Original Research

The Child and Family Traumatic Stress Intervention in Canadian child and youth advocacy centres

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Abstract

Background: The Child and Family Traumatic Stress Intervention (CFTSI) is an evidence-based early intervention shown to reduce post-traumatic stress in children and adolescents. This intervention has not been explored in the context of the Canadian healthcare landscape, and more specifically at Child and Youth Advocacy Centres (CYACs); multi-disciplinary service hubs who serve those exposed to trauma.
Objective: Examine the feasibility and usefulness of the CFTSI in the context of Canadian CYACs.
Methods: A mixed-methods design was utilized, consisting of a validated, nationally distributed online survey which served as an environmental scan, and key informant interviews, which were thematically analyzed.
Results: 15 of 29 invited centres participated. Prior to this study, six of 15 respondents had been aware of the CFTSI. Furthermore, two participants reported current use of the CFTSI. Of the 13 centres not using it, 10 expressed that the CFTSI would be an acceptable and relevant intervention at their centre, and there was significant interest in possible future implementation. Interviews with experienced clinicians revealed benefits and challenges of the CFTSI's format, and the influence of family structure, culture and trauma history on outcomes. Finally, some considerations specific to Canadian centres were uncovered and direction for future research suggested.
Conclusion: Our findings collectively underscore the potential of the CFTSI to bolster mental health services, which are a priority area requiring improvement at Canadian CYACs. Additionally, this study highlights benefits and challenges relevant to Canadian practice and wide-spread implementation of the CFTSI in this country.

Background

Childhood trauma is a pervasive, yet relatively unspoken issue which can have impacts on the mental, physical health and overall wellbeing of exposed children and adolescents. Child and Youth Advocacy Centres (CYACs) serve this demographic and reduce system-based trauma by integrating the work of child protection, criminal justice and mental health services[1]. The CYAC structure has been shown to generally improve accessibility, efficiency, productivity and coordination of care, compared to traditional community-based approaches[2]. However, a review by the Department of Justice described mental health services as a shortcoming in these centres, with many Canadian CYACs using a patchwork of internal and external services in attempt to meet patients' needs[3]. Timely and effective mental health services are particularly important for children and youth exposed to trauma, given the detrimental impacts this can have on development[4].

According to the General Social Survey on Victimization, 30% of Canadians experience some form of physical or sexual abuse by the age of 15 years[5]. A recent review of referrals to mental health partner agencies of Canadian CYACs found that 53.4% of children had exposure to multiple forms of maltreatment, and most had greater than five presenting concerns or symptoms[6]. Many victims of trauma immediately experience some form of psychological stress[7], and between 10-18% continue to experience chronic symptoms[8,9]. Post-traumatic stress disorder (PTSD) can develop in traumatized youth and adults alike, with a Canadian lifetime prevalence of 9.2%[10]. Early intervention can address initial symptoms and bridge the gap between acute treatment and longer-term interventions, thereby preventing chronic trajectories of mental health issues[11].

The Child and Family Traumatic Stress Intervention (CFTSI) is an evidence-based early intervention that was developed over a decade ago at the Yale Child Study Center. It can be used with children aged seven to 18 years from diverse ethnic backgrounds, with single or multiple trauma exposures. It is initiated within 45 days of a traumatic event or disclosure of trauma. The goals of the CFTSI are to improve identification of children impacted by trauma, reduce downstream psychological impacts, address stressors and practical needs, assess the need for longer-term treatment, and strengthen familial communication and coping skills[12].

Delivered by a trained mental health practitioner, the CFTSI consists of five to eight sessions de-

livered over four to six weeks, and includes individual sessions with the child and caregiver, as well as joint sessions. Stress symptoms are assessed in both parties using validated objective materials. Goals around communication and coping skills are established and psychoeducation about trauma is provided. Progress in these areas, as well as distress, are reassessed throughout, and additional treatment and/or case management needs are identified for follow-up[13]. This approach is regarded as beneficial because it focuses on bolstering protective factors in the recovery process, such as internal reaction management and external support[14,15,16].

The CFTSI can significantly lower post-traumatic symptom scores over time, and reduces full and partial PTSD diagnoses at three-month follow-up[17]. Additionally, this intervention increases concordance between caregiver and child-reported traumatic stress symptoms, suggesting improved communication between parties[18]. Finally, use of the CFTSI has been shown to result in meaningful improvements in symptoms of caregivers with clinical levels of post-traumatic stress. This is significant, as parental post-traumatic stress is associated with negative outcomes for children, and thus improvements in the mental health of caregivers may have a compounding, critical impact on the health of their children[19].

