The journey to becoming trauma-informed – using pilot trauma training data to highlight the role of dental services in supporting patients affected by psychological trauma

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Key points

- Introduces an example of trauma training designed for staff at a dental hospital in Dundee, Scotland.
- Highlights that training can increase staff knowledge and confidence in responding to patients who have experienced psychological trauma.
- Discusses barriers to wider-scale implementation of psychological trauma-informed principles.
- The authors welcome being contacted for further information or to discuss future collaborations.

Abstract

Rates of psychological trauma are increasing in the community. Psychological trauma symptoms may prevent patients from being able to access or tolerate dental treatment. The importance of dental teams providing equitable person-centred care by adopting a trauma-informed approach is discussed. One way to support dental services to be trauma-informed is through training staff in psychological trauma. An example from a Scottish Dental Hospital is provided. Directions for future research are discussed and the next steps in the journey to develop trauma-informed dental services are outlined.

Checking the maps – where should we be going?

What is psychological trauma and how common is it?

Psychological trauma is our natural response to 'events or circumstances which are experienced as physically or emotionally harmful or life threatening'.[1] Examples include one-off events like assaults or serious accidents, as well as more prolonged/repeated circumstances which are difficult to escape from, like domestic, emotional, physical and sexual abuse. In reality, any event that causes distress so great that it overwhelms an individual's coping resources may result in psychological trauma symptoms.[2] The World Health Organisation estimates that up to 20% of girls and 10% of boys experience childhood sexual abuse.[3] The Office for National Statistics recorded that 2.3 million people in England and Wales experienced domestic abuse within the twelve-month period ending March 2021.[4]

The majority of individuals will experience a reduction in trauma symptoms and gradually return to normal functioning in the weeks following a traumatic event. However, for some, psychological trauma symptoms can have long-lasting effects on their daily functioning and quality of life.[2] Common trauma symptoms include: intrusive memories, flashbacks and nightmares; intrusive negative thoughts about the event and associated low mood; hypervigilence and hyperarousal; and avoidance of stimuli which trigger trauma memories. Individuals who have been exposed to repeated traumatic events may also have additional problems including: difficulties trusting others, affecting their ability to form and maintain safe interpersonal relationships; difficulties regulating their emotions; and pervasive negative self-beliefs, often involving feelings of worthlessness, shame and guilt.[5]

Overall, there is reason to believe that the number of individuals experiencing trauma is increasing. This is particularly true in the context of the recent COVID-19 public health crisis. For instance, rates of domestic violence have increased during lockdowns[6] and having COVID-19, in particular being treated in intensive care, has been shown to increase the risk of experiencing psychological trauma.[7]

What is the impact of psychological trauma?

Trauma can affect anybody, though children and people from marginalised and disadvantaged groups are particularly vulnerable.[2] We also know that those exposed to repeat traumatic events, especially during childhood, are more likely to suffer with long-term trauma symptoms. Crucially, psychological trauma can place barriers in the way of individuals accessing healthcare services.[2] For example, many individuals affected by trauma have a reduced threshold for managing stress, which means they can quite quickly become overwhelmed by anxiety in environments they perceive to be threatening. This emotional reactivity prepares the body to fight or flee and so is

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an adaptive response to protect oneself from further harm. However, those previously exposed to trauma can experience this increased anxiety when they are required to trust others. Many trauma experiences happen in the context of relationships, that is, domestic and childhood abuse, which can lead to people struggling to feel safe in the presence of people they don't know, even when those people are medical professionals and are there to help.[2] In fact, the language healthcare professionals routinely use to reassure their patients can inadvertently re-traumatise due to similarities with the language perpetrators use to control their victims. Comments perceived to be harmless, like 'it won't hurt', can cause patients to vividly re-experience past abuse, making it less likely these individuals will regularly access healthcare services.[8] Furthermore, to effectively overcome inequalities in access, we need to take action within health care to make staff more knowledgeable about psychological trauma.

What is the impact of psychological trauma in the dental setting?

