Knowledge translation in the field of violence against women and children: An assessment of the state of knowledge

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A B S T R A C T

There is a significant discrepancy between the production of the most recent research findings and the utilization of the findings by practitioners. The scientific research on knowledge translation appears to offer a promising way to close this gap. However, it is still a young and undeveloped field, particularly with regard to violence against women and children, for which there is no overview of the studies that have been done. Without such a knowledge base, it is hard to support researchers and caseworkers in the knowledge translation process, and ultimately, enhance the physical and emotional safety and well-being of abused women and children. The aim of this review of the literature was therefore to take stock of the main areas of research on knowledge translation as they apply to the issue of violence against women and children. The review found 22 studies that met the criteria for inclusion. It highlights a number of barriers to knowledge translation in the field of violence as well as the lack of diversity in the knowledge translation strategies studied. Lastly, the review underscores the urgency of the need to document research initiatives in existing research–practice partnerships as a means of expanding scientific knowledge about knowledge translation in the field of violence.

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1. Introduction

The many physical and psychological consequences of violence against women (Carlson, McNutt, & Choi, 2003; Golding, 1999; Rinfré-Raynor, Riou, Cantin, Drouin, & Dubé, 2004) and children (Higgins & McCabe, 2000; Manly, Kim, Rogosch, & Cicchetti, 2001) have been widely documented in the scientific literature. In light of this knowledge, it is incumbent upon us to see that effective initiatives are taken to attenuate the consequences of the violence and ensure the physical and emotional safety of abused women and children. It is well recognized that the use of the most recent research findings, especially evidence-based findings, is a determinant of the effectiveness of interventions (Dagenais, 2006; Davies, Nutley, & Walter, 2005). Yet a major discrepancy is evident between the knowledge produced and its use by practitioners (Davies, 2006; Graham et al., 2006), a phenomenon that seems to be worldwide (Dobins, Ciiska, Cockerill, Barnsley, & DiCenso, 2002; Saull et al., 2008). Exploring the process of knowledge translation would appear to be a promising way to close the gap.

The objective of this study was to review the literature on the translation and utilization of knowledge on violence against women and children. More specifically, the review involved describing and synthesizing the studies on this issue and conducting a critical analysis of them. As an initial step in this review, the main areas of research relating to the process of knowledge translation in the general literature are presented.

2. Background

There is no consensus about terminology among knowledge transfer researchers, with a number of terms being used to designate the same concept, and the same term often designating a number of different concepts (Graham et al., 2006; Grimshaw, 2008). For example, an international study of 33 health research funding agencies identified 29 terms used by the agencies to designate the concept of “knowledge transfer and utilization” (Tetroe et al., 2008). In Canada, the Social Sciences and Humanities Research Council of Canada (SSHRC) uses the term knowledge mobilization and defines it as “moving knowledge into active service for the broadest possible common good” (see http://whatiskt.wikispaces.com/Knowledge+Mobilization, accessed August 27, 2009). At the Canadian Institutes of Health Research (CIHR), the term knowledge translation is used to refer to “a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge—[occurring] within a
complex system of interactions among researchers and users\(^1\)—to improve the health of Canadians, provide more effective health services and products and strengthen the health care system\(^2\) (see http://www.cihr-cihr.gc.ca/e/26574.html, accessed July 17, 2009). Of the numerous terms proposed, the one that seems to be gaining popularity in Canada is knowledge translation (Graham et al., 2006). Moreover, knowledge translation as defined by the CIHR was adopted and adapted by the World Health Organization in 2005 (Sudsawad, 2007) and by the U.S. National Center for the Dissemination of Disability Research (Graham et al., 2006). We therefore decided to use the term knowledge translation (KT) in this study, especially since the CIHR definition applies quite well to the field of family violence.

Among the many theoretical models of KT described in the literature, four in particular are widely cited in social science (Estabrooks, Thompson, Lovely, & Hofmeyer, 2006; Landry, Amara, & Lamari, 2001). According to the science push model, it is the characteristics of the knowledge produced by researchers that influence its use by practitioners or decision makers (for instance, content-related characteristics—complexity, validity, reliability, etc., or characteristics related to the type of research—basic/applied, quantitative/qualitative, etc.). This one-way model (from research to practice) emphasizes the product of knowledge rather than the users’ context (Neville & Warren, 1986). The demand pull model, on the other hand, assumes that knowledge utilization will increase if users, rather than researchers, formulate research questions to meet specific needs. If the findings do not match user expectations or desires, they will not be used much (Landry et al., 2001). The dissemination model maintains that knowledge transfer is not automatic, or in other words, that just because knowledge is available does not mean it will be used. Consequently, right from the knowledge-production stage, researchers should provide for means of disseminating research findings that can be adapted to suit the characteristics and needs of their target audience. While this perspective does seem to compensate for certain limitations of the science push model, users are still not involved in either the production or dissemination of knowledge (Landry et al., 2001). Last, the interaction model postulates that it is cooperation between researchers and users and incorporation of users’ tacit knowledge and researchers’ empirical knowledge at all stages of the KT process (knowledge production, adaptation, dissemination, receipt, adoption, and utilization) that encourage users to apply the knowledge in their actions or decisions. In other words, knowledge utilization depends on the intensity and regularity of interactions between researchers and users (Landry et al., 2001). The latter model has the advantage of incorporating “all the dimensions of the preceding theoretical models, since it simultaneously considers the researchers’ system, the users’ system and all intermediation channels that can bring the two systems closer together” (Landry et al., 2008, p. 17).

