full-time and part-time RN staff (excluding nurses on orientation and those scheduled to leave or retire from the PICU within 6 months of the study's launch) of a 10-bed quaternary Canadian PICU were invited to participate in the study. Nurses who declined to participate, as demonstrated by failure to return the time 1 (T1) questionnaire, received the educational program.

Figure 1 PUP Questionnaire		
<p>Nursing intervention</p>	<p>IF IMPLEMENTED fill in the circle for the following statements that indicates your reason(s) for implementing this intervention. If none of these reasons apply, feel free to write in your explanation.</p>	<p>IF NOT IMPLEMENTED fill in the circle for the following statements that indicates your reason(s) for not implementing this intervention. If none of these reasons apply, feel free to write in your explanation.</p>
<p>Assessment of risk of pressure ulcers completed using assessment tool</p> <p><input type="checkbox"/> YES <input type="checkbox"/> NO</p>	<p><input type="checkbox"/> BPG <input type="checkbox"/> Suggestion in an article I have read <input type="checkbox"/> Suggestion by nursing colleague <input type="checkbox"/> Requested by family member <input type="checkbox"/> Requested by other member of health care team <input type="checkbox"/> Usual practice (tradition) <input type="checkbox"/> Kardex / Care Plan notation / directive <input type="checkbox"/> Physician order <input type="checkbox"/> Unit expectation Other:</p>	<p><input type="checkbox"/> Lack of knowledge regarding indications <input type="checkbox"/> Lack of technical skill or training <input type="checkbox"/> Requested by member of health care team <input type="checkbox"/> Requested by family member <input type="checkbox"/> Usual practice (tradition) <input type="checkbox"/> Physician order <input type="checkbox"/> Unit expectation <input type="checkbox"/> Patient too unstable <input type="checkbox"/> Inadequate resources (e.g. people, resources) <input type="checkbox"/> Inadequate time Other:</p>
<p><i>Note:</i> Four times throughout the study, participants indicated which of the 11 BPGs they had implemented during their most recent clinical experience of a child at risk for pressure ulcer.</p>		

Table 2 Self-Reported Use of BPG Interventions

Intervention	T1-T2	T1-T3	T1-T4	T2-T3	T2-T4	T3-T4
1. Risk assessment using assessment tool	0.003	< 0.001*	0.003	0.070	0.687	0.625
2. Risk assessment using risk-assessment tool completed	0.031	< 0.001*	0.002	0.003	0.180	0.125
3. Risk, including risk-assessment score, discussed during rounds	0.500	0.250	0.250	0.625	0.625	1.000
4. Nutritional assessment considered risk for pressure ulcers completed	0.008	0.125	0.219	0.625	1.000	1.000
5. Consultation with dietitian related to nutritional needs initiated	1.000	1.000	0.453	1.000	0.453	0.375
6. Pressure-reducing or pressure-relieving support surface used	0.625	1.000	0.625	0.625	1.000	1.000
7. Lifting device used for patients too heavy to lift off mattress	1.000	0.625	0.289	0.375	1.000	0.125
8. Head of bed elevated to less than 30 degrees	0.039	0.388	0.344	0.453	0.250	1.000
9. Q2 hourly turning schedule implemented	0.508	0.125	0.289	0.687	1.000	1.000
10. Head repositioned side to back to side Q2 hourly	0.727	1.000	1.000	1.000	1.000	1.000
11. Protective skin barrier applied over bony prominences if voluntary or involuntary movements lead to friction injury	0.031	0.065	0.375	0.687	1.000	1.000

Note: Responses are based on participants' most recent clinical experience of a child at risk for pressure ulcer.
 * Significant after Bonferroni adjustment for multiple testing.

Measurement Tools and Data Collection

Data on the use of the RNAO (2002) BPG on pressure-ulcer prevention were collected using an RN self-report questionnaire developed by the research team (see Figure 1 for the questionnaire format and Table 2 for a list of the RNAO's BPG nursing interventions). The Pressure Ulcer Prevention Questionnaire (PUP) was pretested for content, readability, and usability by three PICU nurses ineligible to participate in the study. It took 5 to 10 minutes to complete. Following a description of the study at two staff meetings and multiple walk-about, coffee-cart inservices on the unit, the nurses were invited via letter to complete the questionnaire either during their work hours (with the support of management) or after their shift. The questionnaire had an identifying code, known only to the research assistant, to enable matching of responses pre- and post-intervention. The Dillman (2000) method was used to enhance the return rate at four time points.

A research nurse collected daily weekday data on all patients in the PICU for 1 month at four times (T1, T2, T3, T4) using an audit tool developed by the research team (Table 3) based on the BPG. Frequency of use of the BPG interventions, as documented in the patients' clinical records or as observed at their bedside, was noted. Data were not collected in relation to the specific participants in the study; rather, overall BPG intervention use by the unit nurses was noted. Reliability of the audited data was determined during each time period via an independent check by the principal investigator of a random selection of 10% of the patients. The data for item 1 on the audit tool were provided by the PICU unit champion, who performed a risk assessment for pressure-ulcer development on all PICU patients. Table 1 shows the data-collection framework. Timing addressed the inherent risk of carryover effects that can occur with multiple-intervention and time-series studies and for the examination of sustainability of change.

Data Analysis

Descriptive statistics (i.e., percentages, means, standard deviations, medians, ranges) were used to summarize participants' baseline characteristics. The McNemar test was used to test the difference in nursing-intervention decisions (implemented/not implemented) between T1 and T2, T2 and T3, and T1 and T3. This same test was used to compare the nursing-intervention decisions (implemented/not implemented) between T3 and T4 and between T1 and T4 to determine whether the changes in nurses' use of BPG interventions were sustained 6 months later. In order to address multiple testing issues, results were compared with an alpha value of

Table 3 Audited Use of BPG Interventions				
Intervention	T1	T2	T3	T4
Number of patients at risk for pressure ulcer as assessed by Advanced Practice Nurse, mean (<i>sd</i>)	5.6 (1.5)	4.8 (1.6)	4.1 (1.7)	4.7 (1.8)
Number of risk assessments evident in nursing documentation	0 (0.0)	0 (0.1)	1 (0.5)	0 (0.2)
Number of evidence-based nursing practices documented	0 (0.1)	2 (0.5)	3.5 (1.6)	3 (1.6)
Number of dietitian consultations completed	0 (0.1)	0 (0.0)	0 (0.0)	0 (0.1)
Number of nutritional assessments completed	0 (0.0)	0 (0.0)	2 (1.6)	4 (2.7)
Number of pressure-relieving surfaces in use	4 (1.5)	2 (0.4)	1.5 (0.4)	2 (0.3)
Number of lifting devices in use for patients > 20kg	0 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)
Number of patient turning/repositioning schedules documented per chart or Kardex	0 (0.0)	0 (0.0)	3 (1.6)	3 (1.6)
Number of transparent dressings, liquid films, and elbow/heel protectors used to prevent friction injury	0 (0.1)	1 (0.3)	1 (0.3)	1 (0.3)
Number of patients with head and bed elevated to < 30°	5 (2.7)	4 (1.7)	4 (1.8)	4 (2.6)
Number of consultations with skin-care expert	0 (0.1)	1 (0.1)	1 (0.1)	0 (0.2)
* Unless otherwise indicated, data are presented with median and range.				

0.0008 (rounded to 0.001), which corresponds to an alpha value of 0.05 adjusted for 66 tests using the Bonferroni criterion (i.e., 11 self-reported BPG practices compared between T1 and T2, T2 and T3, T1 and T3, T1 and T4, T2 and T4, and T3 and T4). Descriptive statistics were used to compare the audit results with the reasons for implementing/not implementing nursing interventions given in the questionnaire at T2 and T3. No a priori power analysis was undertaken, because the study was intended to be exploratory within a unit with a small nursing population.

Table 4 Demographic Profile (N = 23)	
	mean (SD); median (range)
Years of experience in current position	10.2 (9.9); 5.0 (0.6, 30.0)
Education	n (%)
Master's degree	0 (0.0)
Baccalaureate	16 (69.6)
In progress	2 (12.5)
Completed	14 (87.5)
Diploma	7 (30.4)
Research experience	
Designated investigator	0 (0.0)
Presented research study	1 (4.5)
Designated research assistant for a nursing research study	3 (13.6)
Review committee	0 (0.0)
Participant in a nursing study	9 (40.9)
Read nursing research studies	20 (87.0)
Changed practice in response to reading nursing research	16 (69.6)
Have attended educational sessions directly related to nursing research	15 (65.2)
Have been a research committee member (unit)	2 (9.1)
Have been a research committee member (hospital)	0 (0.0)

Results

Forty-eight percent ($n = 23$) of the RNs participated in the study, with one nurse lost at T4. The demographic profile of participants is shown in Table 4.

Table 2 shows the statistical difference in nurses' self-reported implementation of the 11 BPG practices at the four time points. Between T1 and T3, there was a statistically significant change in implementation in two of the 11 BPG interventions: assessment of risk of pressure ulcers using an age-appropriate tool ($p \leq 0.001$), and documentation of same ($p \leq 0.001$). At T1, 13% ($n = 3$) of the nurses reported performing an assessment and 9% ($n = 2$) reported documenting same. At T2, the percentages of nurses performing these activities were 61% ($n = 14$) and 35% ($n = 8$), respectively (not a statistically significant increase). At T3, the assessment of pressure ulcers had increased to 91% ($n = 19$) and was documented in 86% ($n = 18$) of charts. At T4, 78% ($n = 14/18$) and 67% ($n = 12/18$) of nurses reported these behaviours.

It was revealed (self-reported and audited) that more than half the nurses were already engaged in three of the 11 BPG interventions at baseline — #8 (52%), #9 (61%), and #10 (74%). *Usual practice/tradition* and *unit expectation* were the cited reasons for this behaviour. Five of the BPG interventions were rarely identified as self-reported or observed. These were #1 (13%), #2 (9%), #3 (4%), #4 (13%), #6 (13%), and #7 (22%).

There were 78 days of data collection, with 464 patients observed across the four time points. Table 3 shows the number of audited BPG interventions (*mean/SD*). Audited practice demonstrated a pattern similar to that for participants' self-reports at all four time points. The percentage of patients identified by the Advanced Practice Nurse as at risk for developing pressure ulcers was consistently higher than the percentage of documented assessments performed by the nursing staff (T1 = 88% vs. 0%; T2 = 83% vs. 2%; T3 = 67% vs. 30%; T4 = 84% vs. 9%).

Table 5 reports the nurses' rationale for implementing selected BPG interventions across the four time points. The most frequently selected reasons for using the interventions were *usual nursing practice*, *unit expectations*, *suggestions by a nursing colleague*, and *EBP guidelines*. Interestingly, the reasons given by participants to explain their use of interventions changed across the four time points. Rarely selected reasons for using the BPG interventions were *read in article*, *request by family or health-care team*, and *physician directive*.

Three themes emerged from the participants' written explanations for the decision not to implement a BPG intervention: patient characteristics, team characteristics, and resource availability. Patient characteristics included C-spine not cleared, high frequency oscillatory ventilation where oxygen saturations decreased with position change, and hemodynamic instability. Team characteristics included lack of knowledge about pressure-ulcer prevention, difficulties accessing clinical experts (e.g., unable to initiate independent dietitian consultations), and lack of attention to risk-assessment information by health professionals in other disciplines. Resource availability included lack of appropriate lifting devices and protective barriers and, at T1 only, lack of readily available assessment tools and guidelines at the bedside.

Discussion

Limitations

It is unusual to begin by presenting the study's limitations, yet further discussion must be framed in the context of the limitations we encountered while attempting to implement and evaluate multiple KTA inter-

Table 5 Reasons for Implementing Selected BPG Interventions, T1-T4

Intervention	Usual Practice				Unit Expectation				EBP Guideline				Suggestion by Nursing Colleague			
	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4
	% (n/N)	% (n/N)	% (n/N)	% (n/N)	% (n/N)	% (n/N)	% (n/N)	% (n/N)	% (n/N)	% (n/N)	% (n/N)	% (n/N)	% (n/N)	% (n/N)	% (n/N)	% (n/N)
A	100 (3/3)	7.1 (1/14)	5.3 (1/19)	14.3 (2/14)	66.7 (2/3)	0.0 (0/14)	0.0 (0/19)	42.9 (6/14)	0.0 (0/3)	85.7 (12/14)	89.5 (17/19)	78.6 (11/14)	33 (1/8)	21.45 (3/14)	31.6 (6/19)	21.4 (3/14)
B	100 (2/2)	12.5 (1/8)	17.6 (3/18)	41.7 (5/12)	50 (1/2)	25 (2/8)	35.5 (6/18)	33.3 (4/12)	0.0 (0/2)	87.5 (7/8)	88.2 (15/18)	83.3 (10/12)	0 (0/2)	50 (4/8)	17.6 (3/18)	16.7 (2/12)
C	71.4 (10/14)	70.6 (12/17)	83.3 (15/18)	40 (6/15)	57.1 (8/14)	47.1 (8/17)	44.4 (8/18)	66.7 (10/15)	14.3 (2/14)	58.8 (10/17)	61.1 (11/18)	73.3 (11/15)	0 (0/14)	11.8 (2/27)	11.1 (2/18)	13.1 (2/15)
D	66.7 (2/3)	22.2 (4/18)	44.4 (8/18)	35.7 (5/14)	33.3 (1/3)	50 (9/18)	55.6 (10/18)	35.7 (5/14)	0.0 (0/3)	72.2 (13/18)	61.1 (11/18)	85.7 (12/14)	0 (0/3)	33 (6/18)	16.7 (3/18)	21.4 (3/14)

Notes: n = number of nurses who chose the item as a reason for implementing the practice.
 N = number of nurses who implemented the BPG intervention.
 A = risk assessment using assessment tool completed.
 B = assessment documented based on risk-assessment tool.
 C = Q2 hourly turning scheduling implemented.
 D = use of a pressure-reducing or pressure-relieving support surface.

ventions associated with a complex BPG in clinical practice. The study design limits the conclusions we can reach from this study.

First, the presence of a comparison group in the same context would have strengthened the study design. However, we would not have been able to control for the extraneous confounding variables that could influence nurses' decisions to implement a particular intervention (e.g., informal sharing and learning among nurses, new institutional directives). The use of a counterbalance intervention (e.g., dividing the sample of nurses into two groups and changing the order of presentation of the interventions) to address the issue of progressive error would arguably have made for a stronger study, but this was not an option considering our small nursing population. Our study was exploratory, which met our objective of generating questions or hypotheses, and we leave it to the reader to decide whether our findings are useful.

The second limitation was the poor response rate. Although we had an almost 100% retention rate (with one participant lost at T4), the findings for the primary outcome measure (self-reported use) were based on less than half (48%) of the PICU nursing population. We cannot confirm the reason for such a low participation rate. It may be that nurses were reluctant to commit to a repeated-measures study over a full year. Furthermore, there were a number of missing responses to the 11-item PUP questionnaire. This resulted in an inconsistent *N* value (denominator) for each intervention at each time point and across time points. The low enrolment and missing data restricted our ability to determine whether there was a change in use of each BPG intervention.

The finding that more than 50% of the nurses were already engaged in several of the BPG interventions at baseline is important. To demonstrate a change in practice for these BPG items, we would need a larger sample size than needed for those interventions that were rarely performed at baseline. Based on this information, we performed a post hoc power analysis. We calculated that we would need the following sample sizes to demonstrate significant improvement to a standard established at 75% of nurses engaging in each of the identified practices (understanding that there are times when the intervention would be contraindicated): (a) if $\leq 10\%$ of nurses performed a BPG intervention at baseline, then we would need $n = 10$; (b) if 30% performed the intervention, then $n = 32$; and (c) if 60% performed the intervention, then $n = 312$. We were underpowered to detect a change in the interventions where at least 30% of the nurses were performing them at baseline (i.e., interventions 5, 8, 9, 10, and 11).

A fourth limitation is associated with the audit tool. We used it to measure overall BPG intervention use by the unit nurses, not specific nurse use. As a result, we do not know if the factors that influenced the

subset of nurses who reported on their BPG behaviours were the same factors that influenced the other unit nurses. A larger sample would have given us the confidence to generalize the findings to the other nurses. A prospective cohort comparative design with repeated measures involving multiple PICUs would be ideal. However, organizational and unit-level contextual influences and strategies would need to be addressed. This type of study is costly to undertake and is time- and human-resource-intensive.

In the demographic profile, 87% of the 23 participants indicated that they read nursing studies and 70% of the 23 participants indicated that they had changed their practice in response to their readings. This may reflect a social desirability bias since the nurses understood that the research team was interested in research use. On the other hand, it may be that at baseline these nurses were indeed reading and using nursing studies and were different from those nurses who did not participate in the study. In other words, the study may have been flawed by a selection bias that resulted in overly optimistic findings. However, our finding of congruence between audited practice of all unit staff at four time points and participants' self-reports suggests otherwise. The participants did not indicate that information obtained from the research articles distributed in part II of the study was a factor influencing a change in their practice. It is also possible that the research integrated into the BPGs was considered more reliable by the nurses, consistent with the findings of Gifford et al. (2006).

