

Knowledge Translation Plan to Diffuse, Disseminate and Apply Evidence on Children Exposed to Intimate Partner Violence

Margherita Cameranesi* and Caroline C Piotrowski

Faculty of Health Sciences, University of Manitoba, Canada

*Corresponding author: Margherita Cameranesi, Faculty of Health Sciences, Applied Health Sciences, University of Manitoba, 311 Human Ecology Building, 35 Chancellor's Circle, Winnipeg, Manitoba (MB) R3T 2N2, Canada, Tel: +1204 898 6274; E-mail: cameranm@myumanitoba.ca

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Abstract

Background: A consistent body of evidence shows that childhood exposure to intimate partner violence (IPV) represents a major risk factor for the development of a wide range of short- and long-term adjustment problems that span virtually all spheres of functioning. Although knowledge translation (KT) has the potential to improve the value of research evidence by making it available to professionals who can use them to promote the health of children exposed to IPV such as nurses, KT of research findings concerning this population has received very little attention in the literature.

Aim: The purpose of the present paper is to propose a comprehensive end-of-grant KT plan to diffuse and disseminate clinically relevant research evidence on children who have been exposed to IPV to selected knowledge users. In the KT plan, we emphasize the key role that nurse practitioners play as relevant knowledge users and in the implementation of some of the proposed KT strategies.

Methods: A systematic literature review was performed to identify research on children and adolescents exposed to IPV upon which we built an evidence-based KT plan targeting a variety of relevant audiences. In designing the KT plan, we adopted the definition of end-of-grant KT developed by the Canadian Institutes of Health Research (CIHR), which includes a wide range of activities targeting different audiences and involving a variety of health professionals, including nurses.

Conclusions: Given the high prevalence of childhood exposure to IPV worldwide and the associated adjustment problems children experience, the development of KT strategies to transfer clinically relevant information on this population to relevant knowledge users should be deemed a priority in the professional practice of nurses worldwide.

Keywords: Intimate partner violence; Childhood exposure to intimate partner violence; Exposure to intimate partner violence; Knowledge translation; End-of-grant knowledge translation

Introduction

Worldwide, research in the past two decades has recognized that millions of children and adolescents experience a form of child abuse known as exposure to Intimate Partner Violence (IPV) [1]. Exposure to IPV can occur at any time beginning at conception and can take many forms [2]: Prenatal exposure occurs when mothers are victims of acts of psychological, physical, sexual, and/or financial abuse by a current or former intimate partner during pregnancy, while postnatal exposure occurs when children and adolescents under the age of 18 live in families where such acts occur – they may witness the violence, intervene to stop its occurrence, and/or be exposed to its aftermaths (e.g. injury).

To date, there is a consistent body of evidence that childhood exposure to IPV represents a major risk factor for the development of a wide range of adjustment problems in the short and long-term that span virtually all spheres of functioning including social, emotional, psychological, behavioral, intellectual, and physiological domains [3]. Given the high prevalence of childhood exposure to IPV and the

empirical support for the association between IPV exposure and negative sequelae for children and adolescents, the development of strategies aimed to communicate key research findings relevant to specific audiences should be deemed a critical priority. Raising individuals' and organizations' awareness of research findings and facilitating the use of these findings is the idea behind knowledge translation [4]. Specifically, the Canadian Institutes of Health Research [4] defines KT as "a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system". End-of-grant KT is a specific form of KT that involves the development and implementation of a plan to translate significant research findings and communicate them to selected knowledge user audiences who will most likely be able to use them. In a KT perspective, knowledge users are individuals and organizations that are likely to be able to use the knowledge generated by research to make informed decisions about their health, health policies, programs, and/or practices.

Although KT has the potential to improve the value of research evidence by making it available to those who can use them to promote the health of children who have been exposed to IPV such as nurses, KT of research findings concerning this population has received very little attention in the literature. Therefore, to fill a critical gap in the

literature, the purpose of the present paper is to propose a comprehensive end-of-grant KT plan to communicate some of the most consistent research findings on children exposed to IPV to selected knowledge users. The evidence on children exposed to IPV that will be the focus of the proposed KT plan have been chosen for their relevancy and consistency, as well as because of major significance to knowledge users and most likely to be used by selected audiences to foster the health and well-being of children and adolescents exposed to IPV.