It is generally recognized that the complexity of the KT process may best be represented by a combination of several theoretical models, rather than any single one (Belkhodja, Amara, Landry, & Ouimet, 2007; Estabrooks et al., 2006; Sudsawad, 2007). Indeed, a number of other theoretical perspectives noted in the literature (Estabrooks et al., 2006; Proctor et al., 2009; Sudsawad, 2007) have the potential to guide KT initiatives. As a result, the preferred models are those that best fit the expertise, beliefs, and needs of the groups involved (Estabrooks et al., 2006).

Empirical studies have measured the determinants of knowledge utilization (barriers and facilitators) as highlighted by the four theoretical models, that is, the determinants related to the knowledge produced and to the researchers’ context (science push model), to users’ needs and to organizational characteristics (demand pull model), to efforts to adapt and disseminate (dissemination model) and to interactions between researchers and users (interaction model) (Cabana et al., 1999; Hemsley-Brown & Sharp, 2003; Légaré et al., 2006; Milner, Estabrooks, & Myrick, 2006; Mitton, Adair, McKenzie, Patten, & Perry, 2007). A Canadian survey of over 1200 academic social science researchers on the determinants of knowledge utilization indicated that “the most important determinants of utilization are the mechanisms linking the researchers to the users, the dissemination efforts, the adaptation of research outputs undertaken by the researchers, the users’ context and the publication assets of the researchers” (Landry et al., 2001, p. 333). The authors were surprised to find that the characteristics of the knowledge produced had little influence on its utilization. Like that of Landry et al. (2001), other studies also highlight the influence of interaction-model determinants on the utilization of research findings (Galano & Schellenbach, 2007; Huberman, 1994; Reardon, Lavis, & Gibson, 2006).

A variety of strategies have been examined to assess effectiveness in reducing the gap between knowledge produced and its utilization by practitioners. The Canadian Institutes of Health Research (CIHR) have categorized the strategies based on whether they have to do with educational interventions (e.g., interactivity in lectures, continuing professional development), linkage and exchange interventions (e.g., opinion leaders, knowledge brokers, communities of practice), feedback interventions (e.g., chart audit, feedback, needs assessment), electronic interventions (e.g., reminders, clinical decision support systems), patient-mediated interventions (e.g., generic health-promotion educational activities such as media campaigns or more directed interventions) or organizational interventions (e.g., quality improvement, clinical practice guidelines). It is now known, largely thanks to the medical literature (Dobbins et al., 2002; Sudsawad, 2007), that the simple passive dissemination of knowledge (for instance, by issuing clinical practice guidelines or giving a lecture) is not sufficient to ensure its application by practitioners and that emphasis must be placed on strategies that involve some sort of interaction (Grimshaw et al., 2001; Lavis, Robertson, Woodside, McLeod, & Abelson, 2003). Furthermore, the use of a number of strategies, rather than just one, also seems to be more effective (Gira, Kessler, & Poertner, 2004; Grimshaw et al., 2001). Nonetheless, it is not clear, at the present time, which strategies should be preferred in any given context (Grimshaw, 2008; Grimshaw, Eccles, & Tetroe, 2004; Lavis et al., 2003). As a guideline, Graham et al. (2006) suggest choosing strategies on the basis of identified obstacles for the intended audience. For instance, “When the barriers are related more to the organization of service delivery, introducing reminder systems, modifying the documentation system, changing staffing levels, purchasing equipment, or altering the remuneration process may be useful strategies” (p. 21).

The utilization of knowledge has been the subject of many articles (Barwick et al., 2005, 2008; Landry et al., 2008). The literature focuses on three types of knowledge utilization in particular. Conceptual utilization seeks to provide food for thought on an issue (Landry et al., 2008) and implies changes in knowledge, understanding, or attitudes (Straus, Tetroe, Graham, Zwarenstein, & Bhattacharyya, 2009). When knowledge is utilized to solve concrete problems or aid in decision making (Landry et al., 2008), the process is called instrumental utilization, and changes in behavior or practice can be seen (Graham et al., 2006). Strategic utilization seeks to legitimate decision making to achieve political or strategic goals (Landry et al., 2008; Straus et al., 2009). At an empirical level, “measuring and attributing knowledge use is still in its infancy in health research” (Straus et al., 2009, p. 152). Documented measures primarily concern instrumental utilization (Landry et al., 2001). Yet, as Davies et al. (2005), point out, “Research can contribute not just to decisional choices, but also to the formation of values, the creation of new understandings and possibilities” (p. 13).

In short, the complex and iterative nature of the KT process that leads from the production of research findings to the utilization of

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\(^1\) Here, the term “users” refers to decision makers, policy makers, managers, practitioners, etc.

\(^2\) See the CIHR web site for a list and definitions of various knowledge transfer and utilization strategies: http://knowledgetranslation.ca/ktclearinghouse. Other strategy typologies have been proposed; see for instance, Walter, Nutley, and Davies (2003).
knowledge to improve interventions is fraught with many challenges (Eccles, Grimshaw, Walker, Johnston, & Pitts, 2005; Graham et al., 2006). The research on KT, while highly promising, is still in its infancy (Landry et al., 2001; Mitton et al., 2007). The body of knowledge on this topic has been developed mainly in disciplines such as medicine, nursing, education, and management (Thompson, Estabrooks, & Degner, 2006). While this body of work does indeed contribute to a general understanding of the KT process, is it conceivable that it could be applied to the issue of violence against women and children as it is studied in the social sciences? What is known about the main fields of research related to the study of the KT process specifically with regard to family violence and violence against women? It is currently impossible to answer that question because there has so far been no scientific review of studies specifically on KT in the sphere of violence against women and children. Without such a knowledge base, it is hard to support researchers and caseworkers in the knowledge translation process, and ultimately, enhance the physical and emotional safety and well-being of abused women and children. Our study seeks to contribute to this area.

