International Journal of Child and Adolescent Resilience
Revue internationale de la résilience des enfants et des adolescents

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Volume 9, numéro 1, 2022

URI : https://id.erudit.org/iderudit/1099367ar
DOI : https://doi.org/10.54488/ijcar.2022.313

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Éditeur(s)

Canada Research Chair in Interpersonal Traumas and Resilience/Chaire de recherche du Canada sur les traumas interpersonnels et la résilience

ISSN

2292-1761 (numérique)

Découvrir la revue

Citer ce document

Huartson, K., Hill, T., Killam, T., Kelly, M. & Racine, N. (2022). Physician Perspectives on the Implementation of a Trauma-Informed Care Initiative in the Maternity Care Setting. *International Journal of Child and Adolescent Resilience / Revue internationale de la résilience des enfants et des adolescents*, *9*(1), 205–215. https://doi.org/10.54488/ijcar.2022.313

Résumé de l'article

Objectives: To explore the barriers and facilitators from the perspective of family physicians on the implementation of a pilot trauma-informed care (TIC) initiative to promote resilience, with particular emphasis on asking about adverse childhood experiences (ACEs), in a maternity care clinic.

Methods: Using an exploratory qualitative design, in-depth semi-structured interviews were conducted with family physicians who were practicing in a maternity clinic in a large Canadian city. Interviews were audio-recorded and transcribed verbatim. Transcripts were reviewed by three coders and themes were extracted using thematic analysis.

Results: The analysis of 10 interviews yielded six thematic domains. Three domains pertained to perceived barriers to obtaining an ACEs history including: (1) concern about time management, (2) initial lack of physician comfort with TIC, and (3) cultural limitations of using the ACEs questionnaire. Three themes pertained to perceived facilitators of obtaining an ACEs history including: (1) the importance of a physician champion, (2) a supportive and flexible clinic environment, and (3) improved patient-physician relationships.

Implications: In the context of a broader TIC initiative within a maternity care setting, asking patients about ACEs was generally perceived positively by physicians. Ensuring a supportive clinic environment and adequate staff training may be critical factors that contribute to successful implementation. Future research focused on diverse physician experiences in different settings are needed.

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Physician Perspectives on the Implementation of a Trauma-Informed Care Initiative in the Maternity Care Setting

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Abstract

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Keywords: Trauma-informed care, qualitative, adverse childhood experiences, pregnancy, primary care.

Volume 9, Number/Numéro # 1, pp. 205-215, 2022
https://doi.org/10.54488/ijcar.2022.313

Introduction

Adverse childhood experiences (ACEs) including abuse, neglect, and exposure to family dysfunction, put individuals at risk of developing health and mental health difficulties across the lifespan (Felitti et al., 1998; Gilbert et al., 2009; Mersky et al., 2013). Indeed, ACEs have been identified as one of the most pressing public health concerns of our time costing Canadians upwards of 15 billion dollars in public expenditures (Bowlus et al., 2003). Exposure to ACEs, along with their health and mental health consequences, may put women at increased risk for health difficulties in pregnancy (Kern et al., 2022; Mersky & Lee, 2019), as well as disrupted postpartum mental health (Racine et al., 2020). A growing body of literature demonstrates that the impact of ACEs can also be transmitted across generations, whereby maternal exposure to childhood adversity puts her infant at-risk for poor developmental health (Ahmad et al., 2021; Cooke et al., 2021; Madigan et al., 2017; Racine et al., 2018). Thus, pregnancy and the postpartum period are critical periods for targeted intervention in order to mitigate the transmission of ACEs and promote resilience (Seng, 2015).

Given the implications of ACEs for maternal-infant health outcomes, there has been a rapidly growing movement to incorporate trauma-informed care (TIC) initiatives, including asking about ACEs, into the prenatal care setting (Flanagan et al., 2018). TIC initiatives are system-level approaches that seek to ensure that health care services are provided in a way that is understanding of the impacts of trauma on people's lives, is supportive, and avoids re-traumatization (Substance Abuse and Mental Health Services Administration, 2014). Specifically, TIC is considered to be a "universal precaution" or an approach that should be applied across all maternity clients regardless of their past experiences or presentation (Cuthbert & Seng, 2015; Racine et al., 2019). TIC initiatives can include: (1) training staff on trauma and its impact, (2) ensuring the clinic environment is safe and welcoming, (3) reviewing policies and procedures to ensure safety, (4) training in empathic and transparent communication styles, (5) assessing trauma, and (6) providing targeted interventions as needed (Sperlich et al., 2017). Increasingly, there are calls for the adoption and inclusion of TIC in the maternity care setting to promote resilience in mothers and their infants (Hall et al., 2021).

