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Child maltreatment online education for healthcare and social service providers: Implications for the COVID-19 context and beyond

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ABSTRACT

Evidence indicates that healthcare and social service providers (HSSPs) receive inadequate education related to recognizing and responding to child maltreatment. This is despite the fact HSSPs are identified as an important factor in the primary, secondary, and tertiary prevention of this childhood exposure. The need for online education for HSSPs is highlighted during the COVID-19 pandemic restrictions and will continue to be relevant afterward. The objective of this commentary is to provide an overview of: (a) educational interventions for HSSPs related to recognizing and responding to child maltreatment; (b) the development of VEGA (Violence, Evidence, Guidance, Action), which is an online platform of educational resources to support HSSPs to recognize and respond to child maltreatment; and (c) the RISE (Researching the Impact of Service provider Education) project, which is an ongoing multi-province evaluation of VEGA in Canada. It is important to consider ongoing ways that HSSPs can receive education related to recognizing and responding to child maltreatment. The virtual implementation of VEGA and the RISE Project provide a necessary opportunity to continue to increase the capacity of Canada’s HSSPs to adequately and safely recognize and respond to child maltreatment, while simultaneously advancing education scholarship for the field of child maltreatment and which will have relevance for the COVID-19 context and beyond.

1. Introduction

Child maltreatment remains a persistent public health challenge across low-, middle- and high-income countries including Canada. Child maltreatment refers to “all types of physical and/or emotional ill-treatment, sexual abuse, neglect, negligence, and commercial or other exploitation, which results in actual or potential harm to the child’s health, survival, development or dignity in the context of a

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relationship of responsibility, trust or power” (World Health Organization, 2019, p. 5). Increasingly, children’s exposure to intimate partner violence (IPV) is also considered a form of reportable maltreatment in Canada and in other countries given its high co-occurrence with other forms of maltreatment and its similar potential health and developmental consequences (Dubowitz, 2014). Approximately one-third of Canadian adults report exposure to at least one form of child maltreatment (Afifi et al., 2014). Several systematic reviews and meta-analyses indicate a strong association between child maltreatment exposure and a broad range of negative outcomes, including risky behaviours such as early onset smoking and alcohol use, and both physical and mental health problems, including injuries, substance abuse, suicide attempts, post-traumatic stress disorder, eating disorders, depression, anxiety, chronic physical problems such as pain conditions, among others (Bair-Merritt, Blackstone, & Feudtner, 2006; Caslini et al., 2016; Chen et al., 2010; Danese & Tan, 2014; Kimber, McTavish et al., 2017; Lindert et al., 2014; Norman et al., 2012; Pignatelli, Wampers, Loriedo, Biondi, & Vanderlinden, 2017; Suglia, Sapra, & Koenen, 2015). Evidence also indicates that exposure to one or more forms of child maltreatment is associated with greater risk for other forms of interpersonal victimization over the life course, including peer-based bullying, teen dating violence, as well as intimate partner violence in adulthood (Hebert et al., 2019; Kimber et al., 2018; Stewart, MacMillan, & Kimber, 2020). Furthermore, a large proportion of Canadian children and adolescents who are exposed to child maltreatment will experience more than one form of child abuse or neglect (Afifi et al., 2014; Gonzalez, MacMillan, Tanaka, Jack, & Tommyr, 2020; Tourigny, Hebert, Joly, Cyr, & Baril, 2008). Repeated exposure is also common. Of the children and adolescents whose exposure to maltreatment has been substantiated by child protection authorities, approximately 50% will experience an additional investigation of child maltreatment exposure over the course of their development (Cheung, Taillieu, Tonmyr, Sareen, & Afifi, 2020). While these additional investigations may be related to ongoing or worsening child maltreatment for previously identified children, it is also possible that high reinvestigation rates are related to elevated levels of surveillance due to the initial investigations. Similarly, it should be highlighted, that the link between child maltreatment and adverse health outcomes and additional investigations of violence is not inevitable. Political will is especially needed to address societal protective factors (e.g., policies to support family income) and community factors (e.g., access to quality childcare), which can have a direct impact on child maltreatment rates (Bywaters et al., 2015; Garcia-Moreno & Amin, 2016; Rissan & Bullinger, 2017; Scott, London, & Myers, 2002; Slack, Holl, McDaniel, Yoo, & Bolger, 2004). Many children and adolescents demonstrate remarkable resilience to child maltreatment exposure. Family-level protective factors (e.g., parent-child attachment) and individual-level factors (e.g., healthy emotion regulation) are important considerations related to the risk for or resilience to negative health outcomes following child maltreatment exposure (Afifi & MacMillan, 2011; Domhardt, Münzer, Fegert, & Goldbeck, 2015; Fritz, de Graaff, Caisley, van Harmelen, & Wilkinson, 2018; Meng, Fleury, Xiang, Li, & D’Arcy, 2018).