3. Method

This review of the literature is based on the systematic review method, which assumes: (1) the formulation of research questions, (2) the development of criteria for inclusion and exclusion, (3) an exhaustive bibliographic search, (4) the selection of studies based on objective criteria, (5) an assessment of the quality of the studies, and (6) a synthesis and interpretation of study results following an explicit, predetermined method (Landry et al., 2008; Pai et al., 2004). The review deals with the following research questions, applied specifically to the issue of violence against women and children: (1) What are the theoretical models or conceptual frameworks guiding the KT process? (2) What are the determinants (barriers and facilitators) of KT? (3) What KT strategies are used and how effective are they in closing the gap between the production of knowledge and its utilization by practitioners? (4) What types of knowledge utilization are being studied? With regard to the inclusion criteria, the studies selected for review had to (a) deal with the KT process applied to the issue of violence against women and children and (b) address at least one of the four research questions. Unpublished papers were excluded, as were studies that drift away from intervention in social science (for instance, studies of a population of strictly medical practitioners—doctors, nurses) or that deal with the prevention of violence against women and children. The bibliographic search was done by the lead researcher, after consulting a librarian specializing in the humanities and social sciences. Eight databases were searched, without restriction as to time period covered: ERIC, FRANCIS, Medline, PsycINFO, Social Services Abstracts, Social Work Abstracts, Sociological Abstracts, and Women’s Studies International. Where available, the database thesaurus was consulted to identify keywords relating to KT, family violence, and violence against women. Given the considerable terminological confusion surrounding the concept of KT, a number of research terms or keywords were used (e.g., knowledge translation, knowledge mobilization, knowledge transfer, knowledge management, knowledge measurement, knowledge uptake, knowledge exchange), as well as synonyms for knowledge (e.g., evidence, information, data, innovation, research). To limit the scope to the issue of violence against women and children, these keywords were combined with the keywords domestic violence, family violence, battered women, intimate partner violence, child maltreatment, child abuse, etc. The initial bibliographic search returned 1894 papers. As required by the systematic review method, an initial sort, conducted by applying the inclusion and exclusion criteria to a reading of the titles and abstracts of the papers returned, led to the elimination of 1841 papers. The exclusion percentage on the first sort (97%) was similar to that obtained in other systematic reviews of the literature on knowledge translation applied to health care policy (98%) (Mitton et al., 2007) or education (92%) (Landry et al., 2008). A second sort involving the reading of the full text of the 53 remaining papers led to the identification of 22 studies that met the criteria for inclusion and exclusion. Two other associated researchers checked the 22 studies against the inclusion and exclusion criteria (no paper was excluded). Given the small number of studies selected (22), quality assessment was not used as a criterion for screening the studies, but a critique is provided in the Results section. In addition, four Quebec KT experts were consulted, and those most familiar with the issue of family violence and violence against women confirmed the list of studies selected. No further papers were identified at this stage. The synthesis of the selected studies is based on the classification of Mitton et al. (2007), which distinguishes between implementation studies and nonimplementation papers. The former have to do with “the implementation of specific knowledge transfer and exchange strategies—KT or evaluations of KT approaches” (p. 733), while the latter have to do with “commentaries, and surveys of relevant stakeholders pertaining to KT but not reporting on implementation of an actual KT strategy” (p. 733). Like Mitton et al. (2007) and Lavis et al. (2003), rather than conduct a quantitative analysis specific to the systematic review method, our aim was to produce a thematic synthesis.

4. Results

4.1. Description of sample

Of the 22 studies selected for review, 13 met the definition of implementation studies, while 9 matched that of nonimplementation papers. Fourteen studies (64%) were published between 2001 and 2008, and the other eight between 1982 and 1998. The population targeted by a little under two thirds of the studies reviewed (59%) were clinicians in the health and social services system (child protection workers, health care professionals, medical social workers, or public child welfare workers) and, to a lesser degree, researchers, the general public, two target populations (researchers and practitioners; researchers and community partners; researchers and policy makers) or several target populations (health care providers, law enforcement, community agencies, advocates, and patients; researchers, community partners, and funders). More than half of the studies (55%) concerned child abuse. A single study looked at the co-occurrence of violence against women and children (Gelles, 1982).

Although the objectives of the 22 studies surveyed had something to do with KT (at least based on the definition we used), the authors did not explicitly address the concept. Nevertheless, we have synthesized the findings of the studies based on the topics covered by the four KT research questions. We should point out that the nine nonimplementation papers identified (Alpert et al., 2002; Chaffin & Friedrich, 2004; Fincham, Beach, Moore, & Diener, 1994; Gelles, 1982; Harrell, 1983; Kessler, Gira, & Poertner, 2005; Nason-Clark, 2004; Parmar & Sampson, 2007; Toth, Todd Manly, & Nilsen, 2008) dealt with three of the four fields of research targeted by our review: (1) theoretical models, (2) barriers and facilitators, and (3) strategies. The objectives, method, and main findings of the 13 papers in which the KT process is studied empirically (real-world application) are set out in Table 1.

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3 Some authors prefer to exclude unpublished papers, chiefly because of the problem of quality and methodological rigor they may raise (Landry et al., 2008, p. 10) or because they lead to the bias of having access only to studies done by researchers in our own respective networks.

4 The goal of preventive studies is to lower the incidence of violence (intervention is concerned with reducing risk factors), while this review is interested in studies that seek to reduce the prevalence of violence (intervention focuses on reducing the recurrence of violence and its adverse consequences).

5 The topics are not mutually exclusive, that is, the objectives and results of some studies concern more than one topic.
## Table 1
Summary of knowledge translation implementation studies identified in literature (N = 13).