Methods

We performed a systematic literature review to identify research on children and adolescents exposed to IPV upon which we built the proposed evidence-based KT plan. We searched five online databases – PsycINFO, Medline, Embase, Scopus, and CINAHL, as well as two dissertation and thesis databases through the interface ProQuest and Ebscohost, using the following search strategy: (IPV OR "intimate partner violence" OR "partner abuse" OR "family violence" OR "domestic violence") AND (infan* OR child* OR youth* OR adolescen*). The asterisk (i.e., the truncation symbol) allowed for the inclusion of alternate words ending of the search term (i.e., child* yielded articles containing child, children, and childhood). In order to capture the most recent empirical evidence on children and adolescents exposed to IPV, and considering the impressive theoretical and methodological advances that research on this population has experienced in the last two decades, we decided to include only studies published since 2000. A restriction was also applied regarding the language of the published literature, as only research published in English, French, Spanish, and Italian was included. Our primary search yielded more than 10,000 results, which were reduced to 470 papers by deleting duplicates and performing a first screening of titles and abstracts. Next, we performed a screening of all full-text articles and all reference lists of relevant articles to check for any relevant reference that we might have missed during our primary search. As a result, we reviewed a total of 402 manuscripts including original empirical research, knowledge synthesis research – systematic reviews and meta-analyses, and graduate students' dissertations and thesis on children and adolescents who have been exposed to IPV, which represent the collection of knowledge upon which we built the evidence-based KT plan here proposed.

Empirical Evidence on Childhood Exposure to IPV

A consistent research finding on childhood exposure to IPV particularly relevant in a KT perspective is the evidence that adults involved in abusive relationships, particularly mothers, tend to underestimate and under-report the extent of their children's exposure to IPV [2]. There is also consistent evidence that due to inevitable changes in physical, social, emotional, and economic needs, women are uniquely vulnerable to IPV victimization during pregnancy, and that women victims of IPV during pregnancy are more likely to experience repeated and severe forms of IPV, which places the health of mothers and their unborn children at great risk [5,6]. Specifically, a vast body of research has shown that IPV during gestation is a significant risk factor for a variety of negative prenatal and postnatal outcomes including low-quality prenatal care [7,8], low fetal growth, low birth weight, adverse birth outcomes, and infant hospitalization [9-13], infant and child malnutrition and mortality [14-17], inadequate immunization during infancy [18], infant physical abuse, asthma onset during childhood and adolescence [19-21] and post-traumatic stress disorder (PTSD) symptoms during infancy and childhood [22,23].

Several meta-analyses of cross-sectional and longitudinal studies [24-28] as well as one mega-analysis [29] that have synthesized the empirical findings on postnatal exposure to IPV have provided substantial evidence of a moderate to strong association between exposure to IPV and both internalizing and externalizing problems in children and adolescents, including depressive and anxiety symptoms, aggressive and defiant behaviour, conduct problems, and PTSD symptoms. Furthermore, exposure to IPV is linked prospectively to children's internalizing and externalizing symptoms and the magnitude of these associations strengthens over time [27]. Children and adolescents exposed to IPV are also at increased risk for the development of attachment problems and related social problems, school-related problems, and physical and intellectual impairments (e.g., asthma, obesity, and low IQ), as well as for physical, sexual, and emotional abuse and neglect [1,3,30-32].

Even though the negative effects of childhood exposure to IPV have been largely established empirically, there is also consistent evidence that not all children and adolescents who are exposed to IPV present adjustment problems. Several studies using a person-centered approach have identified different profiles of adjustment among children and adolescents exposed to IPV, showing that between 15% and 60% of these population present profiles of resilience in absence of adjustment problems [33-39]. Across studies, the most significant and consistent factors discriminating between profiles of resilience and psychopathology in children exposed to IPV are maternal mental health, the quality of the mother-child relationship, and maternal parenting skills, together with socioeconomic status (SES) and maternal level of education [32,33,40-48].

End of Grant Knowledge Translation

End-of-grant KT refers to any activity undertaken at the end of a research study in order to communicate its findings to selected relevant audiences [49]. End-of-grant KT can take virtually all forms: It involves a variety of strategies including a wide range of activities that target different audiences such as conferences and symposiums within academia or the use of the media to inform the general public. In designing an end-of-grant KT plan, there are five key factors that researchers need to consider [50]: 1) the KT goals; 2) the target audience/s; 3) the KT strategies that support the KT goals and can be classified in three distinct categories – a) diffusion, b) dissemination, and c) application or implementation [4,51]; 4) the expertise required to execute the KT plan; and 5) the resources needed to realize the KT plan.