Results from the most recent Canadian Incidence Study of Child Abuse and Neglect conducted in 2008, indicated that nearly 250,000 cases of suspected child maltreatment are investigated on an annual basis; less than one-quarter of these investigations are initiated following reports from healthcare and social service providers (HSSPs) (Tonmyr, Li, Williams, Scott, & Jack, 2010). The low report rate by HSSPs, especially by hospital personnel (~5%) (Fallon, Filippelli, Joh-Carnella, Miller, & Denburg, 2019; Tonmyr et al., 2010), is concerning given that the proportion of children and adolescents who are experiencing child maltreatment and who come to the attention of child protection authorities is already considered a huge underestimate of the true incidence in the Canadian population (Public Health Agency of Canada, 2010). Furthermore, other evidence indicates that HSSPs experience challenges in recognizing less overt forms of child maltreatment (e.g., emotional abuse, emotional neglect, children’s exposure to IPV), initiating conversations with children and caregivers about potential maltreatment concerns, and ensuring private, safe spaces for children to discuss their concerns and experiences (Beynon, Gunnamis, Tutty, Wathen, & MacMillan, 2012; Kimber, McTavish, Couterier et al., 2019, 2019b; McTavish et al., 2017; Tufford, Bogo, & Asakura, 2014; Tufford, Bogo, Katz, Lee, & Ramjattan, 2019). A recent qualitative meta-synthesis on children’s and caregivers perspectives of the mandatory reporting process concluded that HSSPs need to pay greater attention to the provision of empathy, warmth, and appropriate referrals for supportive community services when working with individuals who have been exposed to child maltreatment (McTavish et al., 2019).

In this commentary, we discuss how the coronavirus disease 2019 (COVID-19) highlights the longstanding need to develop, evaluate, and disseminate scalable educational interventions that improve HSSP knowledge, attitudes, skills, and behaviour related to recognizing and responding to child maltreatment in clinical practice. We provide an overview of the literature focused on educational interventions for improving HSSP recognition and response to child maltreatment, which includes a focused discussion on the recently launched VEGA (Violence, Evidence, Guidance, Action; https://vegaproject.mcmaster.ca) educational resources (McMaster University, 2020). Made publicly available in February 2020, VEGA is a virtual suite of educational resources that were created for the purpose of educating Canadian HSSPs in the foundational knowledge and skills for safely recognizing and responding to child maltreatment and related forms of family violence in their practice encounters. The commentary closes with a discussion about the RISE (Researching the Impact of Service provider Education) project, which is using a model of implementation science and a multi-phase mixed method research design to support the initial uptake and evaluation of VEGA in Canada during COVID-19 and beyond.

1.1. COVID-19 is reiterating the need to develop, evaluate and disseminate online educational interventions for HSSPs

The relationship between COVID-19 and the rate of child maltreatment exposure, if any, remains speculative. Editorials and commentaries have emphasized concerns related to population-level increases in risk factors associated with child maltreatment, including financial and occupational stressors, as well as emotional, relational and psychological stressors attributable to prolonged periods of social isolation and reduced availability of health, mental health, education, and social services (Brooks et al., 2020; A.M. Campbell, 2020; Courtin, Alchin, Ding, & Layte, 2019; Frank, Davis, & Elgar, 2014; Holmes et al., 2020; Humphreys, Myint, & Zeanah, 2020; Lee, 2020; Stith et al., 2009; van Gelder et al., 2020). Specifically, economic trends suggest that COVID-19 has led to a global
increase in the rate of unemployment and a fiscal recession (Gopinath, 2020; International Labour Organization, 2020). Reports indicate that caregivers who are most likely to be impacted by employment layoffs are also those who are in precarious financial positions and unable to absorb unexpected or prolonged economic losses (Korzinski, 2020). Given previous evidence detailing the strong links between caregiver socioeconomic stress and the risk for child maltreatment and IPV (Courtin et al., 2019; Stith et al., 2009), it is possible that the economic-related impacts of COVID-19 may contribute to elevated rates of child maltreatment; however, this relationship has not been substantiated.