Research suggests that it is important the dental workforce has an understanding of the impact of trauma, since there are elements of dental care that are inherently challenging for those with trauma-histories.[8] Many traumatic experiences, for example, sexual and physical abuse, involve the violation of bodily integrity. Therefore, the close physical proximity and the requirement for the dentist to touch patients can be highly triggering for individuals who have experienced trauma. Dental care is especially difficult for sexual abuse survivors for whom lying horizontal, having objects placed in their mouth and feeling powerless, can trigger intrusive trauma memories. These patients are more likely to experience high levels of anxiety at the dentist, which can make it difficult for them to tolerate treatment 'as usual'.[8] These patients may also dissociate during dental treatment, whereby they feel detached from their body and the present moment.[9] Dissociation has links to the instinctual 'freeze' response. This may be selected as a survival mechanism in times of extreme threat and where we perceive that other protective responses, like fighting or fleeing, are not possible or could result in further harm. Consequently, dissociation is a common response to sexual abuse and through repeated reliance, this can become an individual's automatic response during times of stress.[10] In dental environments, patients may appear outwardly compliant, as dissociation can render them immobile and unable to communicate. However, these individuals are vulnerable to being re-traumatised, since they are less able to alert the dentist to their distress or ask to stop the procedure if they experience pain.[9] Other research has found that individuals previously exposed to interpersonal violence have greater difficulty trusting individuals in perceived positions of authority. Consequently, trauma survivors may be less likely to disclose that they have a history of trauma to those in medical professions. This is especially true for individuals who identify themselves as belonging to low-socioeconomic and minority groups, where there is a larger power imbalance.[11] Overall, these findings support the need for dental staff to be able to: identify signs of trauma in their patients; know how to sensitively discuss trauma symptoms with patients who do disclose abuse; and be willing to adjust their practice to accommodate the additional needs of patients with psychological trauma, whether disclosed or not. Only then may we expect to see inequalities, such as poorer oral health in those with psychological trauma,[12] reduce.

Why should the dentistry workforce embark on trauma training?

There is growing evidence which supports that having a workforce who understand the effects of trauma and who are trained to work in ways which support those with traumatic backgrounds can improve their engagement with services and in turn, improve their health and wellbeing.[13] In Scotland, NHS Education for Scotland published their National Trauma Training Programme, which provides training and guidance to services on how to develop in-house training on this topic to enable staff to empower, prevent further harm and support the recovery of those with trauma.[13]

Setting off – becoming a trauma-informed dental service

Within a dental hospital in Dundee, Scotland, a steering group was set up to support the development of a trauma-informed dental service. The idea of piloting a trauma training event was first approved by the clinical leadership team within the hospital and was then introduced at an all-staff clinical governance session. The main aims of the training were to introduce the symptoms of trauma and the impacts they have on patients, address why it is important to have a trauma-informed dental workforce and highlight the ways dental staff can best support these patients.

Training content

What is trauma and what impact does it have?

Information was presented on the types and prevalence of trauma, the relevance of trauma to dental settings and the impact of trauma on survivors' internal world, behaviour, relationships, future prospects and health outcomes. Special attention was given to what trauma reactions may look like, including how dissociation may appear in dental patients.

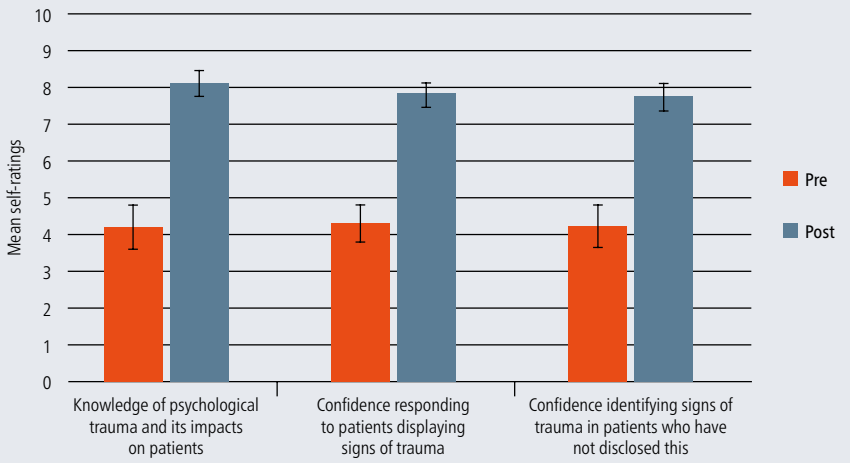
Responding to trauma in dentistry

This section included information on how to respond to patients with trauma symptoms, how to deliver psychological first aid to those with ongoing or recent trauma and the importance of reducing the risk of re-traumatisation for patents. Particular attention was given to group discussion of real case examples of dental patients with significant trauma symptoms. Attendees were tasked to consider how they could work within the trauma-informed principles of trust, safety, collaboration, choice and culturally appropriate input, to meet the additional needs patients with trauma may have and remove some of the barriers they may have accessing repeat dental care. The facilitators also discussed why establishing safe and supportive relationships with individuals with trauma backgrounds can have such a positive impact, highlighting how their feeling able to trust dental staff has the potential to generalise them trusting other healthcare practitioners.

Taking care of ourselves

This final section acknowledged the impact that learning about a patient's trauma can have on the dental staff working with them. Information on the signs of secondary traumatisation and how staff can support themselves by applying psychological first aid was presented. Further sources of support for staff were signposted at the end of the training.

