Understanding the meaning of trauma-informed care for burns health care professionals in a pediatric hospital: A qualitative study using interpretive phenomenological analysis

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Abstract

Background: Trauma-informed care includes a range of practices that build a culture of safety, empowerment, and healing. Limited information is available regarding the lived experience of trauma-informed care by healthcare professionals treating burns in a multidisciplinary setting.

Objective: The primary aim of this study was to understand what ‘trauma-informed care’ means to staff and students working in burns at a tertiary pediatric hospital.

Methods: Semi-structured interviews and focus group were conducted with healthcare professionals (medical, nursing, allied health, pre-graduate students) working in pediatric burn care (or their line manager). Analysis of the dataset was undertaken using qualitative methods (interpretive phenomenological approach and qualitative content analysis).

Results: Eleven interviews and one focus group were completed and transcribed verbatim. Three superordinate themes were applicable across the five cohorts: ‘what does trauma-informed care mean?’, ‘being able to deliver trauma-informed care’ (agency) and ‘impact of the setting’. Eleven components of trauma-informed care practice (for example, everyday interactions with patients and colleagues, screening and assessment) and service-level approaches (for example, service provider training) were described by participants.

Conclusions: Healthcare professionals’ experiences of delivering trauma-informed care in a burns centre highlighted the need to clarify the concept of ‘trauma-informed care’ as a
first step. Enabling the workforce to understand trauma-informed care and apply it in everyday interactions with patients and colleagues, and a strategic commitment to practice change needs to be actioned more systematically to support implementation of a trauma-informed care approach in pediatric health services.

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1. Background

Pediatric illness and injury is a common potentially emotionally traumatic event. Nineteen percent of children and young people attending hospital services following injury (from burns, motor vehicle accidents or brain injury) or acute medical illness have been reported as experiencing symptoms of post-traumatic stress in a meta-analysis including 26 studies [1]. Potentially traumatic events (PTE) are characterized by a subjective experience or witnessing actual/threatened death or serious injury to self and/or another [2]. Whilst PTEs include high profile incidents like natural disasters, in children the majority involve childhood events such as accidental injury and exacerbation of chronic illness [3]. Such events may involve a young person and their family to interact with healthcare settings, potentially for medical care that within itself may be painful, invasive or intimidating. Therefore, the treatment itself may be potentially traumatic, which may impact experiences of ongoing medical care [4]. Given this, a call was established for a ‘trauma-informed approach’ (also termed ‘psychosocial care’) in pediatric healthcare [3,5]. It is reasoned that the potential for medical care to become a PTE can be mitigated by addressing distress and supporting the caregiver’s emotional needs by anticipating care that may be needed throughout the recovery process. Such an approach in conjunction with family-centred practices is likely to improve quality of care for young people and their families, and the wellbeing of health personnel [6,7].

A ‘trauma-informed care’ response in healthcare settings recognises that a high proportion of young people in contact with those health services have experienced adversity or maltreatment [8]. Adverse childhood experiences (ACE) have a significant impact on children’s health (physical and mental) and wellbeing across their lifespan [9]. Exposure to toxic stress due to ACE (arising from abuse, neglect, household dysfunction) has been shown to result in physical and hormonal changes in a dose-response relationship, as well as inter-generational epigenetic changes [10,11]. In addition, social determinants of health (such as lack of access to quality education and poverty) can negatively impact health and wellbeing, beginning in childhood, because of neurodevelopmental and biological consequences that accumulate and produce disease [12]. Therefore, prior to implementing innovative methods to address ‘trauma-informed care’, a greater shared understanding of this concept is needed.

The Substance Abuse and Mental Health Services Administration’s (SAMHSA) definition of ‘trauma-informed’ is among the most widely used [3,13]. According to this definition, a trauma-informed program or organization or system thinks and acts in three ways: realises the widespread impact of trauma and understands potential paths for recovery; recognises the signs and symptoms of trauma in all involved with the system; and responds by integrating knowledge about trauma into policies, procedures, and practices whilst actively resisting re-traumatisation. According to SAMHSA, a ‘trauma-informed approach’ is underpinned by six principles (safety; trustworthiness and transparency; peer support; collaboration and mutuality; empowerment, voice, and choice; and cultural, historical, and gender issues) [14]. An alternative definition of a ‘trauma-informed approach’ has its origins in an empirical understanding of post-traumatic stress symptoms [15] and describes a system in which health personnel can identify and react appropriately to the repercussions of traumatic stress on young people, caregivers, healthcare professionals and support staff [16].