End of Grant Knowledge Translation Plan

A comprehensive end-of-grant KT plan aimed to share knowledge on children exposed to IPV with selected relevant knowledge users inside and outside academia should include diffusion, dissemination, and application strategies, as well as evaluation strategies aimed to assess the outcomes of the KT activities. The evaluation component of the KT project identifies specific indicators that are used to determine the success of each KT strategy [4]. Table 1 presents an overview of goals, audiences, expertise and indicators of success related to diffusion, dissemination, and application strategies included in the proposed KT plan. Knowledge users have been selected: a) to reflect the specific KT goals of each strategy, and b) because they represent those expected to benefit the most from the KT project, and most likely to use the translated knowledge to improve research on children exposed to IPV and the health and well-being of IPV-affected families

such as scholars who conduct research on this topic, policy makers, community-based and non-for-profit organizations, practitioners and clinicians working with IPV-affected families such as nurses, families experiencing IPV, and the general public.

Diffusion Strategies				
Activities	Goals	Audience	Expertise	Evaluation
Peer-reviewed publications	Increase knowledge/awareness	Academic audiences of researchers	Research teams	Peer-reviewed publications of original empirical studies
Conference presentations	Suggest and shape future research			Conferences' attendance and feedback
Organization of conferences				
Dissemination Strategies				
Activities	Goals	Audiences	Expertise	Evaluation
Organization of conferences, seminars, events, workshops, and special interest groups	Increase knowledge/awareness	Policy makers	Research teams	Attendance to conferences, seminars, events, workshops, and special interest groups
Creation of booklets/brochures	Inform policy	Non governmental organizations (NGOs)	Representatives of governmental organizations (GOs) and NGOs	Feedback from participants
Creation of websites	Inform practice	Health care professionals	KT specialists	Feedback from users of websites and mobile apps
Creation of mobile apps	Inform prevention and intervention programs	Social workers	IT specialists	
Utilization of mass media	Provide useful tools and information	Counsellors and clinical psychologists	Communication specialists	
	Promote the development of skills	Teachers	Graphic designers	
		IPV-affected families		
		The general public		
Application Strategies				
Activities	Goals	Audiences	Expertise	Evaluation
	Change policies	Policy makers	Research teams	Changes in policy
Working with knowledge-users to:	Change behaviour	Health care professionals	KT specialists	Use of screening tools
Develop policies	Change practice	Teachers	Policy makers	Changes in practice
Develop screening tools		Counsellors and clinical psychologists working with IPV-affected families		Changes in teachers' behaviour
Develop professional trainings for health care professionals and teachers				
Develop effective intervention programs				

Table 1: End-of-grant knowledge translation strategies.

Diffusion

The proposed KT plan includes several diffusion strategies that target academic audiences and are aimed at raising awareness among scholars of different disciplines regarding the most consistent research findings on children exposed to IPV and promoting the development

of innovative future research in this area. Specifically, the strategies include:

- Publication of empirical studies, literature reviews, meta-analytic reviews, mega-analytic reviews, and meta-syntheses on children exposed to IPV in peer-reviewed journals, including open-access journals.

- Participation to and organization of local, national, and international conferences where scholars can present their research on children exposed to IPV to an academic audience, including for example conferences on domestic violence and child abuse, child development, and exposure to violence throughout the life span.

In order to execute these diffusion strategies, the expertise required is that of research teams that include scholars of different disciplines who develop and conduct research projects in this area such as nurses, as well as students at the undergraduate and graduate levels who may collaborate with the research teams. Volunteers who help in planning and organizing the conferences, as well as external resources that provide catering and refreshment services may be needed in certain circumstances. Two main strategies can be used to assess the outcomes of these KT activities:

- The number and type of original empirical studies on children exposed to IPV published in peer-reviewed journal that specifically address the existing methodological limitations and knowledge gaps of this area of research
- Attendance to conferences and analysis of participant feedback, which can also be used to tailor future conferences on the specific needs of a particular academic community.

Dissemination

Conferences, seminars and events

Conferences can also be organized together with a variety of activities such as dinner events, and seminars, to target a wider audience extending beyond academia. Specifically, the proposed plan includes in this category of dissemination strategies an array of activities aimed to bring together scholars who conduct research on children exposed to IPV, policy makers (representatives from the federal and provincial government and from Child and Family Services – Department of Health), non governmental organizations (NGOs) such as community-based and non-for-profit organizations, and practitioners and clinicians working in maternal and child health and with IPV-affected families such as nurses, social workers, counsellors, clinical psychologists, family doctors, and other specialist doctors (e.g., gynaecologists and paediatricians). Such activities should be aimed to increase awareness regarding the high rates of IPV in the general population, the commonality of IPV during gestation and its devastating implications for maternal and child health, as well as the negative adjustment outcomes of exposure to IPV during childhood and the most important protective factors that should be strengthened in these families. The overarching KT goal is to increase awareness regarding the aforementioned issues to inform policy, practice, and prevention and intervention programs.