A second and equally concerning risk factor related to child maltreatment and which has found to be elevated in the context of COVID-19, is caregiver-related stress and burnout (Hiraoka & Tomoda, 2020; Lee et al., 2020; Spinelli, Lionetti, Pastore, & Fasolo, 2020; Wu et al., 2020). The absence of daycare, school, and community-based programming for children and adolescents, as well as the loss of caregiving supports, has increased the stress experienced by primary caregivers (Cameron et al., 2020; Craig & Churchill, 2020; Parkes, Sweeting, & Wight, 2015). Defined as a caregiver’s response to chronic and overwhelming parenting stress (Mikolajczak, Gross, & Roskam, 2019), caregiver (i.e., parental) burnout is characterized by symptoms of mental and physical exhaustion, increased sleep disturbance, relationship strain with one’s children, and a significantly decreased sense of caregiving competence (Mikolajczak, Raes, Avalosse, & Roskam, 2018, 2019). Caregiver burnout and high levels of caregiving stress have also been found to be positively associated with couple conflict, abusive and neglectful caregiving practices, as well as caregiver mental health challenges (Brianda et al., 2020; Mikolajczak, Brianda, Avalosse, & Roskam, 2018), the latter of which is also associated with harsh and dismissive caregiving behaviour. Collectively, this information indicates that COVID-19 related restrictions are having negative impacts on caregiver stress and wellbeing, but the extent to which these impacts translate to any increase in child maltreatment is unclear.

Despite emerging literature related to increases in individual, family and community-level risk factors for child maltreatment, there is no high quality evidence indicating that the implementation of public health measures to contain the spread and impact of COVID-19 has led to an increase in child maltreatment in Canada, or globally. For example, there have been anecdotal reports of substantial increases in the rate of calls to regional and national-level crisis support lines. Specifically, IPV-focused calls to police and social service organizations have tripled in China and increased by over 30% in France (Allen-Ebrahimian, 2020; Bradbury-Jones & Isham, 2020; Duncan, 2020; Lee, 2020; Reuters News Agency, 2020). This may suggest that IPV—and by extension, children’s exposure to IPV—has increased in the COVID-19 context. Similarly, leadership for the Canadian-based crisis line for children, Kids Help Phone, have noted their concerns related to child maltreatment during the pandemic; calls to the crisis line have doubled or tripled in many Canadian provinces since the onset of school closures and quarantine measures (Naccarato, 2020; Pitt, 2020; Price, 2020). Importantly however, a formal report which disentangles the extent to which these crisis calls are specific to distress related to child maltreatment and have changed—if at all—from the pre-COVID to the COVID-19 context, has not been provided.

Peer-reviewed empirical literature which evaluates the impact of COVID-19 for child maltreatment is just emerging; though none of this information is focused on Canada and caution related to the interpretation of this evidence is warranted. First, a chart review in the UK found a 1,493% increase in the clinical presentation of non-accidental abusive head trauma (AHT) among babies and toddlers (aged less than 115 months) over 1-month of COVID-19 related quarantine compared to the average monthly rate of incident AHT presentations at the same medical institution in the three years preceding the quarantine (Sidpra, Abomeli, Hameed, Baker, & Mankad, 2020). Though this estimate is striking, it is important to consider that COVID-19 has led to significant changes in delivery and access of healthcare and social services, including the allocation of specific emergency rooms and hospital wards for COVID-19 related illness. Many centres have diverted non-COVID related health concerns to specific healthcare facilities; this type of system diversion could account for the significant increase in AHT presentations at the authors’ medical institution. Similarly, a recent letter to the editor from a group of pediatricians in the UK noted a one-third reduction in the monthly number of medical examinations related to child maltreatment which were conducted during mandatory quarantine in March 2020 compared to those in the same month for 2019 and 2018 (Bhopal, Buckland, McRone, Villis, & Owens, 2020). The authors of this latter report are careful to note that they believe the changes do not reflect a true reduction in the incidence or prevalence of severe maltreatment; rather, they argue that reductions in clinical cases are likely occurring given quarantining measures that preclude children from having typical contact with education, health and social service professionals in a position to make reports to initiate child protection investigations. Collectively, the limited and low quality evidence available precludes the ability to say with any certainty that COVID-19 has contributed to changes in child maltreatment. However, it is important to reiterate that up to one-third of Canadians self-report a history of child maltreatment in non-pandemic circumstances (Afifi et al., 2014) and there are longstanding concerns related to increases in the risk factors for child maltreatment exposure during viral pandemics and extreme events (Cerna-Turoff, Fischer, Mayhew, & Devries, 2019; Green, Chase, Zayzay, Finnegan, & Puffer, 2018; United Nations, 2020; Seddighi, Salmani, Javadi, & Seddighi, 2019; Serrata & Alvarado, 2019). Thus, as during pre-COVID times, and perhaps more-so given the increase in risk factors, there is a need to identify and provide evidence-based, educational interventions that can continue to prepare HSSPs during COVID-19 to safely recognize and respond to child maltreatment in their practice encounters.