Interpretation of Results

Our results reveal a statistically significant change in nurses' self-reported use of two BPG components (patient assessment using an age-appropriate risk-assessment tool and documentation of same) between T1 and T3. The change occurred after the educational intervention and implementation of the innovative KTA strategies (i.e., the unit-based champion activities and context-specific tools and resources). Given that no statistically significant change occurred between T1 and T2 (part I only) or between T2 and T3 (part II only), we cannot conclude that either of these interventions would be effective independent of the other. Rather, we believe that the bundle of KTA strategies (i.e., parts I and II combined) may have had a synergistic effect. This argument is supported by the Multiple Intervention Framework (Edwards et al., 2004). In this study, the data suggest that the practice may be sustained. Over 75% ($n = 14/18$) and 68% ($n = 12/18$) of nurses continued to use BPG #1 and BPG #2 at T4. Follow-up in the unit at 2 and 5 years would enable us to determine whether the change is sustained over time.

The theme “patient characteristics” identified in the qualitative data helps to explain why some PICU nurses chose not to implement a specific BPG intervention. The nurses’ rationale for their decision did not ignore the evidence. Rather, the nurses weighed the consequences of performing the action in the particular patient situation and judged that implementing the recommended intervention would be more harmful than not implementing it (e.g., Q2H turning would result in oxygenation desaturation). Thomas and Fothergill-Bourbonnais’s (2005) research on cue utilization by expert PICU nurses in making clinical judgements demonstrates that nurses actively weigh complex and contradictory evidence associated with their particular patients in order to determine the “best” course of action. If we apply the knowledge offered by Wenger’s (1998) theory to this situation, nurses may choose not to comply with a BPG intervention that entails a loss of content and context and to instead create new relevance for the BPG in their own context. What they attempt to achieve involves multiple trade-offs, in part because of the complexity of the patient-care situation. Estabrooks (1999a) refers to this form of research utilization as conceptual utilization. This process of making judgements based on the weighing of evidence in clinical situations requires further investigation, particularly if we continue to examine KTA by measuring only instrumental utilization (i.e., documentation = BPG use). Unfortunately, not all the nurses indicated why they did not implement some of the recommended practices. The emergence of the theme “patient characteristics” from the limited qualitative data leads us to recommend the use of such research methods as ethnographic interviewing or think-aloud technique in subsequent studies.

Six of the questionnaire items showed no statistically significant change across the four time periods: interventions 5, 8, 9, 10, and 11. Two of the qualitative themes, “team characteristics” and “resources,” both contextual influences, offer a possible explanation. For example, in our institution a dietary consultation must be initiated by a physician. The nurses perceived that pressure-ulcer prevention was not a priority of the health-care team. There was likely sufficient power to detect a difference in BPG #3 (discussion of pressure-ulcer prevention during clinical rounds = 4% at T1) as a result of the PUPP KTA strategies, yet no change occurred. Clinical rounds on our unit are traditionally driven by physicians and are attended by the interdisciplinary team. The issues most likely to be discussed are those that are shared by the team members. Pressure-ulcer prevention may not be considered important in a context where the focus is lifesaving measures. Wenger (1998) argues that we need to learn what is valued by the communities of practice in which we work. If others involved in patient care are not concerned with preven-

tion, then nurses may not be concerned either, or may not articulate their concerns. These contextual issues may help to explain why nurses in the present study were selective about which BPG interventions to implement in their practice, a finding also reported by Johnston et al. (2007).

Usual practice and *unit expectation* were the two reasons participants most frequently gave as influencing their practice at all time points. These reasons are congruent with the findings reported by other studies looking at factors associated with knowledge utilization (Estabrooks, 1999b). The present findings suggest that the BPG might have become an important factor influencing the nurses' practice after the implementation of both educational and innovative KTA interventions. It is also possible that the introduction of the BPG provided the nurses with an evidence-based rationale for sustaining those practices that were congruent with usual practice and unit expectations (e.g., Q2H turning, if possible). In other words, the BPG reinforced what they were seeing or doing in practice. In either case, this finding may reflect persuasive research utilization (Estabrooks, 1999a).

Lessons Learned and Recommendations

Based on what we have learned, we recommend that researchers establish baseline performance of BPG interventions prior to the KTA intervention study. Knowing which BPG interventions are already being implemented will permit researchers to determine the degree of change desired. A few specific BPG interventions could then be targeted as the focus for change and the study powered to detect clinically important changes. We also recommend that the questionnaire be administered in interview format. This would serve to reduce the number of non-responses per item and permit clarification when necessary. The strengths of continuing to conduct small pragmatic studies such as this are that they may be more feasible, less costly, and more resource-intensive and can potentially provide useful information specific to the setting. Eventually, specific types, timing, and dose of KTA strategies for that particular setting may be more clearly elucidated (Titler, 2004).

A third recommendation follows from our reflections concerning those questionnaire items that did not show a change across the four time points. Health-care providers who are gatekeepers to the implementation need to be engaged in the process of facilitating the uptake of BPG interventions by nurses. As noted in Davies et al.'s (2007) key recommendations related to facilitators for sustained or expanded use of BPGs, sustainability is more likely to be achieved when interdisciplinary partners are engaged and encouraged to be involved and when the BPGs are integrated with other quality-improvement initiatives. Both

the OMRU and the Multiple Intervention Framework support the use of KTA strategies that involve various layers of aggregation. This interdisciplinary approach to the prevention and treatment of pressure ulcers is supported by Trummer and Panfil (2003). Therefore, in future we would consider a KTA strategy that incorporates a team approach using the collective expertise of various disciplines, clinicians, educators, and managers. Finally, in a PICU context where prevention may not be of the utmost importance, it may be helpful to consider the use of patient-outcome audit feedback (e.g., incidence of pressure ulcers) that is both timely and repetitive as an additional incentive. If enough key stakeholders become genuinely concerned about the quality of care, best practice uptake may well result (Ferlie & Shortell, 2001).

Concluding Remarks

According to Melnyk, Rycroft-Malone, and Bucknall (2004), "If an organization is without a full-scale organizational plan for making a shift to EBP, a change can be instituted from the 'bottom up' with small groups of individuals embarking on evidence-based projects in their clinical settings and sharing positive outcomes of these projects with their administrators or leaders" (p. 83). Our study is an example of such an attempt at EBP research in a small clinical setting. Advancing KTA knowledge about what does and does not work, even within the confines of one's own clinical practice, is complex and messy. Despite our small sample size, the findings of and questions raised in our exploratory study have informed our research plans. Our next study will explore the role of weighing the evidence in nurses' decision-making on whether to implement BPG practices. We believe that this type of study is needed, to elucidate the concepts of conceptual and persuasive research utilization and, as recommended by Bucknall (2007), to interface decision theory with knowledge translation.

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Des innovations dans la pratique

Un modèle d'évaluation du partage de connaissances en contexte de réseau

James Conklin et Paul Stolee

Le recours à des réseaux pour faciliter le partage et le transfert de connaissances dans les milieux de la santé suscite de plus en plus d'intérêt. Le *Seniors Health Research Transfer Network (SHRTN)* [Réseau de partage des recherches dans le domaine de la santé des aînés] de la province de l'Ontario rassemblent des professionnels de la santé, des décideurs et des chercheurs qui œuvrent dans le domaine de la santé des aînés pour favoriser le partage des connaissances issues de la recherche et des meilleures pratiques. Dans le cadre d'une évaluation du SHRTN, les auteurs ont élaboré un modèle qui avait pour but d'évaluer l'efficacité des activités de partage de connaissances en contexte de réseau. Ce modèle tient compte des éléments clés caractérisant une application réussie des résultats de recherche, proposés dans le cadre de travail *Promoting Action on Research in Health Services (PARiHS)* [Promotion d'interventions fondées sur la recherche dans le milieu des soins]. Il tient compte aussi des résultats de ces efforts, pour ce qui est de trois paliers du fonctionnement en réseau. Ce modèle a été utilisé pour évaluer l'efficacité du SHRTN comme système de partage de connaissances. Les résultats suggèrent que ce cadre de travail pourrait possible-ment servir de modèle pour l'évaluation d'autres réseaux de connaissances.

Mots clés : réseau de connaissances, partage de connaissances, santé des aînés, PARiHS

Innovations in Practice

A Model for Evaluating Knowledge Exchange in a Network Context

James Conklin and Paul Stolee

There is growing interest in the use of networks to facilitate the exchange and transfer of knowledge in health-care settings. The province of Ontario's Seniors Health Research Transfer Network (SHRTN) brings together caregivers, policy-makers, and researchers working in the area of seniors' health to share knowledge derived from research and best practices. As part of an evaluation of SHRTN, the authors developed a model for assessing the effectiveness of knowledge exchange activities in a network context. The model considers the key elements of successful application of research evidence proposed in the Promoting Action on Research in Health Services (PARiHS) framework, as well as the results of these efforts, at 3 levels of network functioning. This model was used in a test of SHRTN's effectiveness as a knowledge exchange system. The results suggest that the framework has potential as a guide for evaluating other knowledge networks.

Keywords: knowledge network, knowledge exchange, knowledge translation, seniors' health, PARiHS

Introduction

There is growing interest in the use of networks to facilitate knowledge exchange in health-care settings (Canadian Health Services Research Foundation [CHSRF], 2005; Russell, Greenhalgh, Boynton, & Rigby, 2004). The Seniors Health Research Transfer Network (SHRTN) was formed in 2005 in the Canadian province of Ontario as a network of caregivers, policy-makers, and researchers sharing knowledge derived from research and best practices in seniors' health (Conklin, Stolee, Luesby, Sharratt, & Chambers, 2007). It is funded by the provincial ministry of health and long-term care and governed by key stakeholders, including consumers and community-care and long-term-care associations. The network seeks to improve the flow of knowledge throughout the seniors' health-care system by providing support to Communities of Practice (CoPs, organized around topics such as Alzheimer disease,

spiritual care, and continence care) and to a network of regional libraries. It employs “knowledge brokers” who support the CoPs and the librarians by facilitating communication, promoting SHRTN and extending its reach and membership, seeking useful evidence, and facilitating opportunities to move knowledge into action. As part of an evaluation of SHRTN, we developed an evaluation model suited to a knowledge exchange network and conducted a practical test of SHRTN’s performance in relation to the model.

Methods

Development of the Evaluation Model

Development of the model drew on literature and knowledge exchange principles that had guided the development of SHRTN (Conklin et al., 2007), our previous work (Conklin et al., 2007; Gauthier, Ellis, Bol, & Stolee, 2005; Stolee et al., 2005), the literature on knowledge exchange and network development, and a focused MEDLINE and Internet search related to the evaluation of health networks. We intended to gauge the utility of the model using a practical example rather than a comprehensive synthesis of a complete body of literature.

Work by the CHSRF (2005) and by the International Institute for Sustainable Development (Creech & Ramji, 2004) guided our understanding of knowledge networks. SHRTN can also be understood in terms of levels of network operation. Popp and colleagues (2005) recommend, based in part on the work of Provan and Milward (2001), that evaluation consider a network’s levels of impact (on individuals, organizations, the network itself, and the broader community). The PARiHS theory (Promoting Action on Research in Health Services) provides a useful framework for categorizing and assessing key factors related to successful knowledge exchange: level and nature of the *evidence* (knowledge), organizational *context*, and method of *facilitation* (Kitson, Harvey, & McCormack, 1998; Rycroft-Malone et al., 2002). According to this theory, research tends to be successfully implemented when evidence is clear and is relevant to the local context; when the local context features characteristics of a learning organization; and when enabling facilitation helps practitioners to understand, apply, and sustain the new knowledge.

The Practical Test

The practical test was a case study using primarily qualitative data from interviews and an e-mail survey. For the case, we needed an identifiable knowledge exchange activity that involved at least one of the key SHRTN components (a CoP) and that included activities and events

considered representative of the “machinery” of the network. In collaboration with the SHRTN leadership, we chose an exchange, led by the Alzheimer Knowledge Exchange CoP, on managing smoking cessation among long-term-care residents with dementia. In response to a request from a frontline caregiver, a knowledge broker, supported by a SHRTN librarian, obtained extensive background information and circulated it among CoP members, facilitated an e-mail dialogue, and organized an educational Webcast with a panel of three experts. Resources were made available in an online collaboration space, as a context for further discussion.

Case-study data included background information and documentation on the CoP and a 63-minute telephone interview with the knowledge broker. An e-mail survey was distributed to the 23 people (representing 19 organizations) who participated in the Webcast. Participants received one or two follow-up reminders. Responses were ultimately received from six participants; one response was completed via a 32-minute telephone interview and led to e-mail contact with a long-term-care home. Thirty-minute telephone interviews were conducted with the expert panellists.

Results

The SHRTN Knowledge Network Evaluation Model

We developed a knowledge exchange model that was consistent with major trends in the literature and that could be used as the basis for a flexible evaluation program. To the evidence, context, and facilitation elements of the PARiHS model we added a focus on results or impacts. For evaluation of knowledge exchange in a network context, we identified three levels of network activity: network-wide (SHRTN), network component (e.g., a CoP), and implementation site (frontline practice setting). Table 1 describes the model. The questions in the table reflect the broad categories of needed information; specific criteria can be derived from the PARiHS model (Kitson et al., 1998; Rycroft-Malone et al., 2002).

Results of the Practical Test

Our aim was to assess knowledge exchange activity in relation to the dimensions of evidence, context, facilitation, and results, at all three levels of network functioning.

Network-wide. At the network level, information gathered for the test suggests that SHRTN can enable the communication and interaction needed to support better use of knowledge. Participants indicated that SHRTN makes significant infrastructure and resources available, thus allowing for Webcasts and other opportunities for collaboration.

Table 1 SHRTN Knowledge Network Evaluation Model

		Knowledge Exchange Dimensions			
		Evidence	Context	Facilitation	Results
Network Dimensions	Network-wide	How do SHRTN leaders view evidence, and what evidence do they value?	Is a supportive context/culture evident in SHRTN's governance and operations?	What mechanisms are used to facilitate interaction and exchange within the network?	Awareness and perceptions of SHRTN
	Network component	What type of evidence is being sought and used through CoPs?	What is the context/culture of the SHRTN CoP?	What style of facilitation is used within the CoP? Do knowledge brokers provide effective facilitation?	Linkage and exchange activity
	Implementation site	How is evidence that is shared by CoP members integrated into the practice settings?	What is the context/culture of the practice setting?	What style of facilitation occurs within the practice setting?	Behavioural changes and outcomes for seniors and caregivers

Network component. The organizational context afforded by the CoP supported the flow of knowledge among participants. Evidence and an expert panel were assembled to reflect both research and practical experience. Most Webcast participants indicated that the CoP's facilitation role had been helpful and that the Webcast had been useful and informative. Nevertheless, some respondents indicated that the information may not have been sufficiently specific or concrete to be actionable. It was unclear from the data whether the Webcast session allowed for sufficient interaction between panellists and attendees. Technological issues prevented continued exchange in the Web-based collaboration space.

Implementation site. Participants showed appreciation for the materials received (including panellist handouts) but had different recollections of the usefulness of the Webcast. This test case did not focus on a single implementation site, and we did not have detailed information on the contextual characteristics of specific sites. One participant, however, reported using the Webcast material in a local learning collaboration she had established made up of people working in long-term care and community care. She then facilitated the development of specific intervention strategies in several homes, with a beneficial impact for staff and residents. We communicated with an administrator at one of these long-term-care homes; this person reported that the information and strategies were helpful. We thus found that the Webcast had an impact on specific strategies in at least some instances, resulting in more informed problem-solving conversations among frontline staff.

Discussion

The practical test has its limitations as a means of assessing the effectiveness of SHRTN as a knowledge exchange network. The case may not be fully representative of the range of knowledge exchange efforts undertaken by SHRTN. We were also limited in our ability to track the transmission of information to the frontlines. The Alzheimer Knowledge Exchange CoP, as one of the most developed CoPs, may have been in a better position to facilitate this activity; this facilitation and the resources assembled may thus have been more extensive than is typically feasible. On the other hand, this effort may have had a unusually good chance of succeeding. The test was also limited by the low response to our e-mail survey; this may be an indication of the challenges of sustaining the active engagement of potential knowledge users.

This evaluation model might benefit from additional testing and from an extensive review of other themes and developments in the literature on knowledge exchange and network development. For example, collaborative approaches to knowledge exchange in a network context are

consistent with a Mode 2 view of knowledge production (Gibbons et al., 1994; Nowotny, Scott, & Gibbons, 2001) and are consistent with conceptions within organizational studies of tacit knowledge flows within and across practice boundaries (Brown & Duguid, 1991, 2000; Orr, 1996). Future exploration could look into whether knowledge exchange must be tailored to the specific circumstances of the groups involved in the exchange — in other words, the extent to which we might be able to generalize the results of specific knowledge exchange initiatives (Mitton, Adair, McKenzie, Patten, & Perry, 2005). Recent suggestions by the formulators of the PARiHS framework that the evidence and context dimensions might be used to diagnose organizational readiness for knowledge translation, and to devise appropriate facilitation interventions to improve the likelihood of success, are also worth considering (Kitson et al., 2008).