These KT dissemination activities can be developed and organized using the expertise of research teams conducting research on children exposed to IPV that include scholars from different disciplines and KT specialists. Undergraduate and graduate students, as well as representative of governmental organizations (GOs) and NGOs can also volunteer to help in planning and organizing the activities. At times, the engagement of external services such as catering and renting suitable locations may be needed. In order to evaluate the success of the described KT activities, outcome indicators should include attendance to each event, as well as analysis of participant feedback that can also be used to target future activities on the specific needs of particular stakeholders.

Booklets and brochures

Booklets and brochures should also be created and distributed during the aforementioned conferences, seminars, and events. Given the audience of such activities, the booklets/brochures should be developed using a technical or semi-technical language, and could include a “take home message” for those participating in the activity, summaries of the knowledge the organizers wish to disseminate, and additional information regarding following activities that can be of participants’ interest. Furthermore, some useful information regarding for example help lines, local shelters, and other community-based services available to IPV-affected families should be included, in order to provide professionals who work with or may encounter IPV-affected families in their professional practice with practical information to provide them.

Workshops and special interest groups

A variety of workshops and special interest groups that target IPV-affected families should also be included in a comprehensive dissemination plan. The goals of such activities should be: 1) to increase awareness about exposure to IPV, emphasizing the fact that such exposure begins during the prenatal period and goes well beyond the mere eye witnessing of violence; 2) to increase awareness regarding the negative effects of IPV on mental and physical health of mothers and children; and 3) to promote the development of crucial skills that adults involved in abusive romantic relationships can use to cope effectively with this challenging life circumstance and to engage in effective parenting practices.

During each session of the aforementioned activities, participants should receive a booklet or brochure that contains a content summary and some additional information regarding for example local counselling services, help lines, and local shelters. Given the audience of these specific activities, all written materials should be developed using very simple lay language that takes into account the fact that some participants may not be proficient in English. The promotion of interactions among participants should be a key component of these activities, as they can represent a very valuable opportunity of socialization and exchange of opinions that can improve participants’ social support by enriching their social networks. The expertise of scholars, as well as representatives of NGOs and professional figures such as nurses, social workers, and clinical psychologists, can be used in developing these dissemination activities targeted to IPV-affected families. Once again, analysis of attendance and participant feedback may be used to assess the success of these KT activities.

Websites and mobile apps

Canadian research has shown that the Internet represents a cost-effective and valuable tool for KT and an effective mean to disseminate information to the general public and health practitioners [52,53]. Accordingly, the development of websites and mobile apps directed to a variety of audiences should be included among the dissemination strategies of a comprehensive KT plan. Both websites and mobile apps should be designed to post documents tailored to different audiences, such as health professionals, IPV-affected families, and the general public. They should also include FAQs (frequently asked questions), an online community, information on research activities, support materials such as IPV screening tools, and educational and training resources [53]. The overarching goal of such initiatives is to provide useful tools that different audiences can use to enrich their knowledge

about IPV and childhood exposure to IPV, foster their professional competency in this area, and gather key information regarding health services available to IPV-affected families.

Particularly, each website's section/page should target a specific audience, and therefore provide information using language tailored to that audience. The websites should also offer free webinars to students and professionals working with IPV-affected families, as well as information on social media – Facebook® page, Twitter® account, and YouTube® videos – that could be used by both IPV-affected families and professionals who work with them. Facebook® pages, Twitter® accounts, and several YouTube® videos, should be created and used to provide specific information relevant to different knowledge users. In order to reach knowledge user audiences beyond the research community, the homepage of the websites should be primarily in lay language, and all information should be communicated mainly in lay language. Finally, on the websites, as well as on Facebook®, Twitter®, and YouTube®, people should be able to leave comments and suggestions for improvements regarding the relevance of the contents. These comments may be used to improve the web resources by adding key contents or by dedicating more space to critical topics.

The mobile apps for iPhones and androids should be in very simple lay language, very user-friendly, and should be advertised on local radio stations, television channels, and buses, as well as in primary, middle, and secondary schools. The audiences in this case also include children and adolescents exposed to IPV who could download the apps and use them on their cell-phones. Therefore, the mobile apps should incorporate together with all the contents included in the websites, also specific sections dedicated to these children and adolescents that provide them with basic information regarding IPV and the services available to them if they decide to seek help. The mobile apps should be available for free downloading and should be specifically designed to catch the attention of children and adolescents by being graphically engaging; however, they should also be appropriate for adult users. The mobile apps should include an open blog and a function that provides addresses and contact information of the closest community services where IPV-affected families can find help such as help lines and shelters.