In recognition that trauma-informed care is a familiar term that lacks clarity in an operational definition, Bendall et al. [13] in their systematic review and synthesis of trauma-informed care within outpatient and counselling health settings for young people (aged 12–25 years) used content analysis to identify how trauma-informed care was operationalized in practice, in response to criticisms of too little practical guidance on how it should be used in service delivery. Seven (of ten) components of trauma-informed care were identified at a systems-level (e.g., cultural and gender sensitivity). The remaining three involved trauma-specific clinical practice (e.g., psychoeducation). Following this review, the authors called for greater consensus in defining trauma-informed care to progress implementation of agreed trauma-informed care practices in order to examine the effectiveness of trauma-informed care on client and service outcomes moving forward. Therefore, the main research question for this study was what does ‘trauma-informed care’ mean to staff and students working in burns at a tertiary pediatric hospital?

2. Method

2.1. Research design

Qualitative interview data was collected as part of a larger pre-post, mixed methods design examining a trauma-informed care intervention targeting staff education in a burns centre [17]. Qualitative data was collected throughout the study period. Both latent and manifest qualitative methods [18] were used to analyze the dataset generated from interviews and focus group with healthcare professionals between May 2019 and April 2020. Firstly, latent analysis based on the Interpretive Phenomenological Analysis (IPA) approach was undertaken. Interpretive Phenomenological Analysis is an inductive approach to understanding an
individual’s personal account or experience within a context [19]. The researcher’s values and beliefs are considered and a sample size of between 2 and 25 is recommended [20]. The IPA approach was considered ideal to better understand how trauma-informed care is understood and actioned by burns healthcare professionals. Secondly, a qualitative content analysis [18] was undertaken to identify trauma-informed care practices (or lack of) as described by participants. Data was mapped deductively to constructs of trauma-informed care identified by Bendall et al. [13]. The project team had research and clinical backgrounds in pediatric burn care, including medical (RK), occupational therapy (MS, ZT) and implementation science (MS, ZT). The qualitative experience of MS includes leading the design and analysis of five qualitative studies and the publication of six peer-reviewed manuscripts related to these studies as first or senior author.

The Children’s Health Queensland Hospital and Health Service Human Research Ethics Committee (HREC/QRCH/43839), Children’s Health Queensland (SSA/18/QCH/43839), University of Queensland (2018002021/HREC/QRCH/43839) and Queensland University of Technology (190000773) provided ethical and governance approval. The Consolidated Criteria for Reporting Qualitative Research (COREQ) [21] guided the preparation of this manuscript.

2.2. Study population and setting

Purposive sampling (i.e., intentional selection based on roles representing the core membership of the burns multidisciplinary team in the study setting, as well the organization more broadly) included medical, nursing, allied health professionals (occupational therapy, physiotherapy, social work) and line managers with a shared lived experience of delivering services to children with burns, to enhance generalizability [20]. The participants were either clinicians, managers or pre-graduate students working in a major pediatric hospital in Australia at the time of recruitment. The service was a statewide burns service delivering care to children who were predominantly males (60%) aged below two years, who had sustained a scald or contact burn injury [22]. Most burn injuries were below 5% total body surface area (TBSA), but during the study, children with burn injuries up to 34% TBSA were seen by the large, multidisciplinary clinical team consisting of medical, nursing and allied health (predominantly occupational therapy, physiotherapy, social work). Participants were informed that all participation was voluntary, with any information provided kept confidential and they were free to withdraw at any time. Interviews were conducted by the study authors (MS, ZT) or one research assistant (JB). All research team members had received training in qualitative interviewing prior to collecting data.

2.3. Data collection

In-depth, semi-structured interviews were conducted by one of three interviewers (MS, ZT, JB) using an interview schedule (see Supplemental Files 1 and 2) to guide empathic researcher questioning following the interviewee’s lead. Interview questions were focused on exploring healthcare professionals’ understanding and lived experiences of trauma-informed care, their beliefs of how trauma-informed care was being applied, along with their perception of barriers and facilitators to trauma-informed care delivery. Questions also explored what they believed were opportunities to improve the integration of trauma-informed care in a pediatric hospital setting. Participants were invited to compete interviews at a time and setting convenient to themselves. All interviews were completed on the hospital campus, the majority in a meeting room within burns outpatient areas. Prior to the interview commencing, informed consent (both verbal and written) was sought from all participants, including audio-recording interviews.