Our findings suggest that SHRTN and the CoP provide a supportive context, but continued active facilitation of knowledge exchange is necessary at the point of care. This is consistent with the PARiHS framework's emphasis on the need for context-sensitive facilitation activities. An important implication for knowledge networks is the need for links with individuals and groups who serve as educational or other resources for frontline practitioners. Within the limitations of the practical test, this case suggests that SHRTN's facilitative role will have little or no impact on practice if it is limited to exchanges at the network or CoP level and if these exchanges are restricted to research-based evidence. This test points to the importance of the key elements of the PARiHS framework and demonstrates the value of considering the processes and impacts of knowledge networks in terms of level of operation.

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Des innovations dans la pratique

**Le programme de recherche
sur un équilibre sain : le théâtre comme
outil de traduction des connaissances**

Stephanie Mason

L'auteure se penche sur les possibilités qu'offre le théâtre comme outil de traduction des connaissances (TC). Dans le cadre du programme de recherche sur un équilibre sain, une initiative conjointe menée par des interlocuteurs communautaires et universitaires, une pièce de théâtre intitulée *Balancing Act* [Question d'équilibre] a servi d'outil de TC. Bien que cette pièce ait donné d'excellents résultats quant à l'atteinte de certains objectifs du programme liés à la TC, certains aspects du spectacle peuvent être revisités en vue de maximiser les possibilités qu'offre le théâtre en matière de TC.

Mots clés : traduction des connaissances, théâtre, recherche, programme de recherche sur un équilibre sain

Innovations in Practice

The Healthy Balance Research Program: Theatre as a Means of Knowledge Translation

Stephanie Mason

The author examines the potential of theatre as a means of knowledge translation (KT). In the Healthy Balance Research Program, a community–university research alliance, the play *Balancing Act* served as a means of KT. Though the play was successful in meeting some of the program’s KT objectives, aspects of the performance can be reimagined in order to maximize the KT potential of theatre.

Keywords: knowledge translation, theatre, research, Healthy Balance Research Program

The Healthy Balance Research Program (HBRP) is a community–university research alliance funded by the Canadian Institutes of Health Research and supported by the Atlantic Centre of Excellence for Women’s Health, the Nova Scotia Advisory Council on the Status of Women, and the Institute of Population Health at the University of Ottawa. One of the program’s knowledge translation (KT) strategies was a play titled *Balancing Act*. This article will discuss theatre as a KT strategy and suggest ways to maximize its potential.

Knowledge Translation and Theatre

The Canadian Institutes of Health Research (2006) defines KT as a process “encompassing all steps between the creation of new knowledge and its application to yield beneficial outcomes for society” (p. 6). The application or dissemination of research knowledge has traditionally taken the form of academic publications or meetings such as news conferences, policy forums, or advisory body meetings (Amaratunga, Neumann, & Clow, 2006, p. 44). Yet many traditional forms of dissemination deliver knowledge in one direction only. According to Lavis et al. (2003), “interactive engagement may be the most effective” KT strategy (p. 226),

which suggests that the most successful KT strategies are those which are dynamic and reciprocal.

Theatre has the potential to embody research in a dynamic and reciprocal manner: “The live performance of findings serves to concretize, rather than abstract, the experiences of research participants” (Paget, 1990, quoted in Stuttaford et al., 2006, p. 33). Numerous theatre companies in Canada espouse awareness-raising of health issues through theatre — for example, Health Action Theatre by Seniors, Are We There Yet?, the Injured Workers’ Theatre Collective, the Stepping Out Theatre Company, Kamamakus, and the Y Touring Theatre Company. Theatre makes for effective KT strategy by the ways in which it engages the recipients of knowledge.

The forms of theatre that lend themselves to KT focus on engaging the audience in social and political issues rather than on character development or narrative: “Theories and practices in...theater arts have been moving steadily toward the social and political goals of employing performance as a tool and method of cultural awareness and social change” (Alexander, 2005, p. 412). The Theatre of the Oppressed and Applied Theatre embody principles used in KT strategy. The Theatre of the Oppressed enacts struggles facing disempowered peoples in order to generate meaningful solutions to oppression. Applied Theatre “presents research in a way where there is audience engagement with research material [enabling] greater potential for transforming social understanding” (Gray et al., 2000, quoted in Stuttaford et al., 2006, p. 33). Both theatre models address health, finance, education, and other social and political issues while presenting an opportunity for genuine audience interaction. “Theatre can educate and engage individuals about issues in health care and so has the potential to be a valuable tool for eliciting public participation” (Nisker, Martin, Bluhm, & Daar, 2006, p. 268). The decision to use theatre as a KT strategy within the HBRP, which explores unpaid caregiving in Nova Scotia, was therefore an appropriate one.

The Healthy Balance Research Program and *Balancing Act*

Qualitative and quantitative research conducted between 2000 and 2005 produced greater understanding of the lives of unpaid caregivers in the province of Nova Scotia. In 2006 the program’s co-directors commissioned the Irondale Theatre Ensemble to produce a play employing a KT strategy that was not academic but still in keeping with the program’s objectives. The play, *Balancing Act*, performed for an audience of unpaid caregivers, health-care workers, and policy-makers, portrayed the life of an unpaid caregiver, Tara, “whose aging mother has just moved in after

being released from medical care. Thrust into the caregiving role, Tara struggles to balance her own needs with those of her son — a university student who still lives at home on weekends — and the needs of her mother” (Healthy Balance Research Program, 2006).

The script and the performance demonstrated qualities that make for an effective KT strategy. For instance, the script’s literacy level ensured wide accessibility: “Theatre can overcome literacy barriers through use of local experience and vernacular to provoke emotional and analytical responses in the audience” (Mbizvo, 2006, p. S30). The play’s set featured a clothesline representing the daily tasks of a caregiver. The clothesline was later used in an exercise exploring the audience’s reaction to unpaid caregiving. Feedback included comments such as “Brought the research to life” and “Helped me to process my own caregiving experience.” *Balancing Act* was, in some ways, a successful product of the methodology of theatre as a KT strategy.

Reimagining *Balancing Act* to Maximize Knowledge Uptake

Reimagining the set-up at the performance site and instituting support structures for spectators and actors can help to maximize the KT potential of theatre. A conventional theatrical performance consists of a proscenium arch, which displays the stage as would a picture frame, an invisible “fourth wall” through which the action is observed, and seating arranged in parallel rows facing the raised stage. These conventions serve to minimize the audience’s engagement with the play. To counter this effect, chairs can be grouped into small pockets for pre- and post-performance discussion, the play’s action can be set amongst the audience instead of at a distance, and opportunities for actors to interact with the audience can be explored.

Performing *Balancing Act* for a sympathetic audience of unpaid caregivers was an innovative opportunity to acknowledge the demands on their time in a financially and emotionally supportive manner. Unpaid caregivers have little spare time: “Giving up leisure to take up caregiving was quite common.... Priorities were given to paid employment and unpaid caregiving” (Gahagan, Loppie, MacLellan, Rehman, & Side, 2004, p. 23). Unpaid caregivers would be able to attend a performance of such a play if the event included a support team of health-care workers or experienced caregivers who could fill in for them while they attended the performance. In a more sophisticated framework, support teams could also fill in for unpaid caregivers interested in performing in a play, such as *Balancing Act*, developed from their lived experiences. Such financial and emotional support would enable unpaid caregivers to continue in the tradition of exchanging care “with each other as a form

of barter” (Gahagan et al., 2004, p. xiii). Unpaid caregivers watching the play would be engaged by seeing their experiences being re-enacted on stage, while unpaid caregivers acting in the play would be empowered by the opportunity to relate their experiences first-hand.

Balancing Act translated knowledge on unpaid caregiving to stakeholders through theatrical performance, although research on KT and issue-driven theatre suggests that even greater uptake could have been achieved. Using theatre as a means of engaging an audience with issues, modifying the performance site, and building support structures for the audience and actors serve to maximize theatre’s KT potential. More reimaginings of theatre will inevitably lead to more possibilities for dynamic, reciprocal, successful KT.

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**Le conseil tribal des Moskégons
et la gouvernance autochtone :
une étude de cas portant sur
l'éducation en sciences infirmières
dans le nord du Manitoba**

**David Gregory, Mary Jane L. McCallum,
Karen R. Grant et Brenda Elias**

Cette étude de cas offre un témoignage historique du parcours qui a caractérisé l'élaboration du programme de baccalauréat en sciences infirmières en région nordique, notamment dans la province du Manitoba. L'approche utilisée dans le cadre de l'étude est axée sur les efforts d'autodétermination (gouvernance) déployés par le conseil tribal des Moskégons dans les domaines de la santé et de l'éducation. Ayant recours aux archives de la Faculté des sciences infirmières de l'Université du Manitoba, les auteurs livrent les grandes lignes de la chronologie du baccalauréat nordique du programme de sciences infirmières, en quatre phases : la conception (1982 à 1986); l'élaboration (1986 à 1988); la gestion (1986 à 1990); la mise en œuvre et la clôture (1990 à 1994). Les répercussions contemporaines générées par un partenariat à part entière entre les universités et les organisations autochtones font l'objet d'une discussion.

Mots clés : programme de baccalauréat en sciences infirmières en région nordique, conseil tribal des Moskégons, Manitoba, gouvernance, autodétermination, partenariat, sciences infirmières, éducation en sciences infirmières

The Swampy Cree Tribal Council and Aboriginal Governance: A Case Study of Nursing Education in Northern Manitoba

**David Gregory, Mary Jane L. McCallum,
Karen R. Grant, and Brenda Elias**

This case study provides a historical account of the development of the Northern Bachelor of Nursing Program in the Canadian province of Manitoba through the lens of self-determination (governance) efforts in the fields of health and education by the Swampy Cree Tribal Council. Using records from the Faculty of Nursing archives at the University of Manitoba, the authors outline the chronology of the Northern Bachelor of Nursing Program in 4 phases: initiation (1982–86), development (1986–88), management (1986–90), and implementation and closure (1990–94). Contemporary implications of full partnership between universities and Aboriginal organizations are discussed.

Keywords: Northern Bachelor of Nursing Program, Swampy Cree Tribal Council, Manitoba, Aboriginal health, governance, self-determination, partnership, historical research, nursing education

Introduction

The quest for autonomy and self-government is a common phenomenon among First Nations communities, as well as among the Métis Nation and the Inuit peoples of Canada.¹ Regardless of their manifestations, the objectives of this quest are always the same: to rebuild the nation and reclaim nationhood, to liberate peoples from the effects of colonialism, and to assume control over key sociocultural institutions and processes in order to structure the nation's own solutions. The creation of Aboriginal health human resource programs, particularly in the area of nursing education, exemplifies this effort to reclaim and restore self-government with regard to health and healing. These processes are driven locally.

¹ First Nations, Métis, and Inuit peoples as defined in the Canadian Constitution and addressed by the Royal Commission on Aboriginal Peoples will be referred to collectively in this article as Aboriginal peoples. Specific designations will be used where necessary. Native is a contemporary term commonly used in the 1980s and 1990s to refer to First Nations people in general. We use this term when referring to that era.

Although the outcome may not always be positive, the process itself can foster relations of mutual respect and fair dealing, and eventually greater participation by Aboriginal communities in the development of nursing education programs.

To illustrate this dynamic, we trace the Northern Bachelor of Nursing Program (NBNP) from its founding in 1982 to its closure in 1994. In reviewing the trajectory of the program, we explore the self-determination efforts of the Swampy Cree Tribal Council (SCTC) with respect to health and education. We identify barriers and challenges faced by the SCTC. Our approach is to use a historical-interpretive lens to analyze this nursing education initiative, part of the effort to decolonize health services and nursing education in Canada, and to highlight the work of Aboriginal communities in these endeavours. A case-study approach speaks to this dialogue on Aboriginal governance. We then offer some perspectives regarding current efforts to fully engage Aboriginal organizations in nursing education partnerships.

Overview of the Northern Bachelor of Nursing Program

The NBNP was initially envisaged as a partnership between the SCTC,² the School of Nursing at the University of Manitoba, and the government of Manitoba. Manitoba is located in the centre of the North American continent. According to the 2001 Canadian census, the provinces of Saskatchewan and Manitoba have the fourth-highest per-capita population of Aboriginal people in Canada (approximately 14%), after Nunavut, the Northwest Territories, and the Yukon. The SCTC is a political affiliation of eight Cree Nations in northwest-central Manitoba with a membership of over 14,000. Its mandate, since its inception in 1976, has been to advance and protect the interests, rights, and status of its members and to facilitate the transfer of programs and services (including those related to health) to local First Nations control. The Council's vision of creating a northern bachelor of nursing program thus engages with contemporary struggles to improve health programming in accordance with local objectives and needs. The program had several important goals. First and foremost, it was intended to create a much-needed cadre of Aboriginal health professionals. Related to this was the goal of addressing the significant health needs of Aboriginal peoples and other northerners. Therefore the program was ultimately about

² The SCTC is a political affiliation of several bands in northwest Manitoba. It currently comprises Chemawawin Cree Nation, Grand Rapids First Nation, Marcel Colomb First Nation, Mathias Colomb, Mosakahiken Cree Nation, Opaskwayak Cree Nation, Sapotawayak Cree Nation, and Wuskwi Sipiik First Nation.

governance and, in the language of the day, the self-determination of Aboriginal peoples.

The NBNP, an enriched 4-year baccalaureate program, was endorsed by the majority of decision-makers, including the SCTC, Manitoba Keewatinowi Okimakanak, the Manitoba Association of Registered Nurses, the Manitoba Indian Nurses Association, the Métis Federation of Manitoba, and the University of Manitoba. These organizations supported the program's original objective of producing a workforce of baccalaureate-prepared Aboriginal nurses. However, when the government of Manitoba entered into the contracting process, it exercised its political will to effect an outcome of its own liking. The province supported the establishment of a nursing program that would appeal to all northerners in Manitoba and function as a post-diploma degree program only. This was in keeping with its ideology regarding the education of registered nurses in northern Manitoba. By September 1990 the original baccalaureate program, as envisaged by the First Nations in northern Manitoba, ceased to exist. What was launched was a 2-year post-RN program that appealed to northerners who already held a diploma in nursing. Four years later, this program ceased to exist.

What did the demise of the program mean? The SCTC's failure to achieve self-determination? Something about the nature of the original partnership or the nature of politics in Manitoba? On the face of it, one might conclude that the program's demise was indicative of the SCTC's failure to achieve self-determination. Although the program's short life and its fundamental programming changes were disappointing, the SCTC's consistent efforts to pursue a respectful, equal partnership were compelling. Using the NBNP as a platform for governance processes, the SCTC directly influenced existing agencies, their policies, and their relationships with Aboriginal peoples. It engaged in concurrent and complex self-determination processes and outcomes as a consequence of initiating the nursing program. The SCTC challenged and managed to change how it was viewed by the federal and provincial governments and the University of Manitoba. The SCTC was now seen as a political entity and a legitimate partner in the education arena. In this article we examine these efforts in a four-part chronology of the NBNP: Initiation of the Program (1982-86), Development of the Program (1986-88), Funds Management (1986-90), and Implementation and Closure (1990-94).

Study Design

Our project was one of many case studies funded by a Community Alliance for Health Research grant from the Canadian Institutes of Health Research and conducted at the Manitoba First Nations Centre

for Aboriginal Health Research at the University of Manitoba. Ethics approval was obtained from the Health Research Ethics Board of the University of Manitoba. The primary documents consulted were Faculty of Nursing records held in the Archives and Special Collections of the Elizabeth Dafoe Library at the University of Manitoba. These records, generated from the SCTC and the university, included proposals, correspondence between SCTC and the School of Nursing and other parties, band council resolutions, and minutes of various committee meetings.

Our method was to sort NBNP-related archival documents chronologically and by theme (for example, budget, letters from key individuals involved in the program, program committees, and proposals). The data were intact, comprehensive in scope, of superb quality, and well maintained. They dated from 1982 to 1995.

Initiation of the Program, 1982–86

First Nations, Métis, and Inuit people are recognized in the Canadian Constitution as having distinct rights as Aboriginal people, including the inherent right to self-government. Aboriginal people have consistently had to fight to participate on their own terms in matters pertaining to their territories and to people in the colonial context. Seeking control over the health and education programs delivered to their people by the Medical Services Branch (MSB) of the Department of National Health and Welfare (now the First Nations and Inuit Health Branch, or FNIHB) and the Department of Indian Affairs was an integral aspect of their efforts to decolonize their experience and advance a self-government agenda within First Nations communities (Barman, Hebert, & McCaskill, 1987; Boldt, 1993; Cardinal, 1977; Dickason, 2002; Little Bear, Boldt, & Long, 1984; Peters, 1987; Wotherspoon & Satzewich, 2000). In the 1970s and 1980s in particular, self-government efforts in the field of health care were intensified, motivated in part by staggering inequalities in health status. For example, the incidence of illness among Aboriginal Canadians is, in most categories, double to triple that among non-Aboriginals, and average life expectancy is 10 years shorter (Waldram, Herring, & Young, 1995; Young, 1994).