In order to realize websites and mobile apps, research teams may need to engage IT specialists and/or website developers, and graphic designers. The main indicators of success here should be the number of users who visit the websites and the number of mobile apps downloaded, as well as content analyses of the comments that users leave on the blogs, which can also be used to improve the services.

Mass media

Finally, the general public can be reached by developing communication campaigns that increase awareness about IPV, as well as prenatal and postnatal exposure to IPV. The campaigns, that should include brief messages of great impact communicated in a lay language, could also provide key useful information to those already involved in abusive relationships and in need of help, such as numbers to contact help lines and local shelters. A variety of media including television, radio, newspapers, posters, leaflets, and booklets/brochures can be employed alone or in conjunction to implement campaigns at the population level. Examples of tools are: posters placed in correspondence of very busy urban intersections or on city busses; leaflets, booklets/brochures left in a variety of public places, including malls, grocery stores, and mental and physical health service offices such as doctor offices and clinics; messages transmitted on television

and on radio; and messages included in newspapers. It is important to specify that such campaigns should be developed using a gender-neutral vocabulary in order to raise awareness regarding the commonality of mutually perpetrated or bidirectional IPV [54,55] and encourage both male and female victims of IPV to take action and seek help.

In executing the media campaigns, research teams may need to use the expertise of communication specialists and graphic designers who will contribute to the development and realization of the activities. Even though, given the breath of the proposed media campaigns it is difficult to define specific outcomes, indicators of success may include the number of individuals seeking help in each community, and the number of individuals consulting booklets/brochures and leaflets.

Application

Given the reviewed empirical evidence on exposure to IPV, the KT plan proposed here includes an implementation component that targets a wide range of audiences to achieve four primary goals: 1) to develop national and/or provincial policies regarding mandatory screening for IPV of all women during pregnancy; 2) to change health care professional behaviours by introducing compulsory training of different professional figures working in the health care system on the use of screening tools for IPV that they can employ to screen adult patients; 3) to change the behaviour of child care workers and teachers working in kindergarten, elementary, middle, and high school by introducing compulsory training on infants, children, and adolescents exposed to IPV with a focus on the specific signs of maladjustment such as PTSD, depressive, or anxiety symptoms they should be trained to recognize in this population; and 4) to develop and implement effective intervention programs for IPV-affected families with a specific focus on strengthening parental health and parent-child relationships, as well as promoting positive parenting practices. Accordingly, the identified knowledge users of the proposed implementation activities include policy makers such as representatives of federal and provincial government, as well as of Child and Family Services – Department of Health, health care professionals such as nurses, family doctors, gynaecologists, and paediatricians, child care workers and teachers working in kindergarten as well as elementary, middle, and high school, and counsellors and clinical psychologists conducting clinical practice with IPV-affected families.

National and provincial policies regarding mandatory screening for IPV of all women during pregnancy, as well as policies regarding compulsory training of health care professionals and teachers on IPV exposure and use of screening tools for IPV should be developed in collaboration with policy makers and should be facilitated by implementing the dissemination activities included in this plan with particular attention on involving key policy makers as knowledge users. To change the behaviour of health care professionals, professional training activities on IPV and on the use of screening tools for IPV should be developed and implemented by scholars of different disciplines who conduct research in this area. In this regard, scholars can either use screening tools already existing [56] or develop new tools tailored to the particular needs of local settings.

Professional training activities that target child care workers and teachers of kindergarten, elementary, middle, and high school should also be developed and implemented by research teams at the national and provincial level to provide those professionals, who spend a great

amount of time working very close to children and adolescents, with useful tools to recognize some of the most common signs of exposure to IPV such as PTSD symptoms. Finally, research teams that study this population and include clinical psychologists should focus their efforts on developing and implementing more effective intervention programs for IPV-affected families inclusive of both parents by conducting randomized controlled trials (RCTs). Outcome indicators of the proposed KT activities include the introduction of new policies at the provincial and national levels, the use of already existing or new screening tools in the health care system, changes in the behaviour of child care workers and teachers, and peer-reviewed publications of RCTs evaluating efficacy of intervention programs for IPV-affected families.

Conclusion

It is our hope this paper will capture the attention of scholars who study IPV-affected families and professionals whose work is focused on improving the adjustment of children who have been exposed to IPV. Our ultimate goal is to promote the development of end-of-grant KT plans targeting specific knowledge users that play a critical role in improving the health of children exposed to IPV such as nurses.

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