1.2. Overview of educational interventions for HSSPs

An efficacious digitally-based educational intervention capable of improving Canadian HSSP knowledge, attitudes, skills, and behaviour related to recognizing and responding to all forms of child maltreatment has not been previously identified. To date, systematic reviews by Carter, Bannon, Limbert, Docherty, and Barlow (2006) and Turner et al. (2017) provide two key pieces of information about educational interventions evaluated among HSSPs within and outside of Canada The first relates to a limited focus on certain types of HSSPs and certain types of child maltreatment. Specifically, interventions included in these reviews (and interventions that have been published since) have tended to focus on medical, nursing, midwifery, dental, and early childhood care
providers in the United States (US), as well as recognition and response to child physical and sexual abuse among young children (Carter et al., 2006; Kenny, 2007; Mathews et al., 2017; Palusci & McHugh, 1995; Paranal, Washington Thomas, & Derrick, 2012; Parker, McMillan, Olson, Ruppel, & Vieth, 2019; Rheingold et al., 2015; Smeekens et al., 2011; Turner et al., 2017; Yang et al., 2020).

Importantly, few of these interventions have undergone high quality evaluations and it remains unclear as to whether or not any of these educational interventions yield reductions in the recurrence of the type(s) of child maltreatment investigated, nor is it clear whether the interventions yield improved health outcomes for children and their caregivers.

Second, it is clear that interventions vary in their content coverage and pedagogical approaches (Carter et al., 2006; Turner et al., 2017). Interventions disproportionately emphasize the legal requirements for mandatory reporting, as well as screening for child maltreatment exposure. A focus on screening is particularly prominent among educational interventions that consider child exposure to IPV and which focus on children and adolescents who present to the emergency department for suspected physical abuse (e.g., see Smeekens et al., 2011). This is despite the fact that there is no evidence to support universal screening for exposure to child maltreatment or other adverse childhood experiences (Anda, Porter, & Brown, 2020; T.L. Campbell, 2020; McLennan et al., 2019). The World Health Organization (2015) recommends against universal screening for child maltreatment in the context of any mental health or developmental assessment for children. Comparatively little emphasis has been given to developing and evaluating interventions to improve HSSPs knowledge, attitudes, skills and behaviours related to recognizing all maltreatment types, using strategies that help to minimize the possibility of harms related to mandatory reporting, and using non-screening approaches for child maltreatment identification. This is concerning given evidence which indicates that the co-occurrence of different forms of child maltreatment is high (Chamberland, Fallon, Black, & Trocme, 2011) and the literature has identified ways of reducing the possibility of harm during a mandatory report; these include empathic responding, having repeated discussions about the limits of confidentiality, and including caregivers and children in the reporting process (where safe and appropriate to do so), among others.

Online educational interventions offer an important opportunity to ensure Canada’s HSSPs continue to receive child maltreatment training throughout the COVID-19 pandemic. In addition, web-based interventions that address a multidisciplinary audience are compelling for the Canadian context given that Canada is characterized by a number of unique factors that can make population-level improvements in HSSP knowledge, attitudes, skills and behaviours related to child maltreatment challenging. Specifically, Canadian HSSPs work in widely diverse settings, including hospital and community-based clinical contexts, client homes, school systems, as well in urban, rural and remote areas. Second, there are no national standards for HSSP training, education, and responses related to child maltreatment. Education requirements for HSSPs vary across the country, as does their scope of practice. While some national health professional organizations have developed consensus statements, guidelines, curricula and training for their membership, the review of these materials are seldom mandatory and the scope of information often varies and can be limited, out-date or even, contradictory (e.g., see Durrant, Ensom, & Youth, 2004; Canadian Paediatric Society Child & Youth Malreatment Section, 2007; Stewart, MacMillan, & Wathen, 2013).