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<th>References</th>
<th>Objectives</th>
<th>Design/participants</th>
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| Baumann et al. (2006) | 1. Describe background characteristics of clinicians who have worked with physically abused children and their families; 2. Document most common intervention techniques; 3. Examine clinicians’ attitudes toward treatment manuals; 4. Understand organizational climate of community agencies. | Cross-sectional study Self-administered questionnaires (3) and focus groups (11)  
N = 77 clinicians from 9 child protective service (CPS) agencies (56%; 21♂) | • Focus group discussions about use of treatment manuals covered three areas: availability, benefits, concerns. Several clinicians said they had never received manuals or did not think that they existed at their agencies. Clinicians were almost equally likely to express positive attitudes to using manuals (23 utterances) as negative (20 utterances). |
| Berman (1996)       | 1. Explore potential of two online discussion groups (SOCWORK + ABUSE-L) as sources of information on social work. 2. Determine prevailing attitudes toward professionals regarding DV following multifaceted intervention. | Descriptive study SOCWORK: N = 168 participants (37-day observation);  
ABUSE-L: N = 64 participants (43-day observation) | • N = 194 messages (avg. 4/day); 50% of participants wrote just once and only 13% wrote 6 or more times.  
• Main type of message concerned discussion of issues (77% of participants), followed by information requests (28%) and information transfer (23%). Only 2% of participants engaged in all 3 types of communication. |
| Finnila-Tuohimaa et al. (2005) | 1. Examine whether clinicians investigating child sexual abuse (CSA) rely more on scientific knowledge or on clinical experience when making decisions; 2. Check clinicians’ pretrial beliefs about CSA. | Cross-sectional study Self-administered questionnaire  
N = 320 clinicians active in field, identified through professional organizations (126 social workers, 60 child psychiatrists, 134 psychologists) (279♀, 41♂) | • Regression analysis showed that clinicians relied more on their own experience (number of CSA cases, proportion of child cases, years of experience) than on scientific knowledge (number of books/articles read and courses attended) when making decisions (‘clinicians’ self-assessed expertise as CSA investigators).  
• Study suggests that clinicians involved in CSA investigations hold strong beliefs out of line with scientific literature (all clinicians estimated prevalence of CSA among boys as higher than research results show).  
• Training had significant impact on participants’ knowledge of investigative interviewing.  
• Training had little impact on interviewing skills during simulations.  
• Lack of correlation between knowledge and performance measures is not surprising, given that it often takes practice and feedback over time to develop new skills.  
• Only 15% of survey participants had read at least 1 of 11 journal articles listed in questionnaire.  
• Case load was frequently cited (66% of respondents) as obstacle to investing more time in professional reading. Also, 54% of workers reported inadequate agency accessibility to recent literature. Only 56% of workers said professional literature was useful to them in dealing with client problems.  
• Those with considerable training had read significantly more of 11 journal articles.  
• Study found significant changes in knowledge, attitudes, beliefs, and behaviors of health care providers regarding DV following multifaceted intervention, so it can be effective in heightening awareness, improving case management, and increasing referral rates.  
• Among all health care professional staff, reporting of victim identification within the preceding year increased from 36% to 39%. Those with prior training were more likely to have identified a victim within the year. Of those who had identified a victim, 62% reported counseling patient about alcohol or other drug use, 46% had referred patient to DV advocate or social worker.  
• Attitudes: by end of training, participants were more willing to work with clients’ addiction problems and were more confident they could make a difference.  
• Goal setting: by end of training, participants had developed 60 practice-change goals in two broad categories: changing their own assessment and intervention behavior (e.g., confronting specific client about alcohol or other drug use) and educating clients, self or coworkers (e.g., read a book on children of alcoholics). |
| Fryer et al. (1988)  | 1. Profile attributes of CPS workers; 2. Determine prevailing attitudes toward professional literature; 3. Assess access to and utilization of professional literature and consultation resources. | Pre/posttraining evaluative study and follow-up interview  
N = 12 CPS workers (8♀) |  
| Gadsomski et al. (2001) | Implement and evaluate multifaceted domestic violence (DV) program (training + clinical protocol + local public health campaign) in DV screening, management, and referral. | Pre/postprogram evaluative study Self-administered questionnaire and medical chart review with positive DV screens  
N = 709 health care professionals working in primary/emergency care in rural health network involving 3 hospitals and 19 regional sites (222 physicians, 221 nurses, 294 social workers, 109 community members) (76♀) |  
| Gregoire (1994)     | 1. Evaluate influence of training on CPS workers’ attitudes toward relationship between alcoholism/other drug addictions and child abuse and neglect; 2. Assess workers’ ability to use training content to make changes in their practice; 3. Describe common obstacles to change; 4. Identify supervisory practices to increase impact of training. | Posttraining evaluative study with follow-up  
Self-administered questionnaire and follow-up telephone survey  
N = 42 public CPS workers |  