Research on the implementation of TIC initiatives have demonstrated promising implications for maternal-infant health. Qualitative research has shown that a TIC approach to maternity care is desirable and seen as beneficial by patients, particularly as it pertains to a trusting patient-provider relationship (Gokhale et al., 2020; Muzik et al., 2013). Studies have also demonstrated the positive influence of TIC on infant birth outcomes and maternal care access (Ashby et al., 2019; Racine et al., 2021). Taken together, there is preliminary evidence that TIC initiatives in the maternity setting are associated with enhanced maternal-infant health outcomes.

Although TIC initiatives may enhance maternal-infant health outcomes, it is also important to consider the feasibility and acceptability of its implementation. A TIC initiative can include asking about past and current traumatic experiences, which has been subject to debate in the literature (Finkelhor, 2018; McLennan et al., 2020; McLennan et al., 2019). Although most patients would feel comfortable discussing their ACEs with their healthcare provider (Flanagan et al., 2018; Olsen et al., 2021; Purkey et al., 2018), many healthcare providers do not incorporate asking about ACEs in their routine medical practice or feel comfortable discussing ACEs with their patients (Tink et al., 2017; Weinreb et al., 2010). A quantitative study conducted with 145 obstetrics and gynecology fellows found that less than 30% of physicians spoke to their patients about childhood trauma (Farrow et al., 2018). The largest barriers identified included insufficient time to assess and discuss child trauma with patients, a lack of services available for referral, and a lack of support from the staff. One quantitative study identified training, streamlined workflows, and availability of supports as key components for success of a TIC initiative (Flanagan et al., 2018). No research to date has used qualitative methodology to understand determinants of TIC implementation in the maternity care setting. Given that comfort from healthcare providers is integral to the implementation of TIC initiatives it is important to understand the perceived barriers and facilitators of asking patients about ACEs from the perspective of maternity care providers

Current Study

Building on previous quantitative work, the current study employed a qualitative methodology to identify both barriers and facilitators of asking patients about ACEs in a Canadian maternity setting from the perspective of family physicians. The ultimate goal of the current study is to inform the implementation and adoption of TIC initiatives in the maternity care setting.

Method

Study Design

Based on the identified research question, a qualitative research approach was used. One-on-one, in person, semi-structured interviews were conducted in October and November 2018. This design was used to facilitate brief discussions and allow participants to express barriers that might be difficult to share in a focus group. Ethics approval was obtained from the Institutional Review Board (REB18-0949), and informed consent was obtained prior to conducting interviews.

Participant Recruitment

A convenience sample was obtained from a maternity clinic in Calgary, Alberta, Canada, which offers low-risk obstetrics care to over 2500 pregnant women yearly. The maternity clinic includes a multi-disciplinary team of physicians, social workers, nurses, and mental health consultants that provide care to pregnant people who are: having a singleton pregnancy, intend to have a vaginal birth, < 42 years of age, have no major fetal or uterine anomalies, and do not have a history of pregnancy complications. On average, individuals referred to the clinic are between 18-20 weeks gestation. With regards to clinic demographics, on average individuals are 31 years of age, 43.4% identify as a racial or ethnic minority, 91% are in a relationship, 55% are having their first child, and 6% identify as having significant financial stress. In Summer 2017, the clinic embarked on a pilot project to implement a TIC initiative, including standardized mental health and ACEs history-taking. Physicians and staff received education and training regarding TIC, mental health screening, and ACE history-taking from a physician lead who championed the initiative (see T. Killam). Each patient attending the prenatal clinic completed a standardized ACEs questionnaire using pen and paper at their second maternity visit (see Supplemental Materials 1; Felitti et al., 1998). The physician reviewed all of the findings with the patient orally, assessed their needs, identified their strengths and resilience using supportive statements, and made recommendations and/or referrals accordingly. A recruitment email was sent to all family physicians working in the clinic ($N = 43$) explaining the current study and requesting participation. Interested participants directly emailed one of the researchers to arrange an interview time. Written consent was obtained at the time of the interview. A total of 10 family physicians agreed to participate in the study. Additionally, details on the TIC initiative and an evaluation of the maternal and child outcomes have been published elsewhere (Racine et al., 2021).