2.4. Data analysis

Interviews were transcribed verbatim and identifying details were removed. All transcripts were returned to participants for member checking. Interpretive thematic analysis [15] was completed separately by two coders (MS, ZT), except for two transcripts where pre-graduate participants requested no member of the clinical team view the transcript. In these two cases, analysis was completed by an alternative coding pair (ZT, JB). All research team members were trained in interpretive thematic analysis prior to analyzing data. In the first instance, each transcript was analyzed individually by each member of the coder pair. All derived themes at the individual case level were then compared (both within and across cohorts) for convergence and divergence to present a final list (termed superordinate themes). Iterative discussion amongst the research team throughout the analysis phase allowed checks for reflexivity when interpreting meaning to reduce the risk of interpretation bias based on the researcher’s fore-conceptions (prior experiences, assumptions, and preconceptions). All emerging themes were discussed until consensus to enhance credibility and confirmability of the data, which ensured appropriate cyclical interpretation of trauma-informed care was achieved [19,20].

Qualitative content analysis [18] was completed by one coder (MS) and discussed with the research team until consensus was achieved.

3. Results

Eleven healthcare professionals (33% managers, 50% clinicians representing medical burns specialists, nursing and allied health, and 17% pre-graduate students) were recruited for in-person interviews (Table 1). One in-person focus group (N = 9 participants) was completed with junior and senior medical staff (excluding burns consultants), facilitated by the first author (MS). Interviews lasted between 17 min and 1 h, 35 min. For confidentiality purposes, the terms ‘medical practitioner’, ‘allied health practitioner’, ‘nurse’, ‘student’ and ‘manager’ are used.

Eleven constructs of trauma-informed care were described, seven covering the health system as well as four covering clinical practice (Table 2). One additional construct for clinical practice (everyday interactions with patients and colleagues) was identified within the hospital context in addition to those described by Bendall et al. [13]. A more
A detailed description of trauma-informed practices identified within the eleven constructs is included in Supplemental File 3.

Being a trauma-informed organization is more than providing a great quality of care. Building on the integration of a broader child awareness model with the principles of trauma-informed care was seen as an important step.

And if we're going to be an organization that not only meets the medical needs, but also integrates psychosocial needs, then we have (to have) a strong focus on trauma informed principles and trauma informed care. (Manager 3, line 9–12).

Derived themes (at both individual case and cohort level) are detailed in Supplemental Files 4–8. From 25 derived themes, three superordinate themes were identified across the five cohorts (medical, nursing, allied health, pre-graduate students, managers): ‘what does trauma-informed care mean?’, ‘being able to deliver trauma-informed care’ (agency) and ‘impact of the setting’ (Table 3). The context of the lived experience described was that of an individual, interaction with a member of the burns clinical team or employee of a large children’s health system. Participant’s experiences of trauma-informed care were that of themselves, as a staff member, or involving the families and young people to whom they provide healthcare. These experiences were influenced by a discipline-specific lens, the clinical team with whom they were working (or had interactions with), and workload demands.

### 3.1. What does trauma-informed care mean?

A range of descriptions of trauma-informed care across individuals are available, from descriptions of physical trauma alone to an integrated physical and psychosocial trauma approach, regardless of discipline. An underlying awareness that universal knowledge of the signs and symptoms of trauma in the medical setting was important, regardless of discipline, appeared to form the foundation of understanding trauma-informed care practice.

...what symptoms are we talking about? Are we talking about psychological distress? Are we talking about clinical symptoms and signs of a disease process going on? [...] the emotional intelligence to recognise even sensory experiences, stress...distressed families, emotional needs...and so there is a certain amount of emotional intelligence that needs to be [...] cultivated, that’s the word, with the junior staff. (Medical Practitioner, line 315–326).

...that means that the health professional has an understanding of what is trauma. The impact that a traumatic event has on the patient, the child, their family and also the staff treating the child. (…) And using language and techniques that are appropriate for that traumatic response and, I guess, giving families reassurance. (Allied Health Practitioner 2, line 30–40).

Participants were more familiar with terminology other than trauma-informed care, such as biopsychosocial model of care and family-centred care.

...sounds pretty much the same as like, the biopsychosocial model of care that is often talked about is the way that it is distinct from that, that it’s specifically referring to how people respond to distressing things and things that you can do to manage that. (Medical Practitioner Focus Group, line 460–464).