The under-representation of health professionals in Aboriginal communities is such that in the late 1980s there was only one Aboriginal nurse for every 2,100 Aboriginal people, compared with one nurse for every 118 people in the general population (Morgan, 1987). There was a high vacancy rate for on-reserve nursing positions (i.e., 40%) and a dire need for more culturally responsive approaches to health care. There was an intense desire for Indian control over health systems (Medical Services Branch, 1980; Swampy Cree Tribal Council [SCTC], 1986).

In the field of education, meanwhile, leaders sought to establish more highly skilled training that would appeal to Aboriginal communities by engaging both Aboriginal and non-Aboriginal education philosophies and learning methods. In Manitoba, the SCTC brought these concerns together through the NBNP (Connell, Flett, & Stewart, 1991; Lathlin, 1987; Thomlinson, Gregory, & Larsen, 1991). Indeed, it was the SCTC that initially engaged with universities and colleges to develop programs that would reach out to Aboriginal populations in unprecedented ways.

The Swampy Cree initiated a partnership with the School of Nursing at the University of Manitoba, and their goals remained central to the program's initial defining principles. In 1982 The Pas Indian Band, a member of the SCTC, first appealed to the MSB regarding the need for Aboriginal nurses in the north. In March 1983 the Swampy Cree board passed a resolution to "take action towards obtaining a Northern Bachelor of Nursing Program" (Lathlin, 1987). In 1984 the SCTC submitted a proposal to the Indian and Inuit Professional Health Careers Development Program (IIHC)³ through the MSB, Manitoba Region. The funding was to be used to hire a coordinator to conduct a 4-year feasibility study, documenting the need for and defining the conditions by which a nursing education program might be implemented in The Pas, Manitoba.

The SCTC obtained a \$130,000 grant from the IIHC and hired Pat Stewart as coordinator. Findings written up in the *Nursing Feasibility Study Report* supported the need for a northern bachelor of nursing program. Based on the outcomes of the study, the Swampy Cree entered into a contractual relationship with the School of Nursing to develop a proposal for the NBNP, the first of its kind in Canada. The only programs available in northern Manitoba were a 10-month licensed practical nursing (LPN) program at Keewatin Community College (KCC) in The Pas and Thompson, a 1-year post-LPN RN program offered through Red River College at KCC, and a 3-year diploma program in Thompson delivered by Red River College. From the SCTC's perspective, these programs did not offer nurses the education necessary to provide health care in Aboriginal communities.

The implications of initiating a university/Tribal Council partnership were enormous. First, an outside Aboriginal group convinced the education sector to enter into a partnership with a non-educational agency and, in this case, an Aboriginal organization. Second, the SCTC insisted upon principles that would directly serve its own interests, namely access to nurses who were accountable to Aboriginal patients and

³ The IIHC was an initiative of the MSB designed to support the education of Aboriginal people in the health professions.

communities. Throughout, the SCTC remained committed to the concept of a true partnership. This entailed full participation in decision-making around the NBNP. The case study will demonstrate that while the SCTC steadfastly advocated and claimed full partnership status for the duration of the education and health initiative, it was not always considered a full partner by the non-Aboriginal organizations.

Development of the Program, 1986–88

The SCTC chose to develop a baccalaureate program in nursing. Although an enriched Bachelor of Nursing degree would have given Aboriginal students the knowledge and skills needed to play a more independent community nursing role, the SCTC also wanted to ensure that the program addressed the needs of Aboriginal people seeking post-secondary education at the university level. The SCTC worked tirelessly to secure the participation of the greatest possible number of Aboriginal students in the program.

Baccalaureate education, from the perspective of the SCTC, was closely related to self-government, and it was directly associated with the movement towards the transfer of health to the band level. The *Swampy Cree Tribal Council Bachelor of Nursing Feasibility Study Report* noted the commencement of the self-government movement

whereby control over health services, including nursing, is being transferred to Band control. This means a shift for the nurse of accountability to the Band which has its own management procedures and regulations. This of course forces the nurse into a closer working relationship with community structures, which should improve effectiveness in her role. However it does mean another whole set of tasks requiring administrative time and skills.... This trend also has implications for preparing nurses with a grounding in administration and supervisory skills, and particularly, for administration in relation to Band and community councils in the north. (SCTC, 1986, p. 23)

According to the SCTC, baccalaureate education would prepare Aboriginal people for direct participation in the management of health-care delivery. Moreover, it inherently critiqued the colonial legacies of the MSB itself and argued for more control at the local level. The *Feasibility Study Report* also commented on the BN Program:

It is consistent with the Native movement towards local control that Native communities seek to provide their own health services using their own personnel. This implies that they must also be concerned with education for their own Nurses. Aside from Community Health Representatives and office staff in the communities, and auxiliary staff in hospitals, Native people are severely under-represented in the professions

of health care, notably nursing. The delivery of health services by Medical Services Branch, Health and Welfare Canada, is limited in its capability and relevance in dealing with the complexity of health needs in Native communities. As well, it is not structured to be accountable to the community, without which true community development in health will not occur. (SCTC, 1986, pp. 29–30)

Throughout this developmental period, the SCTC took the lead by establishing and directing steering committees, contacting and motivating the School of Nursing at the University of Manitoba, and soliciting outside support, such as from Manitoba Keewatinowi Okimakanak, the Manitoba Indian Nurses Association, the Manitoba Métis Federation, and the Manitoba Association of Registered Nurses. The *Feasibility Study Report*, released on April 15, 1986, positioned the NBNP to address health problems in northern Native communities, encourage Native people to pursue nursing education, and attend to the social and cultural dimensions of health-care needs in Aboriginal communities. The program was viewed as part of the struggle for self-determination. It spoke to a strong desire to “prepare our own people from the North, in the North, with an education that would develop the skills to work with our aboriginal people” (Lathlin, 1987). The report was accepted by both the SCTC and the School of Nursing, and it led directly to program development.

The NBNP was also poised to influence the direction of nursing in ways that would have immeasurably benefited the profession. The SCTC argued that existing diploma programs available in the north, at Thompson or The Pas, were too urban-based (SCTC, 1986, Appendix D, p. 2) and had been parachuted into the north as satellites of southern programming. The Tribal Council, through its advocacy for baccalaureate education in northern Manitoba, also lent tangible support for baccalaureate education as an entry to practice in the province.

The SCTC insisted that the program be congruent with “Native worldviews” and that it be built on a “holistic conceptual framework.” It argued that transcultural nursing skills and grounding in cultural awareness were not being offered in nursing education generally. The new curriculum included such innovations as a traditional camp, a mandatory Native Studies component, exposure to cross-cultural communication, and enhanced primary care skills training for outpost nurses. Such courses would serve to “prepare nurses to work more independently of doctors,” Pat Stewart argued, as “nurses on a reserve must be prepared to handle emergencies and accidents which are quite common, and stabilize a patient in the same way an emergency ward would” (Morgan, 1987).

Curriculum Development and Program Administration

A Working Group was established in 1986 to address four components of the curriculum: Native content, cross-cultural communication, nurse practitioner skills, and student needs and supports. It was believed that these curriculum modifications would “produce nurses who are ethical and accountable to the patient (and communities), are involved in learning experiences relevant to the health care needs in the communities including health facilities, and which relate the various parts of the program to one another in a holistic, integrated manner” (SCTC, 1986, pp. 41–42). These modifications were significant, as it was the lack of grounding in cross-cultural knowledge and traditional health care, as well as the absence of primary skills to assess, diagnose, treat, and evacuate patients, that had led to the high turnover rates and burnout among nurses (Canitz, 1991; Thomlinson, 1995). The SCTC sought these alterations to the baccalaureate curriculum to ensure that the program was consistent with principles at the core of their self-determination efforts.

The SCTC maintained a partnership in terms of not only curriculum development, but also administration of the program. The Council wanted to exercise influence over student recruitment, program admission criteria, and approaches to student discipline. Entrance requirements were to be set jointly by the SCTC and the university, and the administrative structure between SCTC and/or bands and the university was to be negotiated (SCTC, 1986, p. 37). Resistance from the university regarding these administrative areas was a source of great frustration for the SCTC. It was clear that the university acquiesced on issues of curriculum development, but when it came to standards related to admissions, student progression, and program governance, the university invoked the provisions of the *University Act*, which had established the University of Manitoba under provincial law and which dictated its mandate and authority.

Program Funding: SCTC and the Struggle for Funds Management, 1986–90

Throughout its sometimes tumultuous relationship with outside agencies, the SCTC adhered to a concept of partnership that insisted on Aboriginal monies being spent on Aboriginal students. Initially drawing on federal funding from the IIHC Program, the SCTC envisaged a program that would be based on the principle of supporting Native health professionals. After the \$130,000 in development funds was exhausted, the SCTC was successful in positioning itself at the Northern Development Agreement (NDA) table. The NDA is a funding arrangement for co-sponsored northern development projects in various fields,

under which the federal government provides 60% if the provinces agree to provide the remaining 40%. In this case, the provincial component comprised the Manitoba Department of Education and the Manitoba Northern Affairs Department, with the federal funds coming through the Department of Regional Industrial Expansion (DRIE). Although the NDA did not accommodate the NBNP initiative, in the fall of 1987 the SCTC secured a mirrored arrangement that reflected the principles of the NDA, namely 60% federal and 40% provincial funding.

This funding arrangement brought the province more forcefully into the partnership, and the province came with demands of its own, many of which ran counter to the original goals of the NBNP. In the end, the NBNP's 4-year program was not deemed viable by the province. The provincial government preferred to fund a 2-year post-RN program in The Pas that would ladder or articulate with the existing diploma nursing programs and be open to all northerners, Aboriginal and non-Aboriginal alike. While the SCTC did not approve of these changes, it remained in the partnership with the university and the province. The SCTC continued to face struggles related to the principles and administration of the program, and eventually concerning funding for the program as well.

In at least five instances, the SCTC fought for a fair measure of control over funding arrangements. The first struggle came in April 1987. While the SCTC was trying to negotiate for the continued development of the program, the university attempted to create a tripartite agreement by which the MSB would be a signatory to contracts, to the exclusion of the SCTC (Dorion, 1987). The SCTC immediately rejected this arrangement, arguing that the MSB's role was not defined and that, in fact, the MSB was never intended to play a role in nursing education. It characterized the action as a paternalistic attempt by the university to appropriate the SCTC's involvement. This action suggests that the university may have lacked confidence in its partner. Such a lack of confidence was also expressed by the province, which in May 1987 requested that all funds flow through its offices (Storie, 1987). The MSB also resisted the SCTC's attempts to manage funds. In November 1987 it expressed "discomfort" with allowing a Tribal Council to administer funds (Larsen, 1987).

Again in February 1988 the province insisted that all funds bypass the SCTC and flow instead through the university (Penner, 1988). In 1989 the province made its final attempt to resist a true partnership in its contracts with the SCTC. Just before the program began, the province attempted to "broker" the services of KCC, thereby ensuring that provincial funding would flow through the college instead of through the

SCTC (Northern Bachelor of Nursing Program [NBNP], 1989). This move was also rejected by the Swampy Cree.

Eventually, in 1990, the SCTC signed a three-way contract with the government of Manitoba and the University of Manitoba. The MSB directed funding to the SCTC, which then allocated program monies as appropriate. The agreement, as explained in the NBNP *Student Info-Pak*, was the result of “several years of work by the Tribal Council” (Thomlinson & Streit, 1990).

The *Student Info-Pak* also outlined the principles of the tri-party agreement. Students were advised of the shortage and high turnover rate of nurses on reserves and in northern and remote communities, and were informed that the NBNP would provide nurses with the high-quality, unique education they needed to practise in northern and Aboriginal communities. The program would endeavour to provide nursing education in an Aboriginal cultural milieu. All students in the program would have an opportunity to acquire learning experiences with a specific Aboriginal focus, and Aboriginal people would participate fully in all aspects of the program through representation on the advisory board and on appropriate committees. Finally, the partners in the NBNP would actively recruit Aboriginal nurses, both on- and off-reserve, for the program.

Notably, the outline of principles concluded with a section on the program’s adherence to the administrative rules, standards, and policies of the university’s School of Nursing and Senate. But while the university was still not ready to enter into a true administrative partnership, some of the key self-determination principles of the original NBNP proposal continued to be among the tri-party principles, and the SCTC — albeit after years of struggle — achieved a fair measure of control over the program’s funding arrangements.

Implementation and Closure, 1990–94

Although not the program originally envisaged, the NBNP was nonetheless implemented in 1990. The program had been so thoroughly altered that, 1 month before it was launched, Oscar Lathlin (Chief of The Pas band and Chairman of the SCTC board) stated, “It’s hard to recognize the original program in the remnants” (Lathlin, 1990).

The Northern Nursing Program was based on a modified generic post-RN model, allowing for some of the NBNP curricular developments, including a traditional camp, and added components in Native studies, primary health care skills, and emergency skills and triage. However, the advanced clinical skills preparation of NBNP graduates was not recognized by the MSB, and NBNP students still had to complete

the Northern Clinical Program (Thomlinson, 1995), which met the clinical scope of practice for MSB nurses working in outpost stations. When the Northern Nursing Program was evaluated by an outside agency (Salasan Associates Inc.) in 1992–93, the resulting report concluded that the north required a 4-year Bachelor of Nursing program. This had been the long-held view of the SCTC and Dr. Jenniece Larsen, Director of the School, as well as others at the university.

While the curricular shortcomings were a concern, it was the small number of Aboriginal students in the program that was the foremost indicator — and one that was foretold by numerous individuals involved in the program — of the failure of the substituted post-RN program. When the program was implemented, a 60/40 split in favour of the Aboriginal students was advocated by Chief Lathlin, who also insisted that students be able to enrol on a part-time basis (NBNP, 1989). Problems with meeting quotas became clear in 1990. Lathlin then insisted that the “SCTC will not continue under this direction. We do not want any students accepted into the program unless we have reached the 50% Aboriginal nurse quota” (Lathlin, 1990). Moreover, according to the 1991 Tribal Council Resolutions, the SCTC demanded that a student counsellor of Aboriginal ancestry be hired to work with students in the NBNP; that funding be withheld for the primary health skills course until the feasibility of delivering the course in northern Manitoba was fully explored; and that the 1991–92 student intake be restricted to Aboriginal applicants (Dorion, 1991).

The problem of student quotas was tied to many issues, including a lack of engagement with the SCTC in student recruitment and guidance. Most significantly, however, the success of the program depended on the supply of Aboriginal RNs. The KCC diploma program would also have to maintain a quota of Aboriginal students, so that it could feed into the NBNP. However, the KCC did not change its quota system for Aboriginal nursing students until 1992. Therefore the program did not serve Swampy Cree communities as had been envisaged (Salasan Associates Inc., 1993, Section 2-23). Given the small number of Aboriginal students, and the fact that the Aboriginal students who did enrol in the program were already employed as RNs, the program evaluation undertaken in 1992–93 confirmed that none of the graduates of the post-RN program filled positions at outpost stations (Salasan Associates Inc., 1993, Section 2-25).

When, in 1994, it became clear that a true partnership in education would not be possible and that the program was appealing mostly to non-Aboriginal diploma nurses, the SCTC terminated its contract with the University of Manitoba and the provincial government and withdrew

its support for the program. This was an act of resistance on the part of the SCTC. Although it signalled the failure of the partnership, the decision represented the exercising of authority and accountability regarding the dissonance between the existing arrangement and a program that would educate Aboriginal students to work in Aboriginal communities.

In 1994 the Dean of Nursing at the University of Manitoba, Dr. Janet Beaton, allocated funding to wind down the 2-year post-RN program at The Pas. She stated that the monies committed by the MSB and “freed up” as a consequence of the SCTC’s contract termination should be directed to support the establishment of a 4-year northern bachelor of nursing program (Beaton, 1994). Ironically, the SCTC ended up where it had begun in 1983, advocating the need for a northern BN program for Aboriginal students.

Eleven years of work contributed to self-determination and governance achievements on a large scale. The SCTC challenged the provincial and federal governments to recognize and engage the Tribal Council as a legitimate political entity. For example, the SCTC was a signatory to the NBNP funding contract. In addition, the SCTC set a precedent by securing partnership status with the University of Manitoba and thus established a “footprint” for future educational partnerships with the First Nations. An outside (non-educational) Aboriginal organization had been instrumental in having a major provincial university engage in outreach programming.