Stand-alone, web-based training on child maltreatment offers the opportunity to effectively educate a large number of HSSPs across geographical and disciplinary boundaries in a flexible and cost-effective manner. In addition, evidence indicates that generally speaking, web-based education is as effective than traditional learning approaches for HSSPs (Murad, Coto-Yglesias, Varkey, Prokop, & Murad, 2010); emerging evidence indicates that this is also the case for education related to child maltreatment (Kenny, 2007; Rheingold et al., 2015; Smeekens et al., 2011) and other related forms of family violence (Divakar et al., 2019). This information is especially relevant for the COVID-19 context given that there is no date by which HSSP educational institutions and programs can expect to resume in-person education efforts. Collectively, this information indicates an important need for a web-based, evidence-informed, educational intervention that addresses HSSP recognition and response to all forms of child maltreatment, across clinical specialities, and which takes into consideration federal and provincial variability in Canada’s social, legal, and healthcare responses to child maltreatment.

2. Overview of the Violence, Evidence, Guidance, Action (VEGA) project

The Violence, Evidence, Guidance, Action (VEGA) project is a web-based platform of educational resources designed to assist Canadian HSSPs in recognizing and responding safely to family violence, including child maltreatment and IPV. In terms of child maltreatment, VEGA addresses physical abuse, sexual abuse, emotional abuse (also known as psychological abuse), neglect, and children’s exposure to intimate partner violence. VEGA material acknowledges that children may be maltreated by someone in a position of power, who may be an individual that they know in their own or someone else’s family or in an institutional or community setting; more rarely, children can be maltreated by someone they don’t know (for example, through the Internet).

While primary prevention of family violence is an essential goal for researchers, policy makers, and clinicians, VEGA was primarily created to support HSSPs who are caring for clients who have already experienced maltreatment. As such, VEGA can be considered an educational resource that supports tertiary prevention (i.e., reducing negative consequences of child maltreatment and preventing recurrence). The development of VEGA was funded by the Public Health Agency of Canada (PHAC); the need for resources had been identified based on feedback from HSSPs that they receive little practical training about how to adequately support children and adults who have experiences with family violence (Beynon et al., 2012; Kimber, McTavish, Couturier et al., 2019; McTavish et al., 2017). VEGA educational resources were co-developed with representatives from 22 national healthcare and social service organizations that were selected by the federal Minister of Health’s Office; the representatives participated as members of the National Guidance and Implementation Committee (NGIC). As such, the resources are a culmination of research, clinical, and administrative expertise across the included healthcare and social services organizations, together with evidence review groups that were formed with colleagues in Canada and beyond. The simultaneous inclusion of IPV and child maltreatment education was purposeful and was informed by the
The VEGA educational resources are informed by self-efficacy theory (Bandura, 1977; David & Schiff, 2017; Schiele, Weist, Youngstrom, Stephan, & Lever, 2014; Turner, Nicholson, & Sanders, 2011) and models of cognitive processing (Adams, 2015; Anderson, Krathwohl, & Bloom, 2001; Armson, Elsmie, Roder, & Wakefield, 2015; Shannon, 2003) and can be completed as a self-directed learning opportunity or via a facilitated workshop or webinar. Regardless of modality, the completion of VEGA involves the review of four core modules that take approximately 3.5 h in total and cover background information on IPV and child maltreatment, concrete strategies for practicing trauma- and violence-informed care (TVIC), and practical guidance about how to recognize and respond safely to child maltreatment and IPV. Background information on IPV and child maltreatment includes definitions, prevalence, risk and protective factors, and common social, emotional, and physical health impacts. For example, in an introductory VEGA module, “Know about Family Violence in Canada,” risk and protective factors of child maltreatment and IPV are discussed. These are considered from an ecological model and include attention to: societal factors (e.g., lack of adequate legislation to protect children vs laws against all forms of maltreatment), community factors (e.g., lack of accessible services vs coordination of resources and services), relationship factors (e.g., lack of support vs safe social support network), and individual factors (e.g., history of child maltreatment vs history of positive parenting). The module on TVIC introduces the ‘Environment, Approach, and Response (EAR)’ model that highlights the principles of TVIC, which include attention to the provider’s environment (e.g., does the environment allow for safety and privacy?), the provider’s overall approach to care (e.g., is the provider alert to physical, emotional, and cultural safety?), and provider responses (e.g., does the provider ask about child maltreatment and/or IPV when indicated and safe to do so?). Finally, the modules on child maltreatment and IPV include care pathways, scripts, how-to videos, a handbook, and interactional educational scenarios for practicing skills learned in the educational resources. Scripts and how-to videos attend to skills that HSSPs commonly indicate are barriers to effective practice, such as when and how to make a call to child welfare, how to separate a child from a caregiver when questions about potential child maltreatment are indicated, or how to assess for an adult’s immediate safety when IPV is suspected. Scripts and videos offer examples of how these difficult interactions can be undertaken and providers are advised to tailor wording to fit their existing practice setting. The incorporation of learning tools (e.g., focused opportunities for deliberate practice (Ericsson, 2008), test-enhanced learning (Larsen, Butler, & Roediger, 2008), encouragement of role play (Fominykh, Leong, & Cartwright, 2018), and etc.) support learner improvements in knowledge, attitudes, skills, and behaviours related to child maltreatment and IPV. Informal feedback from trainee and licensed practitioners suggests that VEGA holds promise in improving knowledge and skills related to recognizing and responding to child maltreatment and IPV, however, a formal evaluation has not yet been conducted.