It’s really family centred practice. And then it’s like, understanding...where patient, family, and also where you sit...in

### Table 1 - Demographics of study participants.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number (percentage)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of participants</td>
<td>11</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>21–30 years</td>
<td>2 (18)</td>
</tr>
<tr>
<td>31–40 years</td>
<td>2 (18)</td>
</tr>
<tr>
<td>41–50 years</td>
<td>3 (27)</td>
</tr>
<tr>
<td>51–60 years</td>
<td>4 (37)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2 (18)</td>
</tr>
<tr>
<td>Female</td>
<td>9 (82)</td>
</tr>
<tr>
<td>Number of years of experience in burn care Median (IQR), range</td>
<td>8 years (3 months; 30 years), 0 years - 34 years</td>
</tr>
<tr>
<td>Number of years in current role Median (IQR), range</td>
<td>4 years (2 years; 18 years), 3 months – 25 years</td>
</tr>
<tr>
<td>Number of hours of training specific to trauma-informed care</td>
<td>No training 3 (27), 1–10 h 7 (64), 11–20 h 1 (9), 21–40 h 0 (0), 40 + hours of training 0 (0)</td>
</tr>
<tr>
<td>How long since trauma-informed care training was completed</td>
<td>I have not completed specific training 4 (37), Within the past year 4 (37), 1–4 years ago 3 (27), 5–10 years ago 0 (0), More than 10 years ago 0 (0)</td>
</tr>
</tbody>
</table>

Abbreviations: IQR = interquartile range

* unless otherwise indicated.

### Table 2 - Components of trauma-informed care identified by participants.

**Health service**
- Culture and gender sensitivity*
- Inter-agency collaboration*
- Leadership, governance, and agency processes*
- Safety*
- Service provider training*
- Young person and family/carer choice in care*
- Young person and family/carer participation*

**Clinical practice**
- Everyday interactions with patients and colleagues
- Psychoeducation*
- Screening and assessment*
- Therapeutic interventions*

* Components of trauma-informed care reported by Bendall et al. [13]
your contribution to...the traumatic event and treatment from then on. (Allied Health Practitioner 1, line 118–124).

In the context of a lack of shared understanding of what ‘trauma-informed care’ referred to within the setting, some participants described that trauma-informed practices were delivered unconsciously and within a limited perspective.

...I think we’ve had pockets of it, that, yknow, people probably think that they work in a trauma informed...approach. But, the reality of that and the theory behind it, I’m not so sure that people have a true understanding of what it is (Manager 2, line 22–25).

A broader organizational framework that includes trauma-informed care as part of holistic care beyond a purely medical model was identified as important to define trauma-informed care in the setting, beyond burns care.

But within our framework, we need to be able to point to a clear understanding of trauma informed care principles. Because it’s contemporary, because it’s relevant to that holistic approach, which is part of what we do, and it provides a basis, including a science base, that will, I think, support a critique and understanding more broadly across our organization. Unless we do that, I think we maintain a strong biological focus which really doesn’t do a whole service or justice to our families. (Manager 3, line 90–97).

3.2. Being able to deliver (agency)

Agency is defined as an action or intervention through which an end is achieved [23]. Factors impacting agency to deliver trauma-informed care were a condition-specific focus, individual beliefs, training, the availability of referral pathways and infrastructure.

Having a condition-specific approach to trauma-informed care was described as limiting potential reach.

Because my point is here, if we get stuck on the medical condition, then we deprive any opportunity to build capability. This is not one area. (…) not the dominion of one clinical disease conditions (Manager 3, line 257–263).

Participants discussed the impact of individual beliefs on the ability to implement an organization-wide approach to the delivery of trauma-informed care.

...there is a pocket of people that still see this as, oh well, it’s just that touchy feely stuff that’s not really – and yknow, we pander to, we pander to kids so much these days and parents. Rather than a thought around what has been the impact on people over the years and years of the way that we have…practiced or the way we’ve approached things. (Manager 2, line 267–271).

With regard to training, we found mixed response to being mandatory or voluntary, but there was strong sentiment that it needed to be tailored for the setting.

I find it more relevant when it relates exactly to what I’m doing (Nurse 2, line 235–241).

I think it should be mandatory, like I really do. Like if you’re entering into this space where you are working predominantly with trauma, there should be a basic level of expectation around your knowledge of trauma-informed care (Allied Health Practitioner 3, line 473–479).