Implications

Many Canadian universities, including Dalhousie University, the First Nations University of Canada, and the University of Saskatchewan, are actively engaged with Aboriginal organizations in developing nursing programming in response to the needs of Aboriginal communities (Gregory, 2005). Because Aboriginal communities remain interested in and committed to supporting the development of an indigenous health-care labour force, the need to consider the restructuring of university-Aboriginal relations is even more pressing today than it was when the SCTC brokered a partnership with the University of Manitoba and the province. The recent history of the NBNP points to several implications for contemporary nursing education in terms of governance and curriculum, and it underscores the primary and secondary gains of working in partnership with First Nations.

True partnership between universities and Aboriginal organizations requires what Kirkness and Barnhardt (1991) call the four Rs: respect,

relevance, reciprocity, and responsibility. Ignace, Boelscher Ignace, Layton, Sharma, and Yerbury (1996) indicate that where these are present, it is possible to “foster an environment of compatibility and trust.” Our review of the documents surrounding the NBNP suggests that some of these four principles were present; however, as the relationship between the SCTC, the university, and the province evolved over time, reciprocity and respect became increasingly compromised. As we have seen, it is clear that there were many constraints imposed upon the Swampy Cree–University of Manitoba partnership. True partnership requires models of governance that actualize full participation of Aboriginal organizations. Partnership can be achieved without undermining provincial statutes and laws, university governing bodies, and policies. The consequences of pseudo-partnerships in the NBNP case included fewer Aboriginal nurses and the loss of opportunities to work in a fundamental way to support Aboriginal self-determination.

Curriculum development of the NBNP is still relevant in the northern context, even though the program was scrapped in the shift to the 2-year post-RN program. Since co-management of curriculum development appears to be one of the most rewarding aspects of the NBNP’s history, further research in this area is to be encouraged (McBride & Gregory, 2005). Discussions about Aboriginal nursing often centre on statistics and epidemiological studies that point to the ill health of Aboriginal communities without addressing inherent strengths and the ability of communities to transcend epidemiological illness profiles. Nursing programs should include curriculum content that focuses on the health-promoting aspects of northern, rural, and urban Aboriginal communities and should concentrate on the geographical, historical, and cultural contexts of the lived experience of Aboriginal peoples.

The capacity of community organizations to enact change is real. The SCTC was instrumental not only in founding the NBNP but in changing the education landscape in Manitoba. It pressured the community college to change its quota system, thus introducing affirmative action at Keewatin Community College. The NBNP also set the stage for other partnerships at the University of Manitoba, such as the Norway House program. In 1996 the School of Nursing commenced delivery of an on-site community-based bachelor of nursing program at Norway House. Many of the issues associated with the SCTC experience (e.g., admissions, student progression, and governance) were overcome because of the full involvement and partnership of the Norway House Cree Nation with support from Manitoba Keewatinowi Okimakinak. Other positive consequences of First Nations collaboration include the support of baccalaureate education, the strengthening of university Indigenous

programming, and the creation of meaningful relationships with Aboriginal communities that challenge institutions to make changes that foster the education of Aboriginal peoples.

We have explored nursing education as one manifestation of efforts towards self-determination. In the short history of the Northern Bachelor of Nursing Program, the Swampy Cree created a groundbreaking program sensitive to the cultural, geographical, labour, governance, and health needs of Aboriginal communities in northern Manitoba. The NBNP experience highlights the possibilities for nursing programming when Aboriginal organizations influence key institutions, and the consequences of discouraging the participation of such organizations in institutions that affect them. This historical case study illustrates the need for full partnership with Aboriginal organizations and the need to consider Aboriginal peoples not as outsiders, to be “responded to,” but as insiders and as full participants in health-care education and delivery.

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La faisabilité du dépistage de la violence conjugale effectué dans le cadre des visites à domicile post-partum

**Susan M. Jack, Ellen Jamieson,
C. Nadine Wathen et Harriet L. MacMillan**

Il existe peu de preuve démontrant l'efficacité du dépistage systématique de la violence conjugale et un débat est présentement en cours à ce sujet. Cette étude descriptive et qualitative vise les objectifs suivants : étudier les perceptions des infirmières en santé publique (ISP) en matière de dépistage de violence conjugale; explorer la faisabilité, selon le point de vue des ISP, du dépistage de la violence conjugale dans le cadre des visites à domicile; et décrire les pratiques de dépistages des ISP et la formation qu'elles reçoivent sur le thème de la violence conjugale. Six ISP discutent de leurs expériences d'intervention en lien avec la violence conjugale, tant dans un contexte d'essai randomisé destiné à évaluer les méthodes de dépistage que dans un contexte de visite à domicile générale. Selon les résultats, le dépistage systématique de la violence conjugale, effectué à l'aide d'un questionnaire standard, est difficilement réalisable dans un contexte de visite à domicile auprès d'une population générale de femmes nouvellement mères. Les ISP qui visitent les familles à grand risque dans le cadre du programme Bébés en santé, enfants en santé ont pour pratique courante d'identifier les mères à risque de subir de la violence conjugale à l'étape de l'évaluation familiale approfondie. Cette approche évaluative, utilisée pour identifier les femmes à risque de subir ce type de violence, est axée sur la recherche de cas plutôt que sur le dépistage.

Mots clés : dépistage systématique, mères

The Feasibility of Screening for Intimate Partner Violence during Postpartum Home Visits

**Susan M. Jack, Ellen Jamieson,
C. Nadine Wathen, and Harriet L. MacMillan**

There is ongoing debate and limited evidence on the effectiveness of universal screening for intimate partner violence (IPV). The objectives of this descriptive qualitative study were to examine public health nurses' (PHNs') perceptions of screening for IPV; explore the feasibility, from the perspective of PHNs, of IPV screening during home visits; describe PHNs' screening practices; and describe PHN training in relation to IPV. Six PHNs discussed their experiences of addressing IPV both in the context of a randomized trial to evaluate screening methods and in the context of their general home visitation practices. The findings indicate that universal screening for IPV using a standard set of questions is difficult to implement during home visits to a general population of new mothers. For PHNs visiting high-risk families as part of the targeted Healthy Babies Healthy Children program, the standard practice is to assess for mothers' exposure to IPV during in-depth assessment of the family; the nature of in-depth assessment favours a case-finding rather than a screening approach to identifying women exposed to IPV.

Keywords: domestic violence, universal screening, public health nursing, home care services, mothers

Introduction

Intimate partner violence (IPV) against women is a serious public health, social, and criminal justice problem. In Canada, a national telephone survey, the 2004 General Social Survey, found that 7% of females 15 and older with a partner currently or in the preceding 5 years had experienced some form of spousal violence, and 4% of those currently in a marital or common-law relationship had experienced either sexual or physical abuse perpetrated by their partner in the preceding 5 years (Statistics Canada, 2005). While both women and men may experience IPV, for women the severity, frequency, and impact are significantly greater (Statistics Canada, 2005). Intimate partner violence is associated with considerable impairment. Campbell and colleagues (2002) found that abused women were much more likely than non-abused women to

have increased gynecological, central nervous system, and stress-related problems. In a meta-analysis, Golding (1999) concluded that a woman's exposure to IPV increases her risk for depression, suicide, substance abuse disorders, and post-traumatic stress disorder.

Primary target populations for public health nurse (PHN) home visitation include women who are pregnant or are in the early postpartum period. Estimates of 1-year prevalence of IPV against pregnant women in the United States and other developed countries vary from 0.9% to 20.1%, with most ranging between 3.9% and 8.3% (Gazmararian et al., 1996). Muhajarine and D'Arcy (1999) report a 6% to 8% prevalence rate for physical abuse amongst pregnant Canadian women. In a sample of 3,542 women in North Carolina, Martin, Mackie, Kupper, Buescher, and Moracco (2001) estimate a 3.2% prevalence rate for physical abuse during a mean postpartum period of 3.6 months. However, past abuse is a strong predictor of postpartum abuse. In a study of Canadian women with a history of physical abuse during pregnancy, 90% of the participants reported physical abuse in the first 3 months after delivery (Stewart, 1994).

Given the prevalence and impact of IPV, some organizations in Canada (e.g., Cherniak, Grant, Mason, Moore, & Pellizzari, 2005; Registered Nurses' Association of Ontario, 2005) and the United States (e.g., American Nurses Association, 2000; Family Violence Prevention Fund, 2004) recommend that health-care support staff routinely ask all female patients about exposure to IPV — a procedure referred to as universal screening. There is ongoing debate in the field about this issue. Some authors highlight the lack of current evidence on the effectiveness and the potential harm of screening for IPV (Nelson, Nygren, McInerney, & Klein, 2004; Ramsay, Richardson, Carter, Davidson, & Feder, 2002; US Preventive Services Task Force, 2004; Wathen & MacMillan, with the Canadian Task Force on Preventive Health Care, 2003). A key issue is the lack of evidence regarding effective interventions to which health-care providers can refer women once IPV has been identified (Wathen & MacMillan, 2003).

Universal screening must be distinguished from case-finding; there is general agreement on the importance of asking about IPV when signs and symptoms or other factors indicate the need to do so as part of a diagnostic assessment (Cole, 2000; Ferris, 2004). A number of indicators — characteristics of women, men, and their relationships — have been significantly correlated to abuse status. These include depression; post-traumatic stress disorder and somatic complaints in women; drug and alcohol use by male partners; unemployment or underemployment of male partners; and type of relationship, including common-law and

recently separated (Coker, Smith, McKeown, & King, 2000; Dearwater et al., 1998; Kyriacou et al., 1999; Magdol, Moffitt, Caspi, & Silva, 1998). It should be noted that the available data on risk indicators are primarily correlational — that is, the indicators are present at the time when abuse is assessed. It has not yet been determined which indicators precede or succeed abuse. It has also been argued that routine health assessments (Janssen, Dascal-Weichhendler, & McGregor, 2006) and inquiries (Taket et al., 2003) should include questions about exposure to violence in addition to questions about alcohol consumption and smoking (Janssen et al., 2006) for the purpose of identifying health hazards known to be correlated with IPV (e.g., chronic pain, depression).

The McMaster University Violence Against Women research group conducted a randomized trial testing three methods of screening for IPV, to determine which method should be used in a trial examining screening effectiveness. This involved a comparison between a face-to-face interview conducted by a health-care provider, written self-report, and computer self-report (MacMillan et al., 2006). Two short screening instruments were used: the Partner Violence Screen (PVS; 3 items) (Feldhaus et al., 1997), and the Woman Abuse Screening Tool (WAST; 8 items) (Brown, Lent, Brett, Sas, & Pederson, 1996). The original intention was to include PHN home visitation as one setting for the trial; however, it quickly became clear that this context is very different from health care provided in clinics and that this warranted the separation of public health home visitation and clinic settings. The length of home visits and the average number of clients carried by each PHN precluded the powering of the home visitation setting to obtain data on screening format that were specific to nurse home visits.

The three screening methods and two screening instruments were assessed through Healthy Babies Healthy Children (HBHC), a visitation program delivered by a public health unit in central-west Ontario. The HBHC program is a comprehensive network of services and support funded by the government of Ontario and coordinated through its 36 public health units to promote child and parent development amongst pregnant women and families with children under 6 years of age. Nurse home visitation is a core component. For the majority of women, referral occurs during universal postpartum screening conducted in hospital. Consenting women receive a brief assessment of maternal and newborn well-being by telephone within 48 hours of discharge. All mothers are offered a single postpartum home visit (60–90 minutes) by a PHN for the purpose of: (1) assessing infant and maternal health status and family adjustment, (2) dispensing information

on community supports, and (3) providing information to encourage the adoption of health-promoting behaviours.

At any point of contact with public health services, pregnant women or families who are identified as having children at risk for developmental delay, due to either poor parenting or social or physical factors, may receive an additional home visit during which the PHN conducts an in-depth family assessment (IDA). Based on this comprehensive assessment, families with high-risk children may be eligible to participate in a voluntary blended home visitation program. This targeted component of the HBHC program provides families with home visits by both professional PHNs and lay home visitors.

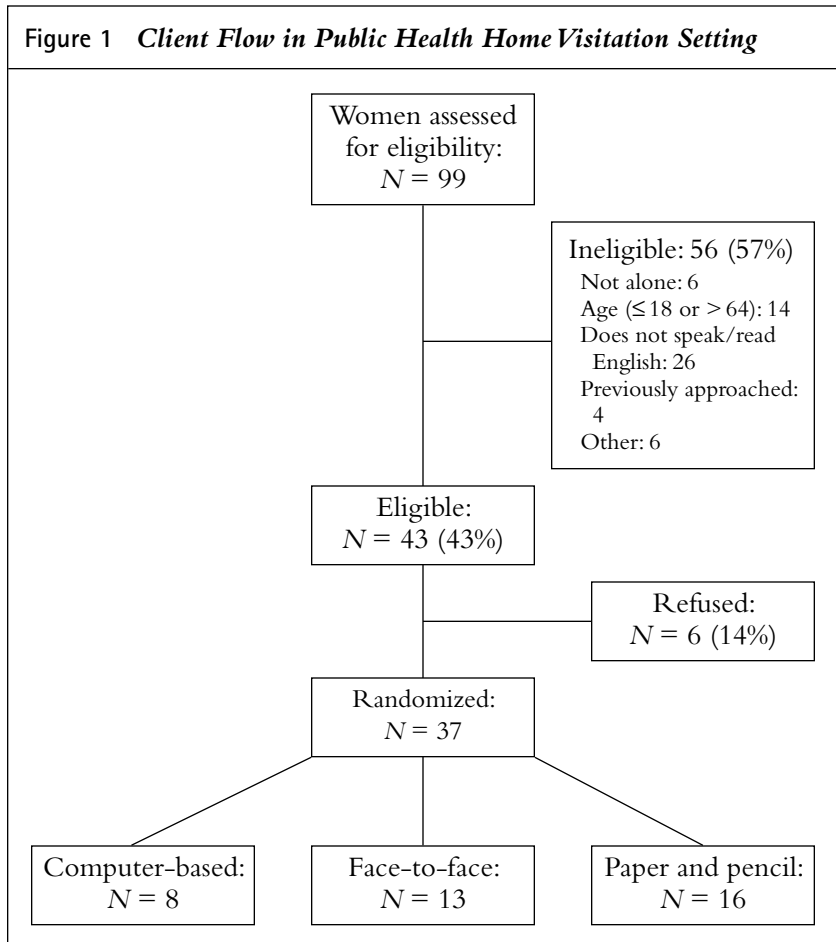
Because the home visitation care was substantively different from care in a clinic setting, and since only 37 women were recruited over 6 months, we conducted a follow-up qualitative study to examine PHNs' perceptions and experiences of asking about IPV during home visits. The objectives were to: (1) examine PHNs' perceptions of screening for IPV; (2) explore the feasibility, from the nurses' perspectives, of screening for IPV during home visits, including identifying barriers to screening; (3) describe the circumstances under which PHNs ask about IPV; and (4) describe PHNs' training with respect to addressing IPV. This article presents the nurses' perceptions of screening for IPV and the feasibility of universal screening in the context of postpartum home visits. The nurses reflect on their experiences related to both their involvement in the study and their usual home visitation practices.

Methods

A fundamental qualitative descriptive design (Sandelowski, 2000) was used to explore PHNs' perceptions and experiences of screening for IPV during home visits. This type of design is employed in order to provide a comprehensive summary of facts and events using the surface language of the participants; it is commonly used by researchers and decision-makers who require direct answers to questions about specific events, phenomena, or programs (Sandelowski, 2000). Compared to data generated through descriptive, interpretative qualitative methods such as grounded theory or phenomenology, fundamental descriptive data are interpreted with less inference and with minimal theorizing (Sandelowski, 2000).

All six PHNs taking part in the trial agreed to participate in this qualitative study. The nurses were asked to reflect in general on the process for the randomized trial, including the experience of assessing participants for eligibility, and then to specifically reflect on the home visits with the 37 women who participated in the trial. Over a 6-month

period, the PHNs assessed the eligibility of all of their new and existing clients receiving home visits. A woman was eligible to participate if she was 18 to 64 years of age receiving a home visit for herself and her infant, able to separate herself from other individuals in the home, able to speak and read English, well enough to participate, and able to provide informed consent (MacMillan et al., 2006). The 37 women were drawn from a total of 43 who met the eligibility criteria, for a response rate of 86%. Six of the 43 who met the criteria chose not to participate. The trial flow diagram is presented in Figure 1. These women were recruited from postpartum, IDA, and long-term HBHC home visits. Nurses were also asked to consider their experiences with asking about IPV in their usual clinical work.