3. Overview of the Researching the Impact of Service provider Education (i.e., RISE) project: an evaluation of VEGA

In the field of HSSP education, there is little empirical evidence regarding the translation between intervention development, implementation, and evaluation; there is even less evidence regarding the mechanisms through which education interventions can be implemented effectively and sustained under real-world conditions. We are not aware of any evidence which speaks to these issues in the context of a global pandemic. Importantly, the key factors for successful implementation and sustainability of educational interventions and the extent to which these translate to improved knowledge, attitudes, skills and behaviours among HSSPs, as well as improved health outcomes among patients, remains speculative. Recent work by Thomas et al. (2017); Price et al. (2015); Carney et al. (2016) and colleagues identify potential for models of implementation science to reduce the chasm between the development, implementation, and sustainability of educational interventions among HSSPs. Implementation science differs from knowledge translation (i.e., application of knowledge) and dissemination (i.e., distribution of knowledge) given its explicit focus on identifying and addressing the factors impacting intervention saliency and sustainability as an embedded component of implementation and evaluation efforts.

Importantly, models of implementation science acknowledge that educational interventions for HSSPs take place within a complex context of macro (e.g., regulatory body support, accreditation), meso (e.g., institutional policies and support), and micro (e.g., provider) factors; each of these factors can influence the uptake of the educational intervention and the ability to achieve its primary (i.e., practitioner) and secondary (i.e., patient) impacts (Childs, Blenkinsopp, Hall, & Walton, 2005; Curran, Fleet, & Kirby, 2006; Mansouri & Lockyer, 2007; Marinopoulos et al., 2007). For example, evidence from the clinical and education realms indicate that negative attitudes regarding the relevance of the intervention for one’s ‘real-world’ setting can be a barrier in the uptake of interventions among HSSPs (O’Doherty et al., 2018; Thomas et al., 2019). Similarly, many HSSPs are free to choose the continuing education opportunities that they perceive to best meet their learning needs, which creates challenges for population-level scaling of an educational intervention within and across HSSP disciplines. While these exemplars are not an exhaustive list of the factors that could influence VEGA
uptake, sustainability and impact, they do provide insight into considerations that need to be accounted for to achieve VEGA implementation and evaluation goals. Given this information, we have launched the Researching the Impact of Service provider Education (RISE) Project, which is using a model of implementation science and a multi-phase mixed method research design to support the initial uptake, evaluation, and scalability of VEGA among HSSPs within the Canadian context.