Most participants reported they had limited training in trauma-informed care, both within their university curriculum as well as ‘on-the-job’. The impact of roles within the hospital setting influenced the training that staff received, with medical staff describing ‘breaking bad news’ as an example of discipline specific trauma-informed care training for the purpose of understanding and managing their own reactions and behaviours to a situation.

...as doctors generally, we’re the people that are able to do put ourselves emotionally away from those situations the most anyway, so there even in a traumatic situation...this is, where-

<table>
<thead>
<tr>
<th>Superordinate themes</th>
<th>Converging themes*</th>
<th>Diverging themes*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What does trauma-informed care mean?</td>
<td>What it means? (4/5)</td>
<td>Making it personal (2/5)</td>
</tr>
<tr>
<td></td>
<td>Doing it naturally (4/5)</td>
<td>Everybody’s business (2/5)</td>
</tr>
<tr>
<td></td>
<td>Naming trauma-informed care practices (3/5)</td>
<td>Getting it to gel (1/5)</td>
</tr>
<tr>
<td>2. Being able to deliver trauma-informed care</td>
<td>Professional development (5/5)</td>
<td>Sharing information (2/5)</td>
</tr>
<tr>
<td></td>
<td>Training (3/5)</td>
<td>Having different roles (2/5)</td>
</tr>
<tr>
<td></td>
<td>Having resources (5/5)</td>
<td>Understanding each other’s point of view (2/5)</td>
</tr>
<tr>
<td></td>
<td>Screening (3/5)</td>
<td>Being family centred/focused (2/5)</td>
</tr>
<tr>
<td>3. Impact of the setting</td>
<td>It’s what we do (4/5)</td>
<td>Meeting families where they are at (1/5)</td>
</tr>
<tr>
<td></td>
<td>Integrated care (4/5)</td>
<td>Experience matters (2/5)</td>
</tr>
<tr>
<td></td>
<td>Self-care (5/5)</td>
<td>Measuring outcomes (2/5)</td>
</tr>
<tr>
<td></td>
<td>Setting (5/5)</td>
<td>Supporting human beings (2/5)</td>
</tr>
</tbody>
</table>

* Number of cohorts (from five) from which the theme was interpreted in brackets.
like there’s always going to be things that affect us. But, it’s a trauma [...] there’s that distance, so you can be in a distressing situation and you know it’s traumatic to the family, but you walk out and then you just move on to your next job. (Medical Practitioner Focus Group, line 212–219).

It was acknowledged by individuals in a management position that an emerging organizational approach to building staff capability in trauma-informed care had impacted what training and resources were available.

But I think there’s been far less focus on the patient family trauma, the impact of trauma, understanding trauma, and identifying trauma, shifting my practice from the outset [...] in terms how I then engage with that child and family, what that trajectory might look like from there. (Manager 2, line 40–44).

What we need to do is have a foundational level one trauma informed care that [...] is interprofessional. (Manager 3, line 146–149).

The delivery of training was also impacted by infrastructure supported by the organization.

...challenging because the platforms we’ve got to deliver education. It’s quite limited in terms of how you can do that, obviously from a financial perspective and what’s available within [the organization] (Manager 2, line 308–311).

Participants reported a lack of confidence in their in their ability to deliver trauma-informed care as a barrier to trauma-informed care.

I wanna be able to talk about and identify that this person that has trauma or provide trauma informed care without it being insensitive to the family as something that might be sensitive to me, or to them, isn’t sensitive to me.” (Student 1, line 76–80).

Both physical systems as well as referral pathways were reported as necessary for responding to symptoms of trauma and/or distress.

And so... I think in terms of information...a system needs to be...needs to FACILITATE looking after a patient.” (Medical Practitioner, line 124–153).

Workload demands and time constraints were also described as a barrier by staff to the delivery of trauma-informed care.

Another barrier is for everybody, particularly when it gets really busy. In busy clinics um people... just generally the whole team have less capacity to take on those the psychosocial aspect of a burn injury and everybody’s just there to right, we’ll just put the dressing on, heal the wound, let’s go boom, next person in. And um it’s, I guess hasn’t always been received overly well from other people when you know we flag, oh hang on, maybe if we’d taken a bit more time with this family or if this was explained better this whole experience could have been different. (Allied Health Practitioner 2, line 138–147).