As an intervention designed to improve outcomes in the immediate aftermath of a traumatic event or disclosure of such, the CFTSI is directly relevant and applicable to the work of CYACs. However, the current literature pertaining to this intervention is limited to the United States, and the CFTSI has only been adopted by a small number of CYACs in Canada. The fact that CYACs are relatively novel establishments in the Canadian healthcare framework[2] provides a unique opportunity for proactive research and implementation of effective mental healthcare, such as the CFTSI, at these centres. This study aims to examine the feasibility and usefulness of the CFTSI in the context of the Canadian healthcare landscape, with the goal of shaping and improving practice at CYACs in Canada.

Methods

Approval was obtained from the IWK Health Centre Research Ethics Board in Halifax, Nova Scotia, Canada. Between June 2020 and January 2021, a two-part mixed-methods design was utilized, consisting of a nationally distributed online survey and key informant interviews.

A survey was developed to ascertain awareness and current use of the CFTSI at Canadian CYACs. Prior to distribution of the survey, content and response process validity were assessed by four experts in the fields of therapeutic practice and trauma-informed care. This assessment of validity was used to establish the reliability and appropriateness of the survey tool[20]. The panel provided feedback on the survey using a content validity index (CVI), by rating items for relevance via Likert scale (1 = highly irrelevant to 4 = highly relevant). Response process validity was assessed using the think-out-loud model, in which participants shared their thoughts on each survey item and the overall clarity of the survey with respect to its objectives[20]. Feedback was incorporated into refinement of the survey. A brief description of the CFTSI and its implementation requirements (Figure 1) was included in the survey, to standardize the level of knowledge for those without prior awareness or experience with the CFTSI.

The survey was built using the secure online platform Research Electronic Data Capture (REDCap) and was distributed via email to 29 Canadian CYACs

Consider the following information when answering questions in this section.

The Child and Family Traumatic Stress Intervention (CFTSI) is an evidence-based, family-centred early intervention which is initiated within 45 days of a potentially traumatic event or disclosure of trauma experienced by children age 7 to 18 years. The overarching goals of this intervention are to improve identification of children impacted by trauma, prevent downstream psychological impacts and assess the need for continued support. Post-traumatic stress symptomology, caregiver-child communication and coping skills are primary outcome measures of this program.

Implementation Requirements:
• Agencies must be trained in teams that include a minimum of one supervisor and two clinicians.
• Standard training protocol includes:
(a) 2-day, in-person training
(b) minimum of 9 out of 12 one-hour consultation calls within approximately six months following the initial training
(c) minimum of 3 cases during the consultation period
(d) collection and submission of clinical and continuous quality improvement data using the CFTSI data system

Figure 1. Standardized information about the CFTSI provided to survey participants, as it appeared in REDCap.

in operation at the time of study. The Dillman Method was employed to maximize response rate[21]. The invitation to participate was sent to the site lead, director or manager at each CYAC, who in turn selected one most appropriate representative to complete the survey. All survey data was anonymized, via participant ID number, prior to analysis.

Key informants were identified for interview based on practical knowledge or experience with the CFTSI, according to their anonymized survey data. Interviews were conducted to more fully understand current practice involving the CFTSI in Canadian CYACs. Individual interviews took place securely over Zoom for Healthcare, and a validated, semi-structured interview guide was used, which allowed each participant to set priority areas for discussion. Interviews were recorded on a hospital-authorized recording device and were transcribed and stored on a secure, encrypted hard-drive. Transcripts underwent manual thematic content analysis[22,23], using a coding guide. All interview data was also anonymized and reported without identifiers.

Results

Part I: CYAC characteristics, practice patterns & awareness of CFTSI

The survey was completed by 15 of 29 invited CYACs. Of the 14 centres that did not participate, nine did not respond to the invitation and five were operating under models that precluded them from providing adequately qualified participants.

The team composition and scale of participating centres varied, but Social Work was the most common profession represented, with 11 of 15 centres having this profession in their care team. Nine of 15 centers offered direct mental health services, the most common modality being Trauma-Focused Cognitive Behavioural Therapy (CBT) (n = 8). The other six centres had partner agencies for therapy referrals, mainly Victim Services (n = 4) and Community-Based Mental Health & Addictions Services (n = 5). Nine centres offered interventions specific to the prevention, diagnosis and/or management of post-traumatic stress. All 15 centres serviced a client population within seven to 18 years of age.