### Table 1 (continued)

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| Harwell et al. (1998) | Evaluate a multifaceted program (training + follow-up support) designed to increase health care providers’ capacity to screen, identify, document, treat, and effectively refer women and teenage girls who are DV victims. | Pre/postprogram evaluative study with follow-up Self-administered questionnaire and medical chart review  
N = 108 health care providers from community health centers (CHCs) (46 nurses, 41 physicians, 21 social workers and psychologists (87♀, 21♂) | • Practice: complete or partial implementation occurred for 50% (30/60) of practice-change goals, 14 to 17 days after training.  
• Barriers: workers saw three main types of barriers to fully implementing goals: work-related events (e.g., lack of management support/approval), clients attributes (e.g., missed appointments), and own personal or family events (e.g., illness). Most barriers had to do with workplace.  
• Health care providers’ perceived comfort in assessing patients for DV and knowledge about DV increased significantly posttraining. Perceived comfort level then decreased at 3-month follow-up, but perceived knowledge level did not.  
• Practice change: after participants attended training and receiving follow-up support (individual sessions on case review and problem solving, perpetrator issues, and/or secondary trauma), a larger proportion of women and girls were screened for DV (25% vs. 5%), assessed for safety (17% vs. 5%), and referred outside CHC for additional services (4% vs. 0%). But a multifaceted program was not effective in increasing documentation of DV in medical charts.  
• Number of articles on health care response to IPV generally declined from 1994 (n = 114) through 2001 (n = 36).  
• 80% of articles in a coded sample of 188 articles were mostly about IPV in general, with only 28% of coded articles focusing primarily on training or screening.  
• Print coverage was minimal and received little attention. When issue was covered, there was little debate or controversy, and a broad discussion of issue was generally provided.  
• Video effectively increased short-term knowledge and changed attitudes about child, elder, sexual and domestic violence among health professionals.  
• QRT typically met bimonthly throughout a 15-month project. Members were involved in all phases of the project, from design to dissemination of findings.  
• Frequent theme of QRT discussions was what to do with findings when research was completed. When preliminary findings were available, researchers held individual meetings with executive directors and advocates from each participating agency. They were asked if there were any research findings on which they would like to act and if they would like assistance from researchers to obtain funding. Four agencies expressed interest. Within a year of release of findings, two grants were obtained for programs developed based on the findings of the research. Other examples included doing presentation, attending conference, producing video.  
• Value of enhanced and additional data: Participants suggested that better understanding of child maltreatment could be achieved through more detailed data sources in addition to CIS, particularly longitudinal data, more frequent collection cycles, inclusion of questions on maltreatment in other surveys of general Canadian population, and linking CIS data to other data sources through personal identifiers.  
• Challenges to linking research and practice: a main theme of forum was needed to improve accessibility and relevance of CIS and its findings for policy development. Overall, it is clear that information from CIS is most useful to policy makers if they are involved in ongoing processes of research design and analysis. |
| Manganello et al. (2006) | Describe frequency and nature of print news coverage of intimate partner violence (IPV) as a health issue, specifically with respect to health care provider training and screening. | Qualitative study  
News articles and editorials (N = 567) mentioning IPV and provider training or screening from newspapers from 20 states were selected for the years 1994 to 2001; content analysis of random sample of 188 articles | |
| McCasley et al. (2003) | Evaluate impact of short continuing medical education video on interpersonal violence in changing knowledge and attitudes. | Pre/posttraining evaluative study  
Self-administered questionnaire  
N = 292 health professionals (120 physicians, 172 others: nurses, social workers, lab assistants) | |
| Sullivan et al. (2005) | 1. Describe case study of participatory action research project that conducted formative qualitative research on domestic violence in 9 ethnic and sexual minority communities;  
2. Report on specific actions resulting from project. | Case study  
Qualitative research team (QRT) meeting notes, researchers’ notes, and process evaluation interviews  
Researchers and community partners from 7 agencies | |
| Tonmy et al. (2004) | 1. Solicit input of policy/program/research experts regarding utility of data from Canadian Incidence Study (CIS) in policy development;  
2. Reflect on implications for surveillance and knowledge in area of child maltreatment. | Case report study  
Day-long forum (panel + focus groups)  
N = 50 policy makers and researchers involved in child welfare representing from 13 federal departments | |
agencies, advocates, and patients. In her opinion, cooperation among health care providers, law enforcement, community agencies, and others is crucial to achieving these changes (transferring practice principles into different contexts). They suggested a more suitable means of transferring effective practices across different situations: this was the ‘practice model’ developed on the basis of an assessment of three domestic violence projects from a theory-driven (rather than methods-driven) perspective. This model focuses on mechanisms of change (transferring causal mechanisms) that explain why a woman escapes domestic violence and how this occurs. Rather than seeking to transfer “standardized activities,” this model suggests the necessary practices for advocates to achieve these changes (transferring practice principles). In the case of implementation studies, barriers such as lack of access to the recent literature, and its perceived lack of relevance are factors that appear to deter child protection workers handling cases of child abuse or neglect from making use of the literature (Fryer, Poland, Bross, & Krugman, 2004; Fincham et al., 1994; Gelles, 1982; Kessler et al., 2005; Toth et al., 2008). We have classified the barriers and facilitators according to whether they have to do with knowledge produced, adaptation and dissemination, user context (individual and organizational), or interactions between researchers and practitioners (Table 2).

Barriers seem to get more attention (n = 18), particularly those having to do with users’ organizational context. When facilitators are addressed (n = 10), it is usually in the form of recommendations. Finally, three of the studies deal specifically with the challenges of translating evidence-based research into practice (Chaffin & Friedrich, 2004; Kessler et al., 2005; Toth et al., 2008).

In the case of implementation studies, barriers such as lack of access to treatment manuals and clinicians’ attitudes towards them hinder the implementation of evidence-based practices, while a number of clinicians “have formed opinions about what they conceptualize treatment manuals to be, based on little exposure to them” (Baumann, Kolko, Collins, & Herschell, 2006, p. 782). In Gregoire (1994), the barriers to change in the practices of child welfare workers, with respect to addiction problems in maltreating families, have to do mostly with workplace characteristics and to a lesser extent with the characteristics of the clients and the child welfare workers themselves. Caseload, lack of access to the recent literature, and its perceived lack of relevance are factors that appear to deter child protection workers handling cases of child abuse or neglect from making use of the literature, while continuing education seems to be a facilitator that leads to increased use of the literature (Fryer, Poland, Bross, & Krugman, 1988) or more extensive screening for domestic violence (Gadomski, Wolff, Tripp, Lewis, & Short, 2001; Tower, 2003). Tommyr, De Marco, Hovdestad, and Hubka (2004), inspired by the science push and dissemination models, document the points of view of policy makers and researchers on the usefulness of knowledge produced as part of the Canadian Incidence Study of Reported Child Abuse and Neglect: that knowledge is deemed essential for monitoring maltreatment cases, but inadequate and inaccessible for the purposes of policy development.