However, as one participant identified, if you don’t see a holistic view of trauma-informed care as important, time constraints will always be a barrier to its delivery.

You know, that cross-cultural perspective. I get it. It’s a time constraint. Yeah. Someone’s not agreeing to give informed consent. It’s a time constraint. But if you have a trauma informed base, you may have approached it differently. (Manager 3, line 664–667).

The use of routine prompting questions, regardless of setting, was seen as likely to influence how a clinical team would approach trauma-informed collectively and shift the approach to self-care.

it’d be lovely if there were prompts around...if it was a standard prompt ‘what are their trauma informed contexts?’ I mean, that might be a really nice cognitive prompt each time. To actually alert everybody to...you know, people might speak in other words. (Manager 3, line 1096–1100).

3.3. Impact of the setting

Working in a pediatric hospital was described as an enabler to trauma-informed care for children and young people, however a lack of a framework for trauma-informed care was a barrier to translating the principles across models of care, regardless of the medical condition.

...I actually think of all settings [...] I think it is done much better in a pediatric setting. I think people are far more...staff are far more family orientated, far more holistic in how they think of the team than if you go and work in a really busy adult hospital [...] I think we are better resourced in a pediatric setting to enable all these other things, so I think that’s an enabler in this setting. (Manager 1, line 126–133).

Support from colleagues was integral to positive trauma-informed care responses (which depend on the staff who make up a team as well as managers) as well routinely addressing the vulnerability that staff experience in this setting.

Depending on what unit you’re in how that response works within the team would be entirely different depending on who the bosses are, who the registrars are, who the juniors are. Just, that entire dynamic can shift entirely. And so, it becomes really quite specific to where people are and how that gets managed. (Medical Practitioner Focus group, line 341–347).

Pain management protocols and emotional safety to raise items for discussion within the team setting were features of the setting which may have impacted on the perceived need by healthcare professionals to focus on trauma-informed care capability building.

I think in our burns unit I don’t feel there is a rank. There is a place for...every team member. And I think that is very much encouraged by...our staff. I would certainly hope that certain
people don’t feel…that they couldn’t speak up because…I would take that as I am doing something wrong. And sure…I have to take final responsibility for the decision made for the patient. I may…I have the power to disagree with someone but that doesn’t mean that someone shouldn’t speak. (Medical Practitioner, line 224–234).

Divergent themes appeared to be related to discipline backgrounds. Participants from nursing and medical backgrounds were more likely to accept the trauma of their work as being part of what they have to do for patients as well as themselves, which impacted their thoughts and feelings about self-care (e.g., receiving supervision) being a trauma-informed care practice.

I don’t think we do the waffle stuff very well. I think it’s just part of our culture is you just, look it’s done and not suck it up but it’s just um…yep well that’s just part of it is what we do. (Nurse 1, line 159–162).

Two allied health practitioners discussed the use of routine screening (as part of informing a bigger picture) and monitoring of trauma symptoms as important, for both patients and staff. However, a focus on screening was cautioned by some participants as complex needs cannot be quarantined to a medical need alone.

I think yes it would be great for families to have potentially a…you know, at least a screening tool that they potentially fill out so that we’re all aware that this family needs support. So it’s not until I think, things escalate that we all as a team go okay, someone call the social worker. […] So it’s not, it’s not preemptive. It’s, you know, it’s reactionary (Allied Health Practitioner 2, line 97–102).

The inherent challenge is to be able to measure the impact of trauma-informed care reforms across an organisation.

The future will be how do we strongly connect with a population health focus and also outcome, you know, as part of that. Rather than outcome measures. Actually, what is the quality difference that we are making in terms of outcomes? (Manager 3, line 320–324).

Reforms across models of care (including burns) within a pediatric healthcare setting were seen as integral to enabling an organizational approach to trauma-informed care.

And to some extent, when it’s sewn into the fabric of what we do, part of a child aware service and is recognized broader organizationally, at a leadership level, at a practitioner level AND in terms of our models of care, then we’re probably getting closer to it. (Manager 3, line 1164–1169).