Data Collection and Analysis

One researcher (KH) conducted all interviews, which were audio-recorded, transcribed verbatim, and checked for accuracy. Information on participant demographics was collected at the beginning of the interviews. An interview guide developed by the research team for this study was used and consisted of six main questions (see Supplemental Materials 2) asking about barriers and facilitators of discussing ACEs and trauma with their patients, as well as their overall experience with discussing ACEs with their patients. Participants were encouraged to expand on their answers and to add additional comments. Interviews were conducted in a 30-minute time period at the convenience of the physician.

Thematic analysis was used to analyze the transcripts. Specifically, thematic analysis refers to the identification of recurrent themes and patterns in data (Braun & Clarke, 2022). The research team followed Braun and Clarke's six phases of thematic analysis, including familiarization, coding, searching for themes, reviewing themes, defining and naming themes, and writing the report (Braun & Clarke, 2006). Transcripts were independently analyzed by three research members: one family medicine resident (KH), one family physician (MK), and one psychologist (TH). Both MK and TH have experience and expertise with qualitative research. Coders reviewed the transcripts, provided semantic codes for each unit of analysis, and collated codes into potential themes. After individual analysis, the three researchers met to compare and review themes and ensure consistency across the dataset. In line with guidelines for qualitative research (Braun & Clarke, 2006), each theme was identified to be coherent, consistent, and distinctive from other themes. Based on the 10 participants who agreed to participate, thematic saturation was reached, with no additional or new themes being generated, suggesting that our sample size was sufficient.

Results

Participant Characteristics

Ten female family physicians participated in the study. The majority of participants were age 40 and older ($N = 6$, 60%) and the average years of practice amongst the participants was 17 years ($SD = 9.8$). Participants were representative of the physician demographic at the clinic, which is largely composed of senior female physicians.

Themes

Generally, the TIC initiative was well received within the maternity clinic. Physicians reported appreciating the trauma-informed training as well as increased use of screening tools and discussions about trauma with their patients (MacKinnon et al., 2021). A quality improvement project conducted by our group indicated that physician comfort with discussing and addressing trauma with their patients increased from 64% to 85% from pre- to post- TIC implementation (MacKinnon et al., 2021). Using thematic analysis, six themes were identified and classified by the researchers as three perceived barriers and three perceived facilitators related to asking patients about their ACEs. The three identified perceived barriers were: (1) concern about time management, (2) initial lack of physician comfort with TIC, and (3) cultural limitations of the ACEs questionnaire. The three perceived facilitators included: (1) the presence of a physician champion, (2) a supportive clinic environment that was open to change, and (3) improved patient-physician relationships. Definitions for each theme and illustrative examples are provided below.

Concern about time management. A common concern identified by physicians was the time-consuming nature of asking patients about their childhood trauma. Specifically, they shared concerns that being open and discussing trauma would be a time consuming and involved process. However, many participants indicated that asking about ACEs was not as time consuming as they had anticipated and not all patients required more time:

> *Well, at the beginning I was a little bit afraid that, you know, it was going to open this huge Pandora's Box and take me forever to ask it, but it hasn't turned out that way. So, the barrier was the fear, but I did it anyway.*

Another participant explained that for the majority of patients, additional time is not required to discuss past trauma experienced, but that a minority of patients do require additional time:

> *You can't just gloss over it, and I think the people who say it's not going to slow you down and it doesn't have to take a long time, well, I sort of think it does. It's like one in fifty, but those one in fifty are hard.*

Initial lack of physician comfort with trauma-informed care. Despite receiving training on TIC, participants were hesitant to begin asking their patients about ACEs. The notion of "getting thrown in there" was common: "You just wing it at the beginning, and I think most of us sort of learned from experience from the first few that we did". With practice, participants explained that they developed their own dialogue that worked for them and their patients.

The notion of learning through direct practice was also important and physicians identified that they became more comfortable as they implemented the trauma-informed practices over time, including asking about previous trauma. One participant compared ACEs history-taking to breaking bad news:

> *It's like your first appointments of breaking bad news. You get the education. That's great. It helps. But it's actually doing it. So, it's like the first time that you do expose a big trauma history that nobody's ever talked about before, that nervous of like am I going to know what to say? Am I going to know how to handle it? You're not, until it happens.*

Cultural limitations of the ACEs questionnaire. Several participants raised concerns about the western-centric characteristics of the questionnaire that was used to talk to patients about their trauma (i.e., the ACEs questionnaire). "[The questionnaire] is a bit outdated for today's world…there are a lot of immigrants and refugees…were you in a war…which we're not asking". Another participant explained there may also be differences in stigma about discussing past trauma for different cultural groups: "[For some culturally diverse individuals] it would be so unacceptable to air your dirty laundry in public".