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<td>Tower (2003)</td>
<td>Determine influence of barriers, in particular lack of DV education (professional education, continuing education units, in-service training, additional training) and lack of institutional supports (screening guidelines, checklist items or paperwork reminders) on self-reported screening barriers, screening behaviors, and number of victims identified by medical social workers.</td>
<td>Cross-sectional study Self-administered questionnaire N = 188 medical social workers (154♀, 34♂)</td>
<td>• Education: professional education is not related to screening barriers, screening behaviors, or number of victims identified. Continuing education units were positively correlated with screening barriers, screening behaviors, and the number of victims identified in the past year. Same observations pertain to in-service training and additional training. • Perception of institutional support: 45% of participants reported that their institutions had screening guidelines. Checklist items or paperwork reminders for DV screening were reported by 33%. • Participants whose institutions have screening guidelines perceived fewer barriers to screening, screened more clients, and identified more DV victims in the past year than social workers whose institutions did not have such guidelines. Same was true for participants whose institutions had checklist items or paperwork reminders. • Multiple regression analysis showed that perceived self-efficacy in helping DV victims, checklist items or paperwork screening reminders, and in-service training hours explained 39% of variance in screening behaviors.</td>
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4.2. Theoretical models

Three nonimplementation papers deal with the question of theoretical models of KT in the field of violence. Harrell (1983) described how the National Center on Child Abuse and Neglect, the U.S. federal agency responsible for disseminating research findings, went from a simple linear information transmission model to a double helix model where responsibility for generating new knowledge as well as transmitting it is broadened to include both researchers and practitioners. Parmar and Sampson (2007) questioned the evidence-based practice approach in domestic violence and its subsequent transfer into different contexts. They suggested a more suitable means of transferring effective practices across different situations: this was the ‘practice model’, developed on the basis of an assessment of three domestic violence projects from a theory-driven (rather than methods-driven) perspective. This model focuses on mechanisms of change (transferring causal mechanisms) that explain why a woman escapes domestic violence and how this occurs. Rather than seeking to transfer “standardized activities,” this model suggests the necessary practices for advocates to achieve these changes (transferring practice principles). Addressing a plenary session at a conference on the subject of changes in screening behaviors.

4.3. Barriers and facilitators

This is the topic most frequently raised in nonimplementation papers on KT in the field of violence (Chaffin & Friedrich, 2004; Fincham et al., 1994; Gelles, 1982; Kessler et al., 2005; Nason-Clark, 2004; Toth et al., 2008). We have classified the barriers and facilitators according to whether they have to do with knowledge produced, adaptation and dissemination, user context (individual and organizational), or interactions between researchers and practitioners (Table 2).

References

Objective 4 was not tested empirically (it is covered in the Discussion section of Gregoire’s paper), so there are no results to report for this objective.

\[ 9 \]

\[ a \] Result for SOCWORK (discussion group on variety of social work topics) are not reported here, as they do not concern the subject of our review.

\[ b \] The results of the public health campaign are not reported in their study.

\[ c \] Objective 4 was not tested empirically (it is covered in the Discussion section of Gregoire’s paper), so there are no results to report for this objective.
4.4. Strategies

Only one nonimplementation paper dealt with KT strategies. Harrell (1983) describes the multifaceted U.S. federal strategy for dissemination of child abuse and neglect information that is based on distribution of publications (monographs, manuals, catalogs, etc.) and access to computerized databases (research abstracts, published materials) and on two active elements, which are regional resource centers and the use of conferences and meetings (small on-site meetings, technical assistance, national conferences).

Among the strategies studied empirically, training (assessment of effectiveness) was a preferred choice, whether in the form of training workshops (Freeman, 1998; Gadomski et al., 2001; Gregoire, 1994; Harwell et al., 1998) or training videos (McCauley, Jenckes, & McNutt, 2003). Overall, the results of these studies indicate that training seems to be effective, in the short term, in changing attitudes or increasing knowledge. On the other hand, the findings on the effectiveness of training in changing the practices or behavior of participants are mixed (low effect size). For instance, between the pre- and posttraining surveys, there is a relatively small change in the rates of participation in nonimplementation studies (N=9).

Table 2
Knowledge translation barriers and facilitators identified in nonimplementation studies (N=9).

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of decision-making skills limit implementation of EBP</td>
<td>Pitching message in appropriate, accurate, sensitive, forceful ways</td>
</tr>
<tr>
<td>Lack of incentives linking rewards to client outcomes</td>
<td>Systematic reviews of health care research</td>
</tr>
<tr>
<td>Lack of funding to implement EBP</td>
<td>Information on laws, best practice guides, and latest research available on Web site</td>
</tr>
<tr>
<td>Lack of quality training (in-depth, ongoing supervision, etc.)</td>
<td>Flexibility to accommodate rigorous research and activists’ passion</td>
</tr>
<tr>
<td>Complexity of decision-making in child welfare environment</td>
<td>Understanding and respect for two-way street of research and social action</td>
</tr>
</tbody>
</table>

4.5. Types of knowledge utilization

Most of the surveyed studies on the implementation and assessment of KT strategies document the changes observed in terms of knowledge and attitudes (Berman, 1996; Gadomski et al., 2001; Gregoire, 1994; Harwell et al., 1998; McCauley et al., 2003; Tower, 2003) or in terms of behaviors and practices (Gadomski et al., 2001; Gregoire, 1994; Harwell et al., 1998; Manganello et al., 2006; Tower, 2003). Only two studies looked at clinicians’ use of the literature. This use seems low, with just 15% of the survey participants having read at least one of the 11 cited journal articles (Fryer et al., 1988).
and the clinicians relied more on their clinical experience than on scientific knowledge when making decisions (Finnila-Tuohimaa, Santtila, Sainio, Niemi, & Sandnabba, 2005). But caution is needed, as these measurements are self-reported and so indicative only (for instance, familiarity with 11 articles published in recent years in peer-reviewed journals; number of books and articles read, and lectures and courses attended). Finally, although there are a number of instruments for measuring types of knowledge utilization (Straus et al., 2009), none of the studies surveyed used validated instruments.