4. Discussion

Within our understanding, this study is the first to incorporate the perspectives of five healthcare professional cohorts (medical, nursing, allied health, pre-gradient students, managers) to describe experiences and perceptions of trauma-informed care using an IPA approach. We found four superordinate themes identified: ‘what does trauma-informed care mean?’, ‘being able to delivery trauma-informed care’ (agency) and ‘impact of the setting’. Our findings suggest that trauma-informed care was understood differently between the groups (indicating discipline-specific interpretation of the construct, as well as between clinicians and managers). Therefore, defining trauma-informed care remains an important first step to promote trauma-informed care practices and research. Using qualitative content analysis, participants described trauma-informed care practices that supported ten previously identified constructs of trauma-informed care across the health setting (interagency collaboration; screening and assessment; service provider training; safety; leadership, governance, and agency processes; young person and family/carer choice in care; culture and gender sensitivity; young person and family/carer participation) and clinical practice (therapeutic interventions; screening and assessment; psychoeducation). We found one new construct identified for clinical practice in the hospital setting (everyday interactions with patients and colleagues). Integrating psychosocial and physical care within a child-centred practice supported by trauma-informed principles was important (both strategically within the health system as well as at the clinical practice level) to support implementation.

It has been recognized that the term ‘trauma’ at the crossroads between psychosocial origins and medical/nursing fields can be confusing [24]. When Kassam-Adams et al. [24] surveyed pediatric nurses (N = 232) from trauma centres about knowledge, practices and beliefs about trauma-informed pediatric care, the terms ‘traumatic event’ and ‘post-traumatic stress’ were applied to extremely stressful experiences that included (but not limited to) injury and an individual’s psychosocial reactions to these experiences. In that study, ‘trauma’ referred to physical trauma or injury and ‘trauma-informed care’ to healthcare delivery which recognized psychological trauma. When Marsac et al. [3] described a framework to guide training pediatric healthcare services (emergency departments in hospitals) in ‘trauma-informed care’ practices, ‘trauma’ referred to emotional trauma and ‘trauma-informed care’ was how medical teams prevented or minimized the risk of emotional trauma for patients. In a recent observational and qualitative study completed in the same tertiary pediatric hospital as the current study, trauma-informed care was described as ‘a psychosocial framework focused primarily on the hospital context’ [5, p. 16]. Psychosocial care was described as an extension of trauma-informed care and included communication and actions designed to enable patients to feel comfortable and safe.

Descriptions of trauma-informed care from health professionals in the current study was most consistent with the definition of a ‘trauma-informed approach’ as a system in which all parties recognize and respond to the impact of traumatic stress on those in contact with the system (children, caregivers, healthcare providers and support staff). Descriptions by clinicians and pre-graduate students of
delivery of trauma-informed care aligned closely with the Integrative Model of Pediatric Traumatic Stress [25] which describes a universal, targeted and clinically indicated approach. Universal strategies of procedural preparation, optimal pain relief, positive communication and psychoeducation were described for the burns outpatient setting in which the study participants were based or were provided line management.

A number of barriers and facilitators to the implementation of a stepped (i.e., universal, targeted, clinically-indicated) care approach were identified in the current study. The majority of participants indicated a lack of confidence in their awareness of pre-morbid risk factors for increased risk of ongoing chronic and/or delayed pediatric medical traumatic stress responses, reduced access to trained mental health providers and limited time to attend training due to high volume workloads. Enablers were described as working in a pediatric setting, where a common belief that trauma-informed care emerged (albeit according to one’s personal definition) is everybody’s business. Some allied health managers described a broader awareness of trauma-informed care that incorporated awareness and understanding of the impact of social determinants of health and adverse childhood experiences within a child-aware model. Having a global view of one’s role within a broader public health model was considered an enabler to moving towards a more holistic view of well-being, beyond being just a hospital that cares.

Opportunities to improve the integration of psychosocial care with physical care were considered important in the current study, including leveraging off trauma-informed principles to integrate a baseline interprofessional self-care strategy. In prior work, the integration of physical with psychosocial care reduced psychological distress, physical symptoms, and pain; improved quality of life, coping and treatment adherence of patients [26,27]. This can ultimately reduce the burden and costs of health care utilization [28]. Despite evidence as to the importance of psychosocial care for improved health outcomes, many healthcare staff report skill deficits, particularly in providing care to children who are distressed and their family members. Moss et al. [5] reported most healthcare staff continue to rely on visible triggers of distress or need to trigger psychosocial care, despite distress not always being externalized in children and families [29].