The RISE Project, funded by the Public Health Agency of Canada, is a collaboration between investigators at McMaster University, as well as the universities of Toronto, McGill and Calgary and involves partnership with eight HSSP professional organizations (see Table 1) to evaluate the use of VEGA within their provider and student membership across the country. The RISE Project will take place over 3.5 years, and is informed by a novel application of the Active Implementation Framework (AIF). The AIF is an evidence-based synthesis of frameworks derived through a systematic review of implementation successes and failures in the areas of education, nursing, mental health, social services (e.g., child welfare), as well as others. Specifically, the AIF outlines five components for implementation and evaluation success (see Fig. 1), including: (1) a Usable Intervention; (2) Implementation Stages; (3) Implementation Teams; (4) Implementation Drivers; and (5) Quality Improvement Cycles (Fixsen, Blase, Timbers, & Wolf, 2001; Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; Fixsen, Blase, Metz, & Van Dyke, 2013; Metz & Bartley, 2012; Metz et al., 2015). Previous work indicates that implementation and evaluation efforts guided by the AIF have resulted in the effective translation of interventions to support practice change among providers in healthcare, social service, and education-based settings (Barac, Kimber, Johnson, & Barwick, 2018; Barwick et al., 2019; Couturier et al., 2017, 2018; Kimber, Barac, & Barwick, 2017; Kimber, Barwick, & Fearing, 2012; Metz et al., 2015; Romney, Israel, & Zlatevski, 2014; Saldana, Chamberlain, Wang, & Hendricks Brown, 2012; Velonis, O’Campo, Rodrigues, & Buhariwala, 2019).

Currently, the RISE Project is recruiting HSSPs via its collaborating organizations for the qualitative strand of data collection in Phase 1; we expect that the quantitative strand of data collection for Phase 1, which will involve a national-level, cross-sectional survey of members belonging to our collaborating organizations, will occur in Fall 2020. An open-access publication of the full project protocol is forthcoming. Though the start of the RISE Project was briefly delayed due to the unprecedented disruptions in clinical and research activities related to COVID-19, we propose that our model of implementation science, which explicitly attends to the macro, meso, and micro factors impacting implementation and evaluation activities, has allowed our team to ‘pivot’ data collection strategies to maximize feasibility in the COVID-19 context. Importantly, the three phases of the RISE Project constitute a rigorous implementation and evaluation program that will provide important information about the value and impact of VEGA for improving HSSP recognition and response to child maltreatment and IPV for the COVID-19 context and beyond. Given that there is no date by which HSSP educational institutions and programs can expect to resume in-person education efforts, the virtual implementation of VEGA and the RISE Project provide the important opportunity to continue to increase the capacity of Canada’s HSSPs to adequately and safely recognize and respond to child maltreatment, while simultaneously advancing education scholarship for the field of child maltreatment and family violence, more generally.

4. Conclusion

Reducing child maltreatment and its negative impacts remains one of Canada’s most pressing public health challenges. Even in the context of COVID-19, Canadian HSSPs are optimally positioned to recognize and respond to child maltreatment exposure. Despite their important role, as well as clear evidence that indicates that early recognition and response to child maltreatment is critical for enabling healthy child development, HSSPs continue to receive insufficient training that facilitates optimal recognition and response. VEGA is a novel, online educational intervention that has the potential to make population-level improvements in HSSP knowledge, attitudes, skills, and behaviours related to the early recognition and response to child maltreatment, as well as IPV. Using a model of implementation science and a multi-phased mixed method research design, we expect that the evaluation of VEGA via the RISE Project will address essential questions for HSSP curriculum delivery and clinical practice guidelines; we anticipate the RISE Project will be of practical relevance to practitioners, clinical trainees, researchers, educators, advocates, and policy makers in the COVID-19 context and beyond.

Table 1
Collaborating Organizations for the RISE Project.

| Organization                                      | Approximate Size of Membership |
|---------------------------------------------------|--------------------------------|
| Royal College of Physicians and Surgeons of Canada | 52,000a                        |
| Canadian Psychiatric Association                  | 2,700                          |
| Canadian Association for Emergency Physicians     | 2,500                          |
| Canadian Paediatric Society                       | 3,500                          |
| The Association of Faculties of Medicine          | 29,200b                        |
| College of Family Physicians of Canada            | 38,000                         |
| Child Welfare League of Canada                    | 2,000                          |
| Canadian Association of Social Workers             | 20,000                         |

a Note, it is possible for practitioners to hold multiple memberships across our Collaborating Organizations; thus, a particular physician (for example) could be counted in the approximation for the Royal College of Physicians and Surgeons of Canada as well as the Canadian Psychiatric Association.

b Approximate estimate includes undergraduate medical students, graduating medical doctors, and postgraduate trainees.
Ethics approval and consent to participate

The conduct of the RISE Project has been approved by the Hamilton Integrated Research Ethics Board (Project #9410).

Consent for publication

Not applicable.

Declaration of Competing Interest

The authors report no declarations of interest.

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