The study was approved by the Hamilton Health Sciences/McMaster University Faculty of Health Sciences Research Ethics Board. All of the PHNs who participated in the trial received 1 hour of training in responding to IPV from the study coordinator and an experienced social worker who served as coordinator of the local hospital-based domestic violence program. They also received a training binder that included information about IPV and community resources for women exposed to IPV. Data were collected between November 2004 and January 2005. Each PHN took part in a single in-depth, semi-structured interview that lasted from 60 to 90 minutes. An interview guide was developed based on the study objectives. It was revised following each interview so that emerging concepts and themes could be explored in subsequent interviews. The PHNs were given a \$5 gift certificate in appreciation of their participation. Data collection and analysis took place concurrently. The audiotaped interviews were transcribed verbatim and the primary investigator (SJ) compared each transcript to the tape for accuracy. Given the exploratory nature of the study, data were analyzed using qualitative content analysis (Miles & Huberman, 1994; Woods, Priest, & Roberts, 2002). A process of first-level, or line-by-line, coding was conducted whereby key phrases were matched with one or more codes. Second-level coding was then carried out to identify subcategories and properties of each category and to establish relationships and links across categories (Priest, Roberts, & Woods, 2002). Once data were reduced, key themes were developed through a process of interpreting participants' responses (Priest et al., 2002).

To ensure data credibility, all interviews were conducted by the primary investigator, a nurse researcher with expertise in qualitative methods and with clinical experience as a PHN. Once all interviews were transcribed and coded, a written summary of the emergent themes was circulated to all interviewees for their comments on the data interpretation. All six PHNs participated in this process of member checking, and all agreed that the themes, interpretations, and conclusions were accurate and representative of their experiences (Krefting, 1991). A presentation of the key themes from the study was given to all HBHC PHNs in the public health unit; there was consensus that the findings were reflective of their experiences with discussing IPV during home visits. Strategies to strengthen the dependability or consistency of the findings included peer examination of the research design and implementation and discussion of the key findings with a multidisciplinary team of researchers working with Violence Against Women. Additionally, transcripts were independently coded by the primary investigator and a 4th-year baccalaureate nursing student. The investigator and the student

then met to discuss emerging concepts and categories and to reach consensus on code labels.

Results

All the nurses held a minimum of an undergraduate degree in nursing and three held a university degree (one a master's degree and two an undergraduate degree). Their mean age was 41 years. Their mean number of years of overall nursing experience was 19 (*range* = 4 to 28 years) and mean number of years of home visitation experience was 7 (*range* = 1 to 25 years). All of the nurses had experience conducting home visits with both postpartum and long-term (high-risk) clients. During the randomized trial, four of the PHNs recruited participants from either their postpartum (initial home visit) or long-term caseloads. Two of the PHNs were members of the client assessment team and study participants were recruited on their home visits following completion of the IDA tool.

Public Health Nurses' Perceptions of Universal Screening for IPV

The PHNs expressed the opinion that it was their role to focus on family health promotion and, because they generally worked with physically healthy populations, that home visitation is an appropriate setting for identifying and addressing psychosocial issues such as IPV. All of the PHNs believed that routine IPV screening for women receiving home visits would benefit their clients. The nurses explained that the process of asking all women about their exposure to IPV would: (1) increase client awareness about the issue, (2) help women exposed to violence to define their experiences as abusive, (3) create more opportunities for women to disclose incidents of IPV to health-care providers, and (4) facilitate discussions between health-care providers and clients about health issues related to violence. It was anticipated that with frequent discussion of IPV women would grow more comfortable disclosing situations of abuse during encounters with health-care providers. As one nurse explained, it is the responsibility of the nurse to present the issue of IPV in a "matter of fact" manner and to tell the client, "We do this with everybody," the rationale being

...the next time another health-care provider asks her, maybe eventually she'll start thinking, "Well, maybe this [IPV] isn't such a terrible thing for me to admit to, because people seem to think that it is quite common."

Some of the nurses cautioned that screening for IPV during all health-care interactions could result in some practitioners asking questions in a very rushed and perfunctory manner, creating an environment that is not conducive to disclosure. However, one nurse acknowledged that a policy of universal screening would serve to identify abused

women at risk of “falling through the cracks” because they might not be viewed by the PHN as at risk for abuse.

Feasibility of Screening in Home Visiting Practice

Despite the value that they placed on IPV screening, PHNs identified multiple barriers to the screening of all women receiving PHN home visits. In the randomized trial, nurses were instructed to determine client eligibility and enrol eligible clients during their regular home visits. What emerged during the in-depth qualitative interviews was that the term home visiting cannot be used generically; we quickly became aware of substantial differences in purpose, intensity, and frequency across postpartum, IDA, and long-term home visits.

The context and purposes of the IDA and long-term HBHC visits differed from those of the postpartum visits. In the former types of home visit, the PHNs were delivering services to clients at high risk of exposure to IPV; it was therefore normal for them, even prior to the trial, to use an assessment or case-finding approach in identifying and discussing the issue of IPV with the client. The PHNs explained that, as rapport and trust were slowly established with long-term clients, they found it natural to weave questions about the quality of the client’s relationships and her exposure to IPV into the conversation. Some PHNs believed that disclosure could be facilitated by slowly building up to a discussion of relationship violence and using a conversational approach to assessment. They said that the direct approach required when screening for IPV using a face-to-face standardized questionnaire might not be conducive to discussing one’s experiences of IPV. These PHNs also explained that when using the screening tools they felt compelled to ask the questions in the tool and did not have an opportunity to explore the client’s responses in depth.

While the universal postpartum home visit is targeted to a general population of new mothers, there are multiple barriers to IPV screening during a home visit of this type. These barriers include the following: (1) the presence of the partner during the visit; (2) the presence of other family members, including children over the age of 18 months; (3) lack of time; (4) the nurse’s respect for the client’s time and priorities; and (5) language barriers. The conditions for safely and privately screening for IPV were frequently lacking during postpartum home visits. One nurse described the ideal screening environment:

The husband is not around, there’s a quiet environment, the baby isn’t crying or fussing, and there are no other children around and no other visitors. [Then] you know that a comfortable relationship has been established.

One common restriction on PHNs' abilities to screen for IPV during postpartum home visits was the presence of other individuals. The protocol for screening required that all questions related to IPV be posed only when the woman was free to answer, so that her response remained private and was disclosed only to the nurse. In some cases, the nurses were unable to complete the screening because the woman's partner had taken leave from work following delivery and wished to participate in the nurse's initial visit:

The majority of the time, for postpartum home visits, the mothers have just been discharged from the hospital, and the partner is always there — always, always there.

Grandparents were also frequently in the home, to provide support to the new mother, and also participated in the visit. During discussions of general home visiting practice, the nurses said that the home setting may enhance a client's level of comfort in discussing intimate issues but can also inhibit discussion of IPV, particularly for abused women who fear that the visit will be overheard or disrupted by the abuser.

The presence of the infant's siblings limited the nurses' ability to screen for IPV, for two reasons: It was study protocol to not screen for IPV in the presence of children over the age of 18 months; and the presence of active toddlers or preschoolers precludes the development of an environment conducive to the discussion of sensitive issues.

The trial protocol estimated that eligibility determination, the securing of informed consent, and the IPV screening process would take approximately 30 minutes. To facilitate the conduct of the study, the PHNs were given the flexibility to extend the time per home visit. The PHNs admitted that the amount of time allocated to a postpartum home visit would be a factor in their decision whether or not to screen for IPV. They reported that an average home visit of 60 to 90 minutes consists of the following interventions: (1) assessment of maternal-infant health status, (2) education of families in infant development and well-being, and (3) promotion of family awareness of local community resources and services. For breastfeeding mothers, considerable time is spent addressing problems related to latch and discussing infant hydration and elimination.

The nurses stated that a discussion of IPV with a client is qualitatively different from, more emotion-laden than, and more time-consuming than a discussion of any traditional health promotion topic. One nurse commented:

You know darn well that if somebody tells you something about abuse...it's not going to be a short little issue. So it's not like when you talk about an issue like preventing SIDS [sudden infant death syndrome]

and then move on to the next thing. This is something that's going to be very time-consuming.

The nurses explained that a discussion of violence requires time, so that the nurse can: (1) fully engage with the woman in order to sensitively introduce the topic into the conversation, (2) complete the screening, and (3) respond to the results of the screening. The nurses were candid about their lack of time during regular postpartum home visits to complete these tasks in a therapeutic manner. Also, most PHNs are expected to make two home visits per half day and lack the flexibility to extend the time between visits in order to respond to any disclosure of IPV. One nurse likened discussing IPV with clients to “opening up a can of worms” and admitted that if she was pressed for time “I’m not going to ask them [about their exposure to IPV].”

During a home visit, a PHN provides the family with a large amount of information in a relatively small amount of time. As a result, the PHNs were extremely sensitive to the impact of a single, intensive home visit to a new mother with an infant less than 1 week old. The PHNs reported that by the end of a postpartum home visit, once the required content was covered, most mothers — already struggling to quickly adapt to caring for an infant — were overwhelmed by the amount of information presented to them. Many of the nurses indicated that the postpartum home visit is not the ideal time to screen for IPV. The PHNs said that if they managed to complete a screening questionnaire at all, it was at the end of the visit. Some made the decision not to screen for IPV because they received numerous cues from the mother that it was time to end the visit. In some situations the nurse observed that the mother was exhausted or in physical discomfort:

The mothers would say, “The baby’s hungry” or “I need to feed the baby now” or “The kids are going to be coming home soon,” or the toddlers would have woken up from their naps and she was saying, “I’ve got to get supper on now.” The postpartum home visit would be long and involved enough, and many of the moms were just plain tired. They’re worn out at that point. So I really do not find that good timing [to screen for IPV].

The ability of participants to speak and read English was one of the inclusion criteria for the trial, and the screening tools were available in English only. As illustrated in Figure 1, this criterion meant that 26% of clients were not eligible to participate in the study. In the qualitative interviews, the PHNs confirmed that language barriers did limit the number of women they could recruit, as many of their clients were new immigrants to Canada or spoke English as a second language. The PHNs stated that this was characteristic of their home visiting practice and that

they could not always discuss culturally sensitive issues such as IPV with non-English-speaking clients. They frequently relied on interpreters to accompany them on home visits. The PHNs said they would be hesitant to have an interpreter ask a client questions related to IPV exposure, mainly because interpreters are frequently drawn from the same community or cultural group as the client and the client may be uncomfortable or fearful disclosing a violent situation. One PHN explained that non-English-speaking postpartum clients may view an interpreter as “someone in their own community” and be hesitant about disclosing IPV,

...especially if they're from a community where abuse and control issues are not that uncommon. So are they going to be sharing that? Not if they're thinking that this person is going to go and tell everybody else in the community.

PHN Education Related to IPV

Throughout the interviews it became apparent that the nurses perceived that a policy of universal screening for IPV would benefit women only if the health-care providers responsible for screening were knowledgeable about and skilled in responding to disclosure of physical, emotional, or sexual abuse:

I think universal screening is only as good as the training you give the person who is asking the questions and the subset of people that you have in place to refer that person to.

Four of the PHNs commented that the training session constituted an excellent overview of IPV. They considered the training binder provided as part of the trial's safety protocol a valuable resource and said they would continue to use it to inform their clinical practice and their work with women at risk for or exposed to IPV.

None of the PHNs could recall learning, in their undergraduate nursing programs, about the scope of IPV in Canada or receiving training in nursing interventions for women exposed to IPV. Some of the nurses reported that their undergraduate education included opportunities to develop communication and assessment skills but not skills related to screening for IPV. All of the PHNs acknowledged that the majority of their IPV knowledge had been obtained through workshops or through the public health agency's orientation program; however, most discussions of IPV during the orientation sessions were embedded in presentations on child welfare.

Overall, the PHNs who participated in the study felt that they had adequate knowledge and skills to screen women for exposure to IPV and

to respond to disclosure of abuse. However, some of the PHNs admitted that prior to the training for the trial they lacked the confidence and skills to respond appropriately to disclosure of IPV. One PHN summarized her fear this way:

I just think, you know, gosh, what if she does disclose? What am I going to do? And I guess I get scared.

During a discussion about general home visitation practice, another nurse said that even when a PHN possesses the knowledge and skill to ask about and respond to IPV while on a home visit, she may be unable to screen properly because of her limited personal capacity or her own exposure to IPV:

If the nurse herself has experienced some abuse and hasn't dealt with it, she might be scared of asking those kinds of questions because she isn't in a space where she could deal with it herself.

Discussion

Findings from this qualitative study indicate that universal screening for IPV using a standard set of questions, while valued in principle by PHNs, is difficult to implement during postpartum home visits for a general population of new mothers. For PHNs visiting high-risk families as part of the targeted HBHC program, the standard clinical practice has been to assess for mothers' exposure to IPV by integrating questions about violence and relationship into the overall in-depth assessment of the family.

The results suggest that the nature of the health interaction, including time available, other tasks to be accomplished, and the expectations and experiences of both the woman and her health-care provider, might be the ideal determinant of the best approach to asking about abuse. The descriptions provided by PHNs in the present study suggest that when and how to ask about IPV during postpartum home visits is an integrated process; nurses read the situation, determine whether there are immediate signs or symptoms of abuse (i.e., the case-finding approach), and then decide whether and how best to ask questions about violence. Specific issues considered by PHNs include the following: Will I have subsequent visits with this client? If the woman does disclose, will I have time to discuss the next steps? Am I prepared to offer guidance with respect to interventions? Given the lack of evidence about whether universal screening by health-care providers leads to interventions that reduce violence or improve quality of life, and given these contextual realities, we conclude that routine universal screening during postpartum home visits has limited acceptability and feasibility. The nurses should

decide when and how to ask about IPV, using their expertise, judgement, and knowledge about the signs and symptoms. This approach is consistent with emerging qualitative evidence regarding women's preferences with respect to how discussions of IPV are raised during health-care interactions (McCord-Duncan, Floyd, Kemp, Bailey, & Lang, 2006).

The PHNs identified the issue of IPV as a public health concern and as a topic to be included in home visiting protocols. They believed that universally "asking about" exposure to IPV can benefit women by raising awareness about the issue, helping to define abusive situations as such, facilitating discussion of sensitive issues, and providing frequent opportunities for disclosure. These benefits are consistent with the findings of other qualitative studies examining the effects of screening from the woman's perspective. Generally, female patients report that when health-care providers are able to ask about exposure to violence sensitively and confidentially, they feel supported and relieved that the issue is being addressed (Feder, Hutson, Ramsay, & Taket, 2006). The interaction validates their experiences, represents an opportunity for them to obtain information, and helps them to make links between their health status and the quality of their relationship (Cherniak et al., 2005). In a case-control study, abused and non-abused women ($n = 1,988$) agreed that screening would make it easier for abused women to seek assistance (86.1%) and women would be glad that their provider is concerned about their exposure to violence (95.6%) (Gielen et al., 2000). However, the study also revealed the potential harms of screening; 43% of the women agreed that the intervention could place abused women at increased risk for violence. While both clients and health-care providers are able to identify the benefits of IPV screening, the effects of screening on women's long-term health remain unknown (Wathen & MacMillan, 2003).

In the present randomized trial, some women did not meet the eligibility criteria for IPV screening because they could not be seen alone or did not speak or read English. In home visitation practice, the PHNs frequently could not screen properly for IPV because of the presence of others, language barriers, time constraints, the need to focus on client-identified priorities, or immediate concerns such as maternal or infant health. Although this sample of PHNs was confident about their IPV knowledge and their ability to screen for IPV, some PHNs expressed concern about the ability of PHNs in general to respond to IPV disclosure, including providing information about interventions.

Other health-care providers, such as physicians, have identified similar barriers to IPV screening, including a lack of interventions, time constraints, fear of offending the woman, lack of education about IPV, limited knowledge of support services for abused women, fear of reper-

cussions for the woman, and child-protection concerns (Taket et al., 2003; Waalen, Goodwin, Spitz, Petersen, & Saltzman, 2000). Additional barriers stemming from the nature of home visits were identified by the participants in the present study. Nurse home visitation is a unique mode of health-service delivery, unlike traditional nursing or medical services delivered via community or acute-care facilities. Care is offered in the client's private space and the family acts as a gatekeeper. In addition, health risks and needs are identified by the nurse, so that care is frequently offered to families rather than sought by them; access to health promotion interventions may be a low priority for parents experiencing multiple stressors (Chalmers, 1992; Kitzman, Cole, Yoos, & Olds, 1997). Public health nurses have little control over who participates in the home visit; the presence of a newborn often leads to other family members being at home when the nurse visits, creating a risky environment in which to ask the woman about IPV. The newborn's siblings may also be present during the visit. For safety reasons the PHNs were instructed not to screen in the presence of children over 18 months of age, again limiting the feasibility of in-home postpartum screening. However, screening for IPV in the presence of young children has been successfully conducted in other clinical settings. In a general pediatric clinic, a sample of female caretakers of children seeking medical care were screened for IPV; the protocol was that participants could be screened in the presence of children over the age of 3 only if they could be interviewed alone or were able to complete the written response form (Holtrop et al., 2004). It was estimated that, with this approach, female caretakers could be screened in 75% of the visits. This result provides further support for screening women using self-completed approaches (MacMillan et al., 2006). However, Zink (2000) cautions that the placing of IPV screening results in pediatric charts can threaten confidentiality as caretakers/guardians may have access to the information.