Language was also noted as a barrier, as professional translators were seldom available. Additionally, participants identified a cultural disconnect, with some individuals from minority groups not understanding why they

were being asked about their trauma history: "I find that folks from [diverse groups] don't quite get it and wonder why you're asking".

Presence of a physician champion. All study participants expressed the benefit of having a colleague who was familiar with TIC, and provided support and encouragement where needed. The fact that the champion was a physician also was important. When one study participant was asked what helped them engage in discussing trauma with their patients, she replied, "A colleague testing it out first…who did it on her own first and figured out what worked, what didn't work…and having that positive testimony from a colleague that you respect".

Many study participants also commented on how smooth the implementation of the TIC initiative and the discussion of trauma with their patients had gone. This seemed to be a product of the upfront planning done by the physician champion. As one physician noted, "I think our apprehension, though understandable, was very quickly resolved, yes, because it did go well, and I think partly because there was really good planning and education and support".

A supportive clinic environment. Participants valued the supportive clinic environment and appreciated that asking patients about trauma was part of a broader TIC initiative. One participant explained:

> *Well, we had to [engage]. So, it's like I find that's often a very good thing in medicine. So, it wasn't something we spend too much time thinking about whether we were going to do it or not. We just had to. So, you just do it.*

Similarly, the initial apprehension around engaging in TIC was alleviated through a safe and supportive environment where clinicians could practice their skills. It was also helpful that the clinic philosophy fostered change. One participant explained that, "Our clinic is very accustomed to change and taking on new initiatives, and so we've done this side of things before". In essence, an environment conducive to change facilitated the implementation of the initiative.

Improved patient-physician relationships. Participants described improved relationships and encounters with their patients, as well as an increased understanding of how past trauma contributes to their patients' current behaviours:

> *I think, in general, becoming trauma-informed has been a really good clinical tool for seeing patients who had traumatic histories and how that impacts their behaviours now. I think just changing the subconscious perspective of both why they're doing the behaviours they are, or why they can't change the behaviours, leads to a much greater understanding and empathy.*

Discussion

The current study used qualitative methodology to identify both barriers and facilitators of asking about ACEs in the context of a broader TIC initiative, in a maternity setting from the perspective of family physicians. The findings of this study identify several perceived barriers and facilitators to implementing a TIC initiative in a low-risk maternity clinic. Building on previous research, physicians were concerned about the time required to engage in conversations about trauma with patients (Flanagan et al., 2018; Purkey et al., 2018). Interestingly, while time management was a concern, physicians also acknowledged that not every case required additional time. Specifically, some physicians identified that some patients may require more time to discuss concerns while others did not feel the need to have detailed discussions about their past experiences. These findings suggest that physicians may need to have a flexible and patient-centered approach when discussing trauma with their patients.

The physician champion was identified as a critical component for the successful and sustainable implementation of the TIC initiative. This finding is in line with recommendations and guidelines on the implementation of TIC in medical settings (Substance Abuse and Mental Health Services Administration, 2014). The champion helped to alleviate anxieties, and helped to increase comfort levels with talking about trauma with patients by providing practical scripts to initiate conversations with patients. The practice of ACEs history-taking was further reinforced by positive feedback from patients, and a perceived enriched patient-physician relationship. In line with positive outcomes described in previous studies (Purkey et al., 2018), physicians in the current study expressed a deeper understanding of their patients once they knew their histories more fully, which provided a context for future

encounters and conversations. The training and implementation of the TIC initiative was also noted to assist in the cultivation of physician empathy, which can contribute to better patient outcomes (Kim et al., 2004).

An important barrier identified in the current study was related to the limitations of the history-taking tool that was used. Specifically, the western-centric nature of the ACEs questionnaire was a barrier to fully engaging with culturally and ethnically diverse patients. Limitations of the ACEs questionnaire have been identified in previous work and point to the need to move beyond these simple items when discussing trauma (McLennan et al., 2020). Physicians identified barriers of talking about trauma with their culturally diverse patients, which is an important gap and future direction for training. Additionally, research has shown that asking about positive childhood experiences that are associated with resilience can be a culturally sensitive way of identifying protective influences from an individual's childhood (Merrick et al., 2019). The consideration of strength-based approaches as part of TIC initiatives is also an important future direction.