Prior to this study, nine of 15 centre respondents had been unaware of the CFTSI. The six respondents who were previously aware of this intervention were located mainly in Western provinces and Ontario. Additionally, 4/7 of those in operation for >5 years were aware of the CFTSI, while 2/8 of those in operation for >5 years were aware. The National Child Traumatic Stress Network was the most common way (4/6) clinicians were made aware of the CFTSI. Of those respondents who were aware of the CFTSI, two were currently using it at their centre, and each had been offering it for less than two years. These centres expressed strong agreement that the CFTSI is an acceptable and relevant intervention for use at their CYAC.

Of those not using the CFTSI, 10 of 13 expressed agreement or strong agreement that the CFTSI would be an acceptable and relevant intervention at their centre, while three were unsure. 12/13 expressed interest in learning more about the CFTSI and 7/13 expressed interest in implementing the CFTSI at their centre in the future. None of these centres were aware of other departments or agencies currently offering the CFTSI in their catchment area.

Part II: Thematic analysis of key informant interviews

Three key informants were identified for follow-up interview. All three participants were trained in the field of Social Work, and were evenly distributed in locations across Canada. One of the three participants did not use the CFTSI directly, but was previously aware of it and was currently involved with a similar therapeutic model in both structure and objective. Several prominent themes emerged from the interviews with these clinicians.

Benefits & challenges of a family-focused, highly structured approach

> *"I have many good things to say about the model, but there are times when kids and families spin out of the model, and sometimes there needs to be redirections and alternative approaches".*

Firstly, the caregiver-child approach was consistently recognized as a major benefit of the CFTSI. Education for caregivers was cited as a source of reinforcement of the skills taught to children in therapy, and family support was identified as a protective factor. Additionally, the well-defined time frame and clear clinical goals were identified as appealing aspects of the CFTSI, for both clinicians and families. Clinicians benefit in that the approach is well-organized and deliverable, and families benefit in that they have realistic expectations of the therapy and receive it at the point of maximal impact, rather than later when life circumstances may have changed.

However, the highly structured approach of the CFTSI presented a series of challenges as well. The redundancy of questionnaires, although important to the integrity of the model, was cited as a difficulty for some pa-

tients and families. According to an informant whose caseload was primarily composed of younger clients, the heavy emphasis on psychometrics was identified as a particular challenge for this age group. Additionally, real-world complexities such as pressing emotional or situational issues that may arise in session would sometimes take priority and hinder proper completion of clinical materials.

Overall, training for the CFTSI was highly regarded by interviewees who had participated. Training must be completed by Masters, PhD or MD-level mental health clinicians, and consists of a two-day in-person session, nine to 12 additional consultation calls, and a minimum of three cases reviewed via follow-up consultation (Carrie Epstein, personal communication, June 6, 2020). The required post-training consultation was noted as being focused on adherence to the model and lacking in case-driven clinical richness. As a solution to this, one participant noted that clinicians at their centre engage in regular peer consultation to review cases more fully. Also, one informant expressed concern regarding potential difficulties that clinicians familiar with less-directive therapies, such as play therapy, may face when implementing the very structured CFTSI.

Significance of family structure, culture & trauma history

> *"...Parental support often leads to better outcomes... I can do the work within those sessions when I have supportive, receptive caregivers, but I cannot do the work when that's not a strong skill set within the family".*

Another common theme that emerged was the importance of context. The caregiver-child approach was consistently recognized as a major benefit of the CFTSI, however the effectiveness of the intervention was described as being significantly reduced in cases without a close, receptive and supportive guardian willing to engage in communication. One participant noted that this premise of the CFTSI directly opposes the values of families from cultural backgrounds with strong stigma surrounding open discussion of trauma, while another described some perceived cross-cultural efficacy within their caseload. Furthermore, language barriers and the use of interpreters was cited as having a negative impact on the efficiency of delivery and overall effectiveness of the intervention. Finally, the CFTSI was described as particularly effective in cases of acute trauma, where communication and coping skills are adequate catalysts in the recovery process. However, in more complex cases, such as those involving relational or developmental trauma, the CFTSI often served simply as a stepping-stone to more targeted therapies.

Considerations for Canadian centres

> *"...We're the only ones that offer therapy services... We are a non-profit that kind of took the lead of creating the CYAC, so funding is always an issue".*

Adequate case load/referral base (i.e. police service, child welfare and/or medical clinics), staffing and administrative support, and funding were all identified as important considerations for centres looking to implement the CFTSI. These issues have been recognized by developers of the intervention, as the application process includes an organizational readiness assessment, detailing a centre's peri-traumatic case load and eligible trainees (Carrie Epstein, personal communication, June 6, 2020). Considering that Canada's CYAC network is comparatively less developed and robust than that of the United States, these may be significant limiting factors for many centres, especially non-profits and those serving less-populated regions.