As client participation in the home visiting program is voluntary, it is essential that PHNs adopt strategies that promote client acceptance of the service. One strategy is to provide client-centred and client-directed care and to give priority to the family's questions and needs during the home visit. The PHNs reported that, after accommodating these needs and providing health education on a variety of topics, such as breastfeeding, they had little opportunity to introduce IPV screening at the end of a visit. Furthermore, the PHNs indicated that aspects of the provider-client relationship that might facilitate discussion of violence, such as trust and rapport, are not usually established in one visit. Discussions of IPV are best held when there is a bond of trust between the provider and the client and when the client does not feel rushed. This calls for adequate resources, to ensure appropriate levels of care, including intensity,

frequency, and length of postpartum home visits. These specifications sat in direct contrast to the PHNs' work with families in the targeted program, who received monthly home visits. Over time, as trust was developed, and when a structured screening tool was not being used, it became easier for the nurses to introduce questions about exposure to violence. It was evident that PHNs consider the topic of family violence to be distinct from general parenting or safety topics. Most of the nurses expressed a wish for flexibility so that women could choose when to disclose IPV; this is an approach that is also valued by abused women (Feder et al., 2006).

Given the PHNs' preference for integrating any discussion of IPV throughout multiple home visits, it is important to differentiate between screening and case-finding. Cole (2000) explains that screening is the process of routinely asking all women accessing health services about their exposure to violence, regardless of their reasons for seeking care. In case-finding (e.g., in-depth nursing assessment), on the other hand, questions about IPV are posed in any nursing assessment of a client who shows signs or symptoms of abuse. The nature of the HBHC program, which offers monthly PHN home visits to families with children at high risk for developmental delays, essentially presupposes a case-finding approach to identifying women exposed to violence. The maternal and family indicators that place children at high risk for developmental delays, and thus eligible for nurse home visits (McNaughton, 2004), are similar to some of the indicators for IPV exposure. Therefore, it is good clinical practice for nurses to use a case-finding or assessment approach to identifying abuse in their home visitation work.

There are several limitations to this descriptive qualitative study. The experiences and perceptions are those of only the six PHNs from one Ontario public health unit who participated in the trial and received additional training in screening for and responding to IPV. The findings are generalizable only to women in Ontario, Canada, who receive postpartum home visits. In future research, barriers to and experiences of discussing IPV should be explored with PHNs who are not involved in this type of research protocol and also with HBHC clients. While qualitative findings are not intended to be generalizable, the present findings may be transferable to other programs that offer postpartum home visits facilitated by a PHN and support program planners and clinicians in identifying barriers to universal IPV screening. Finally, it was only during the qualitative study that the investigating team learned that the unique differences amongst the postpartum, IDA, and long-term home visits significantly influenced the IPV discussions between PHN and client. Data were therefore not collected on the type of home visit the client received or the number of visits the PHN had made prior to the

screening encounter. The content of a home visit, the quality of the client-provider relationship, and the establishment of trust and rapport differ significantly between a single postpartum or assessment visit and a series of visits to identified high-risk women and children. The quality of the PHN-client relationship influences the sharing of sensitive information (Jack, DiCenso, & Lohfeld, 2005) and thus may influence a woman's willingness to disclose incidents of IPV. Researchers evaluating the effectiveness of home interventions should inquire a priori about the different types of home visit offered to families and collect data that will capture these differences.

Clearly, it is a question of not only whether to ask about IPV but also what approach to use and under what circumstances. Recent debates and guidelines have focused on screening to such an extent that issues such as how to ask about violence in the context of a case-finding approach or diagnostic assessment have received little attention (Taket, Wathen, & MacMillan, 2004). It is noteworthy that the nurses in the present study agreed in principle with the concept of universal IPV screening but identified barriers to the implementation of such screening. When information about the effectiveness of IPV screening in health-care settings becomes available from an ongoing randomized controlled trial (<http://www.fhs.mcmaster.ca/vaw>), such information should be considered in the context of the specific health-care encounter. In the meantime, information provided by the nurses suggests that education about IPV generally has been lacking — a finding that is supported by a recent report on Ontario-wide practices (Catallo et al., 2006). Whether or not IPV screening is shown to be effective, it is essential — given the prevalence and health consequences of IPV — that home-visiting nurses have appropriate training in identifying and responding to it.

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**La négociation du « domicile » et des « soins »
chez les personnes vivant avec le VIH et
les sans-abri : une étude de cas ethnographique
de l’habitus des soins infirmiers à domicile**

Cindy Patton et Helen Loshny

Les auteures combinent le travail de terrain que fait le personnel infirmier affecté aux soins à domicile et œuvrant dans un milieu urbain pauvre, et l’analyse des modèles en évolution de la prestation des services. Elles explorent les notions de « domicile » et de « soins » pour les sans-abri ou sans domicile fixe en tant que caractéristiques d’un habitus des soins infirmiers à domicile, dans le contexte d’approches institutionnelles et professionnelles conflictuelles en matière de soins du VIH. Les infirmières et infirmiers ont adopté une pratique des soins infirmiers novatrice, puisque les modèles existants ne répondent pas aux besoins des « patients diagnostiqués comme souffrant de plusieurs troubles ». Cette pratique est aussi influencée par le mouvement axé sur l’accroissement de régimes anti-rétroviraux comme moyens pour ralentir la propagation du VIH dans la population. Les auteures décrivent la pratique négociée par le personnel infirmier et utilisent la notion d’habitus de Pierre Bourdieu pour élaborer une théorie sur leur capacité à répondre à des demandes concurrentielles.

Mots clés : soins infirmiers à domicile, antirétroviraux, sans-abri, pratique des soins infirmiers, habitus

Negotiating “Home” and “Care” among the HIV+ Homeless: An Ethnographic Case Study of Home Care Nursing Habitus

Cindy Patton and Helen Loshny

The authors combine field work among home care nurses working in an impoverished urban neighbourhood with analysis of changing models of service provision. They explore the concepts of “home” and “care” for the homeless and marginally housed as features of a home care nursing “habitus” in the face of conflicting professional and institutional approaches to HIV care. While the nurses’ innovative practice is a result of the failure of existing models to meet the needs of multi-diagnosis patients, it is also influenced by the drive to increase adherence to antiretroviral regimens as a means of slowing the spread of HIV at the population level. The authors describe the nurses’ negotiated practice and use Pierre Bourdieu’s notion of habitus to theorize about their ability to meet competing demands.

Keywords: home care, antiretrovirals, homeless persons, nursing practice, habitus

Introduction

Over the past decade, home care nursing has come to the fore in Canada’s efforts to put a kinder face and a lower price tag on medical care. In the absence of a cohesive national strategy but with increased spending (Sharkey, Larsen, & Mildon, 2003), this has mandated and enabled much local innovation, as home care providers try to keep pace with the demands of an increasingly diverse patient population whose needs often conflict with the goals and practices of health-care settings and systems. Many approaches to home care now co-exist, but their philosophical and practical differences make it difficult to systematically evaluate whether overall care has improved — which models are working for which patients — or whether costs are reduced. Indeed, there is no broad agreement on what home care is or what it has become, much less what outcomes we ought to be studying. From the perspective of both planning and practice, home care is less a coherent category of care than a demarcation of the site of care: “Home” is the “other place” relative to contemporary institutional care.

The thrust of home care is to offer both long-term and transitional care in the home for those individuals who are expected to get well, experience stabilization of a chronic condition, or never recover and die at home (Health Canada, 2003; Romanow, 2002). Currently, home care includes tasks performed by professional, paraprofessional, and lay caregivers, with a general expectation that the nursing component will be of limited duration; the nursing objective is to help the patient and his or her support network assume the tasks temporarily performed by the nurse. However, researchers have pointed to various assumptions in this model: that patients have good knowledge of and a positive pre-illness experience with care systems; that patients have social support networks in place and reside in stable, secure homes; and that the home is a private, apolitical space where nurses attend knowledgeably to patients' needs while meeting the demands of their often conflicting institutional, professional, and personal roles (Angus, Kontos, Dyck, McKeever, & Poland, 2005; Hollander & Chappell, 2002; Patton, 2005; Purkis, 2001).

Various longstanding and emerging nursing practices come into the ambit of home care. Some nursing practices — wound care, injections — have long been adapted to the home setting, while others — management of addiction — are new to home care. At least since the introduction of morphine, mitigation (or what is known in the professional idiom as palliation) of symptoms for those dying at home was the province of nurses working in private homes. With the rise of specialized care in hospitals, palliation — sometimes critiqued as the medicalization of dying — moved to the institutional setting, though under different names (von Gunten, Ferris, Portenoy, & Glajchen, 2001). The hospice movement, partly a reaction to the dehumanizing effects of technologically driven care practices, highlights the value of non-technological interventions that, as a result of the attention paid to the physical, psychological, social, and spiritual aspects of suffering, have enabled a process of dying with dignity both in institutional settings and elsewhere (Lagman, Declan, Heintz, LeGrant, & Davis, 2008). This has led to, among other things, the development of group housing located in community settings. But the availability of hospice care still varies according to the community and the population group (Subcommittee to Update “Of Life and Death,” 2000, Introduction). The growing hospice movement, combined with the move towards increased use of home care, has revitalized the idea of palliative care in the home context.

The field work analyzed in this article describes a style of home care nursing that has evolved in an environment — an impoverished urban neighbourhood — and among a group of clients — multiple-diagnosis patients, including many HIV+ and Hepatitis C+ individuals residing in

marginal housing — that shatter all of these assumptions and raise new questions about “home” and “care.” For example, a person with a heroin addiction and late-stage HIV disease will have injection-site infections or wounds because of a decimated immune system. Is this person a palliative care patient, an addictions patient, or an HIV patient? This determination becomes harder yet when we consider multi-label or multi-diagnosis patients and the growing public health concern of these and other outpatients spreading communicable diseases (HIV, hepatitis C virus [HCV]) and highly infectious diseases (tuberculosis). The latter concern incrementally affects the practice of home care nurses, who, traditionally distinct from public health nurses, must increasingly monitor medications not only for their patients’ benefit (“maximally assisted therapy”) but also to meet public health goals (“directly observed therapy”). With the rapid, largely unplanned increase in home care nursing, nurses not only have more tasks added to their practice in settings like Vancouver’s Downtown Eastside but also have to negotiate fundamentally different rationales for providing care.

Our research shows that the hybrid model of care described by the nurse/research participants in this study as “action-based care” (Giles & Brennan, 2006) often conflicts with the very institutional pressures and philosophies that militated for expanded home care in the first place. Nurses are aware of these tensions. However, they tend to dwell instead on their reliance on one another: “We knew that regardless of the response of the larger structure, we agreed on what we were experiencing, what was working and what wasn’t” (Giles & Brennan, 2006). The nurses’ agreement, however, does not mean that action-based care encompasses a set of fixed, explicit rules. Rather, in their writing, the nurses describe general principles, including working in pairs and building trust with patients by accepting values specific to the Downtown Eastside, such as the importance of getting something in order to give something: “Regardless of what we think of this attitude [in which everything in this neighbourhood has a value and is negotiable], we can make it work for us.... Simple, small incentives can go a long way... They work with you more, don’t resist with the same obvious hostility. In short they start to trust you. And you start to trust yourself.” (Giles & Brennan, 2006)

In this article we explore the gap between government mandates, professional ideas, and nursing practices in the Downtown Eastside. This area has a population of 16,000 (City of Vancouver, 2001), of whom 5,000 are estimated to be injection-drug users (Buxton, 2003). Many of these people have several medical diagnoses, including HCV, mental illness, addictions, cancer, and diabetes, not to mention the prevalence of

HIV. The associated mortality rates are among the highest in the developed world (CHASE Project Team, 2005; Patrick et al., 1997; Wood et al., 2003). Ethnography, in the context of allied research projects analyzing demography, disease prevalence, and social networks, enables us to raise questions both about the limitations of current home care initiatives and about the development and implementation of HIV/AIDS programs and services in neighbourhoods with high numbers of marginalized people living in substandard housing.

**Background: The Shift towards Home Care
in the Face of Rising Homelessness and HIV**

There has been limited research into the effects of shifting models of care on the home care nurses who have long practised in impoverished neighbourhoods — particularly in the context of increased homelessness in Canada. A recent review of studies on the transfer of acute medical and nursing treatment to the home setting reveals that most studies of home care nursing involve uncritical reporting of how such “hospital in the home” programs benefit the system and increase opportunities for specialization and autonomy in the nursing profession (Duke & Street, 2003). Because of the link between poverty and HIV and between HIV and palliative care, one of the most fruitful areas for assessing the hospital-to-home movement is home care for marginally housed people with HIV. Several studies have analyzed aspects of the most commonly used palliative care model and highlight the perseverance and resourcefulness that home care nurses must possess in order to interact with a variety of health professionals, AIDS services, and social welfare and volunteer organizations, as well as their own health authorities and managers (Bryant, Wancho, & Daigle, 1999; Robinson et al., 2006). These studies are extremely useful for understanding the issues faced by middle-class gay men who are stigmatized by their sexuality and suffer financial loss as a result of their HIV. But while these men often experience downward mobility, they are spared the cycle of homelessness, interrelated with poverty, experienced by the residents of the Downtown Eastside. While middle-class gay men are — or can become — part of a social network supportive of their sexuality and integrated with services, the residents of the physically decaying neighbourhood in question are economically marginalized and enmeshed in the social world of sex trade, drug use and sales, and petty crime. Data from our allied quantitative study and from our interviews with residents reveal that, in spite of rich social networks, these individuals have a tenuous connection with formal services because of stigma associated with drug use, participation in the sex trade, alco-

holism, racism, sexism, misunderstanding of mental illness, and other factors.

As a municipal service, home care for marginally housed people with HIV might offer a mechanism for providing the continuous and comprehensive care that is necessary for adequate HIV management. Our study asked how palliative care modalities have adapted to the conditions of substandard housing, and how this might enable those who have lost the battle against HIV to die with dignity.

Method

In this article, we analyze data from the ethnographic component of a large, multiyear study of care provision in the Downtown Eastside, called the Homecare for Homeless People with HIV (HCHP) study. The main goal of the study was to evaluate the modalities of home health care provided to homeless and marginally housed persons with HIV/AIDS, with a focus on social relations among homeless persons, in order to make policy recommendations to health planners about improving the quality and continuity of care. The study entailed historical analysis of the various services offered in the neighbourhood, with attention to changes in housing regulations, demographic shifts, and ideological shifts with regard to social welfare, as these factors influence the creation of services by government, church, and advocacy groups. In addition, the team conducted semi-structured, open-ended interviews with residents of the Downtown Eastside, exploring the issues of housing stability, access to food, perceptions of health and illness, health and social service use, relationships, and emotional attachment to the neighbourhood. In addition, one of the co-investigators took part in the cross-sectional Community Health and Safety Evaluation (CHASE) project, a community-based survey of the neighbourhood conducted by residents, and we use data from that survey ($N = 3,530$) in our analysis.

The HCHP principal investigator (Patton) was the team ethnographer, and this article reports on her work following various home care nurses on their rounds during a 15-month period totalling 150 hours over 18 days — all weekdays from 8:00 a.m. to 4:30 p.m. On about one third of those days the supervising physician also made rounds. Field notes were composed between client visits, which could last anywhere from 5 minutes to several hours, depending on what tasks were entailed in the visit. The tasks ranged from wound care to assistance with administration of medication, to reminders of appointments, to assistance with moving the patient to a hospice. The nurses' rounds included visiting two shelters, each of which had both long-term and short-stay clients. All notes were transcribed and elaborated soon after being recorded.

They were analyzed for common and improvisational practices, evidence of policy or practice mandates, and patient acceptance or rejection of the care on offer.

Setting

In 1997 the Vancouver/Richmond Health Board declared a health emergency due to the prevalence of HIV/AIDS among drug users living in the Downtown Eastside. This declaration underlay the introduction of a range of new services alongside the wide variety of support services that had been developed for the neighbourhood over many decades (Patrick et al., 1997; Wood et al., 2003). The latest exceptional services, aimed at HIV, HVC, and addiction, included North America's first legal safe-injection site, a heroin maintenance trial, four new health facilities to increase awareness of health issues, and two new health clinics. In addition, several programs and augmented home care nursing services enable a range of modalities, including the aforementioned directly observed treatment (DOT) and maximally assisted treatment (MAT) for indigent HIV+ persons on simplified antiretroviral (ARV) programs. These semi-linked strategies include two programs that hold patients' medications in a fixed location and the addition of ARV home delivery to HIV+ patients (Wood et al., 2003) by home care nurses already working in the neighbourhood.