5. Discussion

5.1. Knowledge translation in the field of violence: among the newest of the new research topics?

As far as we know, this study seems to be the first to review and synthesize the literature on KT applied to the issue of violence against women and children. This observation does not appear to be specific to the issue of violence, as Mitton et al. (2007) arrive at the same conclusion with respect to the literature on health care policy. In fact, this review, like other similar reviews, highlights just how short the history of research on KT is: 65% of the studies surveyed have been published since 2001, comparable to the trend noted in education (Landry et al., 2008) and in health care policy (Mitton et al., 2007), which suggests “that the field [knowledge transfer and exchange] is growing in interest and importance” (Mitton et al., 2007, p. 734). Another indicator of how recent this research topic is: in the five thesauruses we consulted for our bibliographic search, there are very few keywords associated with the concept of KT, and the few that do exist are recent additions. Mitton et al.’s (2007) observation that “knowledge translation as a field of research is still in its infancy” (p. 759) is perhaps even truer of the issue of violence against women and children. Although we used a number of KT keywords, our initial sort yielded only 1894 papers, rather few compared with the 4250 found by Mitton et al. (2007) and the 8981 by Landry et al. (2008) in the fields of health care policy and education. Finally, unlike the general literature on KT, very few studies selected for our review refer explicitly to the concept of KT (even though they meet the inclusion criteria), which suggests that the systematic study of KT has not yet expanded to cover research on violence against women and children.

Below we discuss, in turn, the four research questions raised as part of this review, in order to highlight the answers we have found, but also the unanswered questions that remain and about which we make some recommendations for future studies.

5.2. Few theoretical foundations to guide KT initiatives in the field of violence

Of the authors surveyed who examine the theoretical models for the KT process (Alpert et al., 2002; Harrell, 1983; Parmar & Sampson, 2007; Sullivan et al., 2005), Harrell is the only one who refers to them explicitly. Yet he uses different terms than those generally seen in the literature on KT when he refers to a “simple linear information transmission model” and a “double helix model,” which seem to be the science push model and the interaction model, respectively. The only empirical study we found on this question tested the interaction model by putting participatory action research into practice (Sullivan et al., 2005). It seems that like Alpert, who underscores the importance of collaboration between researchers and advocates (Alpert et al., 2002), researchers on KT in the area of violence are willing to acknowledge the importance of interactions between researchers and users in fostering the optimal utilization of knowledge produced; in other disciplines, in contrast, this model is apparently regarded as an innovative solution. The research and practice communities in social science, and particularly with regard to violence, already share a history of this type of partnership. For instance, in Canada, the members of the Alliance of five violence research centers (see www.criviff.qc.ca for more information) have conducted many studies involving close collaboration between researchers and practitioners. These research centers were designed and established by academics and practitioners together, so dissemination and KT have always been priorities for the Alliance. Nonetheless, few KT initiatives regarding violence have been documented and published. It is therefore paramount for research on KT in the field of violence to pay special attention to the assessment of such initiatives and to the development of theoretical thinking that could provide guidance for KT research in this area.

5.3. Many barriers identified, but few empirically tested

Like Mitton et al.’s (2007) review of the literature on knowledge transfer and exchange in health care policy, our review also underscores the importance given to barriers and facilitators in the nonimplementation and implementation literature pertaining to KT in the field of violence (12 of the 22 studies surveyed deal with this question). The theoretical debate on barriers and facilitators seems well under way in the nonimplementation literature, where 28 barriers and facilitators have been identified (Table 2), while empirical testing (implementation studies) of determinants has examined just 11 of them, including only one study of facilitators. Considering that “both barriers and facilitators to knowledge use must be considered by those interested in knowledge implementation” (Légaré et al., 2006, p. 83), the current empirical knowledge base available to guide efforts in KT is inadequate, particularly with regard to facilitators. At the very least, what we do know from the results of implementation studies is that a wide array of factors seem to hamper knowledge utilization, including the limited nature of the knowledge base and the perceived lack of relevance of the literature (barriers related to the knowledge produced), practitioners’ attitudes towards the evidence-based approach, lack of time or resources, caseload and lack of management support/approval (barriers related to users’ context), and lack of accessibility of research findings (barriers related to adaptation and dissemination efforts).

Although the nonimplementation papers draw attention to some barriers and facilitators related to interactions between researchers and practitioners, no implementation study has empirically measured the influence of this category of determinants on the utilization of knowledge in the field of violence. Yet it is acknowledged in the general literature on KT that sustained interactions between researchers and potential users of the knowledge are one of the key factors in a better utilization of research findings (Huberman, 1994; Landry et al., 2001; Reardon et al., 2006). As a result, future empirical studies on violence should verify the extent to which determinants related to researcher–practitioner interactions foster the utilization of knowledge by users by documenting the characteristics of such “winning” interactions in terms of frequency, intensity, duration, etc. Furthermore, to avoid reinventing the wheel, the barriers and facilitators of the other categories of determinants identified in the nonimplementation literature (determinants related to knowledge produced, adaptation and dissemination efforts, users’ context) should serve as a basis for future empirical studies. Taxonomies of barriers and facilitators, developed in medicine, also have the potential to guide empirical studies measuring those determinants of knowledge utilization in the field of violence (for instance, to guide a content analysis of individual interviews) (Légaré et al., 2006).