Limitations

Findings from the current study should be interpreted in the context of some limitations. First, the sample size is small and homogenous. Study participants were also self-selected, so there is a potential for selection bias. Participants were familiar with quality improvement projects and change. Additionally, all physician participants were women, which may have impacted their experiences of asking pregnant patients about trauma, as well as their perspectives. Thus, these findings are not likely generalizable to male physicians, clinics that have not prioritized or undergone trauma-informed training, and clinics that are less accustomed to change. Pregnant women in the current study were also at low medical risk. It is unknown if the experiences between these patients and the physicians in this study would translate to a general family practice setting.

Implications

This study adds to the growing body of literature on TIC in primary care, with a specific focus on the maternity setting. Physicians identified both barriers and facilitators to incorporating a TIC approach to their practice. A physician champion and adequate clinic supports were key to physician motivation and successful implementation of the initiative. Real-world practice was identified as one of the best ways to increase comfort for physicians and, therefore, future implementation initiatives would benefit from including in vivo scenarios or role-play to enhance this aspect of training. The goal should be to normalize talking about past trauma as part of a general patient history, in keeping with a trauma-informed approach to patient care. Cultural limitations continue to be a barrier, and future research should explore how to effectively have these conversations with diverse patients.

Funding

We acknowledge the staff at the Riley Park Maternity Clinic who participated in this study. Dr. Nicole Racine was supported by an Alberta Innovates Clinician Fellowship.

Conflict of interest

The authors have no conflict of interest to disclose.

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Supplemental Materials 1

Adverse Childhood Experiences (ACE) Questionnaire

Adverse Childhood Experience Self-rating – Please check all that apply

While I was growing up, before I turned 18:

A parent or other adult in the household would often swear at me, insult me, put me down, humiliate me, or act in a way that made me fear I would be physically hurt.

A parent or other adult in the household would often push, grab, slap, or throw something at me or would hit me so hard that I had marks or was injured

An adult or person at least 5 years older than me touched or fondled me or had me touch their body in a sexual way or tried to or actually had oral, anal, or vaginal sex with me.

I often felt that no one in my family loved me or thought I was important or special or that my family didn't feel close or support or look out for each other.

I often felt that I didn't have enough to eat, had to wear dirty clothes, and had no one to protect me or that my parents were too drunk or high to take care of me or take me to the doctor if I needed to go.

I experienced a parental death, separation, or divorce.

My mother was often pushed, grabbed, slapped, or had something thrown at her or sometimes kicked, bitten, hit with a fist or something hard, or ever repeatedly hit over at least a few minutes or threatened with a gun or knife.

I lived with someone who was a problem drinker or alcoholic or who used street drugs.

A household member was depressed or mentally ill or attempted suicide.

A household member went to prison.

We respect your privacy. If you are not comfortable sharing the above details with your health care provider, please fold over the top, leaving only the Score visible. We encourage you to share this with your partner and have them discuss their ACE score with their family physician.

How many of these types of Adverse Childhood Experiences did I have as a child up until age 18? (how many circles did you check off)?

ACE Score _____

Supplemental Materials 2

Interview Guide

Date: _____

Sex: Male ☐ Female ☐

Age: 20 - 29 ☐ 30 - 39 ☐ 40 - 49 ☐ 50 - 59 ☐ 60 - 69 ☐ 70+ ☐

Years in practice: _____

Special training / interests: _____

1. **What helped you to engage in ACE history-taking at Riley Park Maternity Clinic?**

   _____
   _____
   _____
   _____
   _____
   _____

2. **What barriers did you experience in regards to ACE history-taking at Riley Park Maternity Clinic?**

   _____
   _____
   _____
   _____
   _____
   _____

3. **What has been your experience with the <u>process</u> of implementing ACE history-taking at Riley Park Maternity Clinic?**

   _____
   _____
   _____
   _____
   _____
   _____

4. **Do you have any general tips regarding ACE history-taking that have worked well for you?**

_____

_____

_____

_____

_____

_____

5. **What supports do you need to continue your clinical use of the ACE Questionnaire?**

_____

_____

_____

_____

_____

_____

Additional Comments

_____

_____

_____

_____

_____

_____

Supplementary Questions

1. If you had to choose, would you administer the ACE Questionnaire to all patients entering the clinic? Why or why not?
2. Have you made any changes to your community practice in regards to ACE history-taking?
3. Where would you like to see the ACE Pilot Project go next?