Stress can impact our bodies in many ways, and this is particularly true for children as their bodies are developing. Toxic stress, or adversity in childhood, affects children in several key areas, one of them being physical changes in the brain (e.g., enlarged amygdala, increased impulsivity and underdeveloped pre-frontal cortex) and the other being hormonal changes, resulting in a suppressed immune system and increased inflammation responses [30]. A universal awareness of biopsychosocial risk factors (for child, parent/family and healthcare provider/environment), as well as the use of validated screening tools can help target scarce mental health resources to the smaller percentage of children and young people (and their care providers) who are most in need [31]. However, improving the base level of understanding trauma-informed care within the context of a child-aware model beyond condition-specific situations would likely transform models of care.

Factors influencing trauma-informed care (including social determinants of health and adverse childhood experiences) are considered important in trauma-informed care. The majority of participants identified an understanding within the hospital setting of the dose-response relationship between adverse childhood experience scores identified in the study interviews and their negative impact on long-term health and wellbeing outcomes. Whilst hospitalization from burn injuries have declined over the past two decades [32,33], children aged below five years remain at a higher risk of injury from burns [32,34]. Therefore, increasing staff awareness of social determinants of health as another powerful indicator of a child’s health and wellbeing outcomes across their lifespan is critical, as described by some study participants.

Trauma-informed care practice was also described by many participants as making resources that reflect trauma-informed care principles available (e.g., procedural preparation); increasing a focus on strengthening resilience and protective factors (e.g., maintaining situational awareness, adequate pain relief, supportive team); addressing, minimizing and treating secondary traumatic stress for staff; and normalizing interprofessional self-care strategies. Additional strategies described in the literature as trauma-informed care practices and reported by participants as embedded into daily practices within the study setting included recognizing symptoms, sharing information, talking in an age-appropriate manner, reducing distress, implementation of own self-care, use of therapeutic touch and responding calmly to emotionally distressed families.

Effective implementation of programs or practices in a particular setting is required to influence health outcomes [35]. Within an ecological framework, effective implementation is influenced by many factors related to the organization’s support system (i.e., models of care, training and technical assistance) and delivery system (i.e., features related to organizational capacity such as treatments provided by healthcare professionals) [35]. Findings from the current study indicated the overarching health system related to the study setting was still developing their meaning of trauma-informed care, at both a strategic and service level. Thus, the support system (including training and resource development) was emerging. Participants in the study identified trauma-informed care must be child-centred and set within a child awareness model (and not disease or condition-specific) that acknowledges a broad base of need and risk that includes contemporary trauma-informed care principles. A child-centred approach can translate across workforce and community, to inform interaction between individuals and the delivery and support system that affect implementation of trauma-informed care beyond the presenting medical condition. For example, having a focus on psychological recovery and the child’s relationship with their community and environment to support recovery across the lifespan. Building on this approach would provide a strong foundation for advancing the implementation of trauma-informed care.

4.1. Strengths and limitations

The perspectives of healthcare professionals were included in this qualitative approach. Understanding the lived
experience perspective of trauma-informed care by patients and carers (of patients) within the setting is also important. Future research would benefit from triangulating the perspectives of patients, their caregivers and healthcare professionals using an IPA approach. Such an approach would allow further exploration of the impact of consistency of care within a child-centred approach. Another limitation of the study was the small number of nursing staff and pre-graduate students who participated (although nurses represented 40% of nursing staff and pre-graduates represented 100% of students working in the setting at the time of the study). Moving forward, global collaborations (please see https://www.global-psychotrauma.net) will be important to obtain consensus on how trauma-informed care is defined and operationalized, and to progress research examining the effectiveness of TIC approaches targeted at system, organizational, team and individual levels.

5. Conclusions

Using multiple qualitative methods, stakeholders’ experiences of trauma-informed care identified a need to clarify the meaning of the construct to inform how to build capability and to examine the discrepancies between evidence-based care and service delivery within organizational structure and individual beliefs. The ability (agency) of the workforce to deliver trauma-informed care and a strategic commitment to practice change needs to be actioned more systematically to support implementation of a trauma-informed care approach.

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Declarations

Consent for publication.
Not applicable.

Data availability

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request if appropriate permissions are obtained (by those seeking to access the data) from the data custodians with appropriate ethical and governance approvals from Children’s Health Queensland Hospital and Health Service Human Research Ethics Committee who can be contacted at the following email: CHQETHICS@health.qld.gov.au The author MS can be contacted at Megan.Simons@health.qld.gov.au for information regarding access to the dataset.

Conflict of Interest

The authors (MS and ZT) have no conflict of interest to declare. The author RK is a member of the editorial board for BURNS.

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Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.burns.2021.10.015.

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