Navigating Trust, Domesticating the Clinic

The situation of the nurses observed in this study is different from that conventionally envisaged for home care. Many of the spaces occupied by patients in this setting would, to an outsider, barely register as home. Nurses employ a variety of strategies to acknowledge and respect the boundaries of the private spaces constructed by the marginally housed. Such private spaces can range from a room in a hotel to a bag of belongings next to a daybed in a shelter. By using simple gestures of civility, such as knocking and waiting to be admitted, kneeling on the floor instead of sitting on furniture (unless invited to do so), and being attentive to the daily differences in whether one is welcome at all, the nurses "co-construct" a sense of home with patients. Nurses typically see 10 to 14 patients during an 8-hour shift, and their patients are highly sensitive to the smallest gesture that might indicate a negative value judgement or lack of interest. Given these time constraints and social conditions, and in the absence of an explicit code of practice to govern their trust-building activities, the nurses have developed a "feel for the game" that permits them to build and sustain fragile relationships. When our lead ethnographer first observed the nurses, all of their gestures, postures, and ways of

asking some questions (“How are you tolerating your HIV medications?”) while avoiding others (“Who are these people living in your room?”) indicated a deliberate, orchestrated approach to care delivery. But over time — and especially when the ethnographer observed nurses who were new to this clientele making mistakes, emulating more experienced nurses, and attempting to develop strategies of their own — it became clear that the range of gestures, vocal tones, and phrasings were part of a non-verbal care vocabulary from which the experienced nurses drew improvisationally; they were able to instantaneously size up a situation and find a viable means of providing care. The embodied nature of their knowledge, and their enactment and expression of a unique home care nursing practice, extended their education to include not only what they had learned in school but also what they had learned by experience.

Instead of comprising a rational interaction, in which patients and nurses directly modify each other’s behaviour, this approach reflects what the French philosopher and sociologist Pierre Bourdieu calls “habitus” — a “generative principle of regulated improvisations” (Bourdieu, 1977, p. 78). Habitus can help us to analyze how the nurses’ practice retains its nursing roots while evolving in the Downtown Eastside context to become embodied knowledge enacted daily.

From this perspective, the motions, signals, and postures with which the nurses engage patients to establish a sense of home are a form of embodied knowledge acquired through the processes of professional and institutional acculturation and years of adapting their practice, or having it adapted, to the changing worlds of their patients. Such a conception of knowledge, activated and expressed in the language of the body in real time and space, accounts for the context-driven, situation-specific nature of the nurses’ practice, while at the same time recognizing their expertise as practitioners. This explains the nurses’ refusal to reduce their action-based model of care to a list of rules and their decision to share their general impression of what it takes to inhabit the space they do (Giles & Brennan, 2006). For Bourdieu (1977), it is not so much the set of gestures that endures, is added to, or subtracted from over time, but the internalization of a practical logic or generative schemes for putting them together in the right place at the right time (pp. 78–83).

The emphasis on the embodied, temporal, and spatial dimensions suggested by the notion of habitus highlights the continuities as well as the contradictions inherent in practices that are manifested in the nurses’ minute-by-minute judgement calls, which can serve to both operationalize and put them at odds with the central ethos of their own action-based care approach of being consistent, reliable, non-judgemental, respectful, collaborative, and supportive (Giles & Brennan, 2006). These contradictions (a source of tension between the experienced nurses and

nurses working with other patient groups) are evident in, for example, the nurses' practice of using cigarettes and bus tickets to initiate and sustain their relationships with patients. It is impossible to know whether the nurses had extended an existing practice of offering enticements or had been prompted by patients to modify their practice. In any case, our lead ethnographer observed multiple daily encounters in which residents signalled their role of patient by asking the nurses for a cigarette or for bus fare. At first this seemed to be a form of anonymous and guilt-inducing panhandling, but over time the ethnographer realized that most people in the neighbourhood knew the nurses' approximate schedules and actually came looking for these small tokens. Occasionally the nurses turned down these requests, but more often than not they took the opportunity to engage the individual by giving the small token high symbolic value. The exchange served as a reminder that even if the person was not currently on the nurses' roster he or she was still their patient. This is comparable to a middle-class person's sense that *even if I haven't been to my doctor this year, she is still my doctor, and even though I remain well, I am her patient*. In some cases — especially with highly independent patients — it was the nurse who initiated the exchange, as if to remind poor persons that even if they were no longer technically under care, or possibly even refusing care, as “patients” they still belonged to the nurses.

The following field notes illustrate the symbolic value of a free cigarette and demonstrate the nurses' improvisational use of a transaction to slip almost imperceptibly into the formal role of nurse:

Jane (pseudonym) is living in a temporary shelter, but the nurses have known her for many years through the variety of her settings. When she first re-emerged at the shelter, she was primarily getting meals and sometimes did not return to her bed at night. The unit managers, concerned about her well-being as winter approached, but also about her “taking up a bed someone else could use,” asked the nurses to see her. When they called Jane in, she gave a cursory account of her current situation, and as she left, one of the nurses asked if she wanted a cigarette. For a period of several weeks, she returned to the drop-in clinic with various complaints (since attending the clinic implies a complaint), but mainly to talk about her relationship with her current partner and to receive her token cigarette. Jane was not around for a period of time until one day she was rushing out as the nurses came in. She stopped and got into the queue to see the nurses, and finally said in a whispered tone, “Can I get a cigarette?” I thought the nurses, who were especially busy that day, would give her the cigarette and let her go on her way. But instead, one nurse, renowned for her toenail and fingernail trimming abilities, started a conversation about Jane's new haircut and clothes. As they chatted, Jane picked at one nail, infested with a fungus, and the

nurse asked if she could take a look at the finger. Jane said, “That one’s so ugly — there’s a fungus.” The nurse asked if Jane would like her to trim the nail, and in the course of the “manicure” Jane revealed many more details about her situation and declining health. In this instance, the nurse transformed the cramped first-aid room that serves as the shelter’s clinic into a home-like domestic space of female bonding and caring.

In this interaction the nurse builds from the simple act of offering a cigarette and asking nothing in return to enacting other forms of caring that incrementally bring the patient from a state of apparent disregard for her personal welfare to caring about her appearance. Some weeks later this patient sought more permanent housing and resolved (from her perspective) her relationship with her partner, and eventually she returned to treatment for her multiple medical problems, including HIV.

Negotiating Privacy

Let us examine another situation in which the nurses must negotiate trust and privacy — the cramped confines of a social housing unit. Unlike the suburban home, which presumes a degree of privacy and security from policing forces, the spaces of marginally housed people, where the nurses carry out their practice, are under surveillance. In fact it is not uncommon for patients to go outside their room to receive treatment or medication drop-offs, or simply to meet the nurse. This practice is likely related to their experience of being harassed by police, having to cope with the variable rules concerning visitors, and having their rooms scrutinized by housing personnel, who demand that tenants maintain varying levels of cleanliness and orderliness. Patients may have drugs and drug paraphernalia lying about or may even be actively dealing drugs from their room. Patients who are in the sex trade may have a customer in their room or may simply have evidence of their trade there. Patients living in social housing may be violating regulations by keeping a live-in partner, and patients in single-room-occupancy dwellings may be violating rules that require a nightly fee for “guests.” It is not unusual for residents of these relatively luxurious social housing units to make informal rental arrangements with relatives or acquaintances. The nurses have to carefully negotiate their arrival with these people, since from the point of view of the “couch renters” their quasi-contractual relationship with the tenant entitles them to at least partially control the space. The nurses must make quick judgement calls in the face of a changing cast of characters if they are to maintain the trust of patients who have little reason to put their faith in the “system” or its representatives. One of the ways in which nurses maintain this trust is by cultivating a reputation for not disclosing patients’ activities to police, building managers, or others regarded by patients as monitoring them.

The field notes record a number of visits to an older white woman living in one of the nicer social housing complexes:

Each time we visited, there was a different young, white woman sitting politely at the kitchen table, whom I initially assumed to be daughters or relatives. On a later occasion, there was a young Native woman at the same table, sitting equally quietly and politely. This time, our earlier automatic assumptions — based on age and race — were challenged, and I looked more closely at the neatly ordered table. I realized that the table was a tidy display of various tools for consuming drugs — pipes and cooking devices, but no visible syringes. I still couldn't quite understand what I was seeing and asked the nurses who the young woman was. They looked at each other and one said, "We really don't know. I guess we assume she is a customer."

The nurses more or less unconsciously took on this kind of nonchalance in the face of the complicated and questionable activities they witnessed. In fact, we suggest that because of their enmeshment in the particular home care habitus of the Downtown Eastside they no longer saw things the way others might. In the case above, it was not that the nurses consciously ignored the drug-dealing activities of their patient, or that the patient intentionally left the evidence in plain view (no doubt she had put the actual drugs away); rather, these tools of criminal activity were accepted as everyday items that did not merit attention. In order to preserve the patient-nurse relationship, a line had been established regarding what had to be left unsaid. This "unnoticed noticing" was very difficult for new nurses and for outsiders such as ethnographic researchers. We would often stare at drug paraphernalia and, when caught by the patient, quickly look away.

Palliative Care and HIV Miracle Drugs

Palliative care was one of the important care philosophies underlying the nurses' practice. In the early days of our field work, one of the nurses spoke of her experience in the field of palliative care and her interpretation of her current practice as a form of palliative care. Indeed, we learned that one of the official criteria for adding an HIV patient to her caseload was the declaration of the case as palliative. The historical changes in the survival rates post-HIV diagnosis confound the official understanding of which patients are classified as palliative, and when. In the late 1980s middle-class persons with AIDS (or PWAs) began to reap the benefits of anti-HIV drugs with the introduction of protease inhibitors and other innovations in anti-HIV drugs. In the 1990s this particular group of PWAs began a dramatic decline in morbidity and mortality. The picture has been quite different for disadvantaged persons, whether they live in developing countries or in decaying neighbour-

hoods in the developed world. Because of their disconnection from primary health services, and because they are often diagnosed with advanced disease, when the home care nurses began caring for the emerging group of Downtown Eastside residents with AIDS there was still a strong perception that PWAs in the neighbourhood would not survive and therefore that virtually any PWA there would sooner or later be “palliative.” Based on the horrific experience in that decade of having many patients “die with their boots on,” as they put it in their educational presentations, the nurses devoted tremendous energy to making it possible for PWAs to die with some degree of dignity, including access to structured pain management (as opposed to self-medicating with illicit drugs).

But the easy equation between later-stage PWAs and palliative care changed in the late 1990s as the new, lifesaving ARVs became available to this group. In British Columbia ARVs are fully covered under the provincial health plan, so the barrier to access is not financial. Also, Vancouver’s health authorities and practitioners have grounded their decisions about who is placed on ARVs explicitly on a human rights approach (BC Ministry of Health, 2006). In addition, Vancouver places no restrictions on access to ARVs (Wood et al., 2003), while other jurisdictions in the developed world require abstinence from illegal drugs (Oppenheimer, Hernandez Aceijas, & Stimson, 2003; Wolfe & Malinowska-Sempruch, 2004), evidence of stable housing, or even enrolment in group therapy or programs aimed at transforming chaotic lives into “normal” ones. Today, therefore, extremely sick individuals are sometimes restored to quite normal health, and in many cases it is hard to know if HIV medication will amount to palliation or cure. On the other hand, a patient who has been doing very well on medications may become involved in street life and stop medicating, taking a rapid downward turn. The nurses had several patients who had gone through this cycle many times, with each downward trend signalling imminent death and each upward trend enabling the patient to resume a fairly normal life.

In their ethical commitment to providing universal access to ARVs, the nurses have been influenced by AIDS doctors at the BC Center for Excellence in HIV and Clinical Trials Network, a group known around the world. Yet the nurses are the caregivers who cope with the practical results of the doctors’ human rights, drugs-for-all approach: Once they feel better, many patients — possibly most — choose to return to the life that placed them in harm’s way in the first place. The challenges presented by this situation are quite different from those encountered in mainstream palliative care. In the face of considerable political controversy, the nurses have had to develop a form of practice that saves the lives of people whom many citizens would just as soon forget. Within the

Bourdieusian framework, such adaptations and innovations are not rules of practice but, rather, logics for generating practice. Thus the nurses have developed a rationale that, even if never formally codified, implicitly provides a basis for maintaining continuity across an individual's course of treatment and a consistent approach across the population group. This logic emerges from practice, is oriented to the situations encountered in daily life, and is often antithetical to the principles of rational logic that the treatment algorithms, much loved in clinical practice, attempt to codify. "The logic of practice is logical up to the point where to be logical would cease being practical" (Bourdieu & Wacquant, 1992, pp. 22–23).

These concepts, when applied to nurses' search for practical, logical solutions to competing care mandates, show how such solutions transform both palliative care and addiction treatment. The concept of harm reduction is hotly debated among care providers in this community. In harm reduction, the objective of care is shifted away from abstinence towards mitigation of the social and physical harms of substance use. Those providing HIV care employ this framework while at the same time treating the infectious disease that has resulted from harmful practices associated with drug use (the harm is threefold: the needle-sharing that results in infection, the challenge to the suppressed immune system posed by the drugs, and the drug-induced behaviours that affect self-care — including adherence to treatment). Because harm reduction is not accepted by all service providers in the Downtown Eastside, the nurses' practices continually meet with conflict. For example, there have been several cases of methadone-maintained patients doing well on HIV drugs but becoming too feeble to leave their room to fetch their medications and methadone. When the nurses attempt to deliver these drugs to recovering addicts managed by a 12-step group (whose goal is abstinence), they can be prevented for days from entering the building, the managers arguing that home delivery "enables" the patients' "addiction" to methadone.

Medical personnel who are unfamiliar with the complexities of life in places like the Downtown Eastside have difficulty comprehending the cycles of good health, when people often resume their street lives trading in drugs and sex with a vengeance, and poor health, when they are extremely and seemingly irreversibly ill. To conventional practitioners and many lay people, palliative care is inappropriate for these patients when they are well, even though they are diagnosed with debilitating and fatal illnesses. A comment by a nurse taking extra shifts in the unit expresses this perspective very well: "If she's out at night turning tricks for the \$400 to buy drugs, then she's not palliative." Most providers find it hard to accept the harm reduction strategy invoked to justify this use of pallia-

tive care, which allows patients to consume their street drugs. This stems from the moral assumption that activities like smoking crack or trading sex for money are of a totally different character from smoking cigarettes, drinking alcohol, or eating badly — behaviour that would be overlooked in conventional palliative care patients.

While the changing care demands related to improved life expectancy for impoverished people with HIV — an outcome of new treatment modalities — are not unique to AIDS, the stigma attached to people with HIV and the activities they likely engaged in while contracting it shift the moral calculus of improving quality of life. It is not entirely clear that Canadian society wants to save the lives of marginalized people, especially if those saved are unable or unwilling to pursue a middle-class lifestyle. In the Downtown Eastside, success means medical success; people who are doing well on their ARVs and who have undetectable viral loads require ongoing, frequent interaction with nurses if they are to maintain their new level of health. It appears that the universal-access philosophy based on human rights will continue to hold sway despite counterbalancing attempts at cost containment that might limit care to those who show promise for leading a “productive life” according to middle-class standards (e.g., by making liver transplantation inaccessible to people with HIV). But the costing and evaluation systems for home care that determine when a patient has had a sufficient number of visits to make it on his or her own do not take into account the special goals imposed on home care nursing practice by the philosophical commitment of universal access to HIV medications.

Discussion: Competing Care Philosophies, Impossible Practice

In conversations with the nurses, we discussed at great length the complexity of their jobs, and they have written in nursing journals about their understanding of their practice (see, e.g., Giles & Brennan, 2001; Griffiths, 1996). From their point of view, it is their patients’ “multi-diagnoses” that make the job difficult. They believe that each patient should be treated more holistically, not as a person with an “addiction” or with HIV, but as a person for whom several social and medical labels function synergistically, calling for different treatment approaches and rendering each individual “problem” more complex.

On the one hand, the ways in which individual patients deviate from the norms of nursing’s various subdisciplines make them difficult to treat. On the other hand, the nurses’ job is guided by structural forces. As frontline workers, nurses have little opportunity to consult on the policies and mandates that will ultimately make their jobs easier or more difficult. The nurses who work with HIV patients in the Downtown Eastside

serve conflicting masters — even more so than their home care colleagues in falls prevention, wound care, or diabetes management. They are upholding a long tradition of out-of-hospital nursing, providing care to people who have no other means of improving their lives. At the same time, they work under the authority of doctors who themselves serve different masters when it comes to making decisions about who is placed on ARVs: Doctors too must negotiate the practical consequences of prescribing treatment for conflicting reasons. The doctors' reasons are both noble and political in the context of obtaining resources for people with HIV; there is no doubt that they care about their patients, but they are also invested in proving that their city can deliver world-class care. While many of Vancouver's doctors "do time" in the downtown clinics, few make house calls. It is primarily nurses who are bringing health care to the most intimate spaces and moments. The complexity of providing continuous care in conditions often described as chaotic is only intensified as individual physicians and the public health system make policy decisions about treatment out of concern about compliance with drug regimens and its consequences for population health. It is the frontline nurses who, in generating a home care habitus, have developed and adapted flexible and innovative solutions for people with a range of diagnoses and a range of treatment options, many of which stem from fundamentally conflicting care mandates and models.

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