Another consideration was presented by one informant who explained that, although the materials for the CFTSI have been translated to Spanish, this language was rarely used in their practice. Thus, the value of translation in a single language is limited for Canadian centres serving densely-populated regions with extremely diverse demographics and multiple languages spoken.

Finally, a participant proposed that CYACs in Canada are relatively less strained than those of the United States, allowing for greater availability of long-term therapies. According to this clinician, such therapies are often preferential for those with complex traumas and/or requiring more sustainable supports; thus, it may be justified to bypass the CFTSI, regardless of its convenience, provided more appropriate longer-term therapies are readily available and accessible.

Discussion

Childhood trauma has enduring and detrimental effects, as demonstrated by the Adverse Child Experiences (ACE) Study[24]. Felitti and colleagues concluded that a proportional relationship exists between traumatic exposures early in life and risk factors for leading causes of death and disease in adulthood. Poor health outcomes associated with childhood trauma increase demand on the healthcare system and carry profound economic implications as well. A systematic review and meta-analysis examining the lifetime consequences and associated costs of adverse childhood experiences found the total annual cost of ACEs in North America

to be $748 billion USD and that a modest 10% reduction in ACEs could lead to potential annual savings of $105 billion USD or 3 million disability-adjusted life years (DALYs)[25]. Given the breadth and degree with which childhood trauma impacts long-term health status, coupled with the striking financial burden, the importance of investment in tools to address childhood trauma is clear. The CFTSI makes a compelling candidate to help address current gaps in mental health services at Canadian CYACs.

Based on the lack of familiarity with the CFTSI demonstrated in our environmental scan, increased awareness of this intervention among Canadian CYACs may be a good first step to enhance mental health services. However, the CFTSI is certainly not a one-size-fits-all model, and commitment, flexibility and adaptation will be important in facilitating more widespread adoption of this intervention.

Survey results revealed that the US-based National Child Traumatic Stress Network was the most common means by which clinicians were made aware of the CFTSI. Although this is an American network, it may be a valuable avenue to increase awareness of CFTSI in Canada moving forward. Improved awareness and engagement might also be achieved by offering more accessible training modalities, beyond in-person sessions at the Yale Child Study Center. Such options are currently in development, however several stipulations, including a minimum group size of 10 (Carrie Epstein, personal communication, June 6, 2020) may perpetuate barriers for some Canadian centres. Although respondents in this study did not identify financial constraints as a barrier, travel and other associated costs may be limiting factors for less-developed Canadian centres to partake.

Thematic analysis revealed several benefits of the CFTSI. In particular, the combined approach involving both child and caregiver was identified as a strength of the intervention. This is consistent with the existing body of literature regarding early intervention for traumatized youth, which states that outcomes are optimized with caregiver education and involvement[26,27,28,29]. Several challenges with implementing the CFTSI in the context of Canadian CYACs were identified as well. Some of these issues lend themselves to relatively simple solutions, such as alleviating language barriers by expanding the languages in which therapeutic materials are translated. Others, such as complex developmental traumas, lack of supportive caregivers and stigma surrounding mental health, present more significant challenges which require further consideration.

It is pertinent to note that the significance of our findings is potentiated by the manner in which this study was conducted. The merits and pitfalls of an intervention are not necessarily best measured by parameters distantly removed from it. Rather, insights from those who directly work with and deliver the intervention may be more valuable[1]. Thus, the input provided by survey and interview participants is underscored by their experience and working knowledge.

Despite these strengths, this study also had some limitations. All interview participants were trained in the same field, therefore, perspectives from other professions were not reflected in the data. However, this was also somewhat of a benefit, in that profession was eliminated as a variable when reflecting on results. Another limitation was that none of the key informants could speak objectively to the effectiveness of the CFTSI in terms of rates of PTSD in their client population at follow-up. This is due to the relatively short period they have been using the intervention, as well as their designated role in delivery of the therapy and lack of involvement in outcome analysis. However, one clinician noted a perceived decrease in symptoms in most clients, while caregiver distress was not consistently measured.

Overall, there is strong evidence for the CFTSI as an intervention which improves outcomes of childhood traumatic exposures[17,18,19]. Based on our evaluation of its feasibility and usefulness, the CFTSI holds potential to contribute to the enhancement of mental healthcare at Canadian CYACs, by bridging a gap in existing services and providing a family-focused, integrative approach to recovery. This is a crucial area for improvement, as CYACs are still a relatively novel addition to the Canadian healthcare landscape. Moving forward, priority should be set on research and investment in efforts aimed at augmenting mental health services and optimizing outcomes of childhood trauma. Adoption of the CFSTI at CYACs across Canada could offer promise in achieving these goals.

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