5.4. Need for diversification and more rigorous assessment of KT strategies

Although there are many KT strategies, as the CIHR have highlighted, the strategies surveyed focus mainly on educational initiatives (training,
discussion groups or communities of practice, conferences, meetings) or organizational interventions (clinical protocols, screening guidelines, checklist items or paperwork reminders, structured forms, flowcharts) and very little on patient-mediated actions (via the mass media). None of the strategies examined (except in Berman’s, 1996 study) concerns linkage and exchange, while the importance of personal interactions in knowledge acquisition and utilization has been demonstrated, and the studies surveyed highlight—at least in what they say—the interactions between researchers and users. This may in part have to do with the human and financial resources required to implement such strategies.

Training is the KT strategy most often used (Argote, Ingram, Levine, & Moreland, 2000, cited in Landry et al., 2008) and KT in the field of violence is no exception in this regard. But it is known from the general literature that training alone is not enough to change practices, as the results of our review of the literature on KT with respect to violence tend to confirm (Freeman, 1998; Gadomski et al., 2001; Gregoire, 1994; Harwell et al., 1998; Tower, 2003). By way of explanation, Gregoire (1994) suggests that it may be “difficult for participants to make a transition from passive reception of information to active involvement in contemplating the utility of the information to professional practice” (p. 78). Hypothesizing that child protection agencies are in the “best position to increase the extent to which training leads to improved performance” (p. 78), he argues that agency managers should increase their support for training (for instance, meeting with workers before and after training, or giving workers verbal encouragement to try something new). Tower (2003) agrees and notes that his study outcomes “reflect the work of others who have concluded that education alone may be insufficient to sustain screening behaviors and that there is a need to focus on institutionalized screening methods” (p. 491).

Nonetheless, although several of the strategies surveyed here may be termed “organizational,” based on the CIHR classification, the unit of analysis of these strategies seems to be the individual, rather than the organization. In fact, although they are referred to as organizational strategies, they do not involve real structural or organizational change (for instance, reviewing work organization, sharing duties) but only fairly small organizational additions (for instance, protocols, reminders).

Given the methodological limitations of the studies surveyed, it is currently impossible to make a pronouncement as to the effectiveness of the various KT strategies studied in violence against women and children research. This is in fact the same observation made in the literature on health care (Wensing, Bosch, & Grol, 2009). Therefore, “current research evidence on the effectiveness of KT interventions cannot completely guide the implementer on the choice of best intervention” (Wensing et al., 2009, p. 95). However, Wensing et al. (2009) also point out that “the choice of KT interventions remains an art informed by science, meaning that practice-based experience and creativity are important in selecting KT interventions. Research evidence on KT interventions can provide some guidance, if only to show which interventions need to be avoided” (p. 110).

5.5. Emphasis on conceptual and instrumental uses

It should be kept in mind that no nonimplementation study addresses the issue of types of knowledge utilization in the field of violence. In the implementation studies surveyed that examine this topic, no author refers explicitly to the nomenclature of the types of knowledge utilization highlighted in the general KT literature (conceptual, instrumental, strategic). Contrary to what is seen in the general literature, where the measurement of utilization has centered almost exclusively on the instrumental use of knowledge (Landry et al., 2001, p. 336; Légaré et al., 2006), measurement of knowledge utilization applied to the issue of violence has also dealt with the conceptual utilization (changes in terms of attitudes, knowledge). Indeed, this is a strength of the research on violence, as researchers document a wider range of changes following implementation of a KT strategy.

The studies surveyed also emphasize the challenge of measuring knowledge utilization. As reported by Gadomski et al. (2001), “More subtle changes in health care providers’ behaviors or public attitudes may have occurred but not been captured by self-reported measures or the medical record audit” (p. 1050). In fact, that raises the entire question of how new knowledge is absorbed, transformed, and eventually integrated into tacit knowledge already existing among case-workers (Davies et al., 2005). As they noted, “Capturing these subtle and diverse impacts poses considerable conceptual, methodological and practical challenges” (p. 13).

5.6. Limitations and strengths of study

A review of the literature on KT applied to the issue of violence against women and children is an ambitious project, given that there is no consensus on the definition of the construct and its terminology (Graham et al., 2006; Grimshaw, 2008). As Mitton et al. (2007) note regarding their review of KT in health care, “The review did address the field of KT but does not suggest that others who label their work differently have not made important contributions” (p. 759). In addition to some studies that may have escaped our attention, our review does not cover unpublished papers.7 Despite these concerns, however, our study does improve upon the existing literature in several ways. It is the first to look at the main fields of research related to the study of KT in the area of violence. Furthermore, in being based on the systematic review method, currently considered to be the most valid and most reliable for finding and synthesizing existing knowledge (Landry et al., 2008), this review provides some initial answers to the original questions and underscores the points that need to be investigated further in future studies. Finally, given the very few explicit references to the construct of KT in the studies surveyed, the review represents a significant effort at synthesis by making connections between the theoretical concepts of KT and what the results of the studies surveyed suggest, even though the authors do not explicitly make such links.

6. Conclusion

This review highlights the embryonic state of the published research on KT in the area of violence against women and children and raises many questions for further study. Sudsawad (2007) sums up the scope of the challenges facing research on the KT process: “Knowledge translation is a complex and multidimensional concept that demands a comprehensive understanding of its mechanisms, methods, and measurements, as well as of its influencing factors at the individual and contextual levels—and the interaction between both those levels” (p. 1). However, since the players concerned by the issues of violence against women and children already share a history of research in partnership, this may well be fertile ground on which to take up the challenge of the study of the KT process. It is up to us to make our contribution to the scientific literature by documenting the implementation and effectiveness of such initiatives as a means of expanding knowledge of KT in this field.

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7 Due to this restriction, recent strategies are underrepresented in the review and care should be taken in other papers to describe those in current use (e.g., communities of practice).