Fig. 1 Bar graph (M ± SE) of staff self-rated knowledge and confidence before and after training



The training lasted approximately two and a half hours and was delivered by the clinical psychologist, who is co-author of this paper. Dental case studies were provided by the consultant, who is also co-author of this paper.

The main findings from this trauma training pilot

In total, 13 staff members attended the training. To have a sample that was representative of the different roles and responsibilities within the dental hospital, a targeted recruitment method was used. Service leads from all specialities nominated employees in their teams to attend. Staff representing the following positions – dental consultant, speciality dentist, core trainee, speciality trainee, dental nurse, hospital management, reception staff – attended the pilot. All staff completed a questionnaire before the training. This assessed their self-rated confidence in understanding the topic of psychological trauma and its impacts on patients, alongside assessing how confident they felt responding to patients who display trauma symptoms. Attendees similarly rated these questions on a Likert scale following the training and provided qualitative feedback.

Pre-training ratings revealed that staff felt they had limited knowledge of trauma and lacked confidence in their ability to identify and respond to trauma symptoms. The mean rating given out of ten across the items (with higher scores indicating greater confidence or knowledge) was four. Attendees' post-training questionnaire responses support that trauma training can be beneficial to dental staff, as mean ratings on all items doubled (see Figure 1). There was one further closed question in the post-training questionnaire, in which the dental staff rated how useful and relevant to their role they found this pilot trauma training. Not a single staff member in attendance rated less than an eight out of ten to this question, with nine out of ten being the mean rating.Overall, these findings support that the pilot delivered on its aims. Attendees' positive qualitative feedback showed that the inclusion of case studies and the group discussion these facilitated were particularly useful at helping the dental staff think how they might apply their trauma knowledge. In fact, a significant number of attendees requested that more time be given to discussing case studies and examples of trauma-informed practice in future training events.

The long (and winding) road ahead – next steps in the journey to becoming a trauma-informed dental service

Based on the feedback from the pilot, the trauma training has been adapted. Qualitative feedback highlighted that dental staff would prefer a longer event, to be better able to absorb the information and to have more opportunities for open discussion. Staff also indicated that small group activities during the training, such as discussing/roleplaying ways to respond to trauma symptoms, would be more interactive. The training now makes use of pre-workshop resources that are available to all NHS Scotland staff on the key concepts for becoming trauma-informed.[14] This has enabled us to adapt the face-to-face element of the training into a workshop-style event. This allows for more discussion of cases (in line with staff feedback) and means we can also facilitate discussions of how we can overcome potential barriers to develop a trauma-informed dental service, while not taking up an unreasonable amount of clinicians' time. This re-developed training is being rolled out currently within the Dundee Dental Hospital.

Potential barriers to developing a trauma-informed workforce

All staff accessing training

In line with the available guidance, all staff within the dental hospital, including administrators, cleaners, porters, dental nurses, clinicians and consultants, would need to be trained. Likely barriers include the high-turnover of staff and the ability for staff to prioritise training in jobs that are often demanding, particularly in the wake of the COVID-19 pandemic.

Implementing training

Research looking at implementing change in organisations has shown that training alone is often not enough. More elements are needed before individuals can successfully implement change in their work. for example, ongoing supervision, coaching and organisational support.[15] To successfully support dental teams to be trauma-informed in their practices, more is likely to be needed.

Impact on patients

It is important to ensure that all changes to practice are evaluated in regard to their effectiveness and usefulness. However, it is also important to evaluate whether such training has any measurable impact on patients' experience of care within dental services.

Planned evaluations of redeveloped training

It is clear that dental teams have a role to play in supporting patients who have experienced psychological trauma to be able to access services. What needs to be established is clear research on the best way to support dental services to do this. For example, this pilot could not assess whether feelings of competency responding to patients with trauma are maintained long term, or to what extent dental staff actually adapted their working when they suspected patients had a history of trauma. To establish the former,

we aim to collect follow-up measures of staff's knowledge and confidence responding to those with trauma between six and twelve months' post training. Focus groups/semi-structured interviews will additionally allow us to evaluate how well dental staff apply the trauma-informed principles in practice and identify any factors that have prevented dental staff from being able to apply their trauma skills. Research on trauma training in other healthcare services have identified time constraints, worry about further re-traumatising patients, requiring further training and confusing information/evidence on trauma-informed practices as barriers that get in the way of staff adopting trauma-informed ways of working.[16] Only once we know to what extent these are also barriers for dental staff can appropriate support be put in place to minimise their impact. Semi-structured interviews could also elucidate what impact ongoing support in the form of supervision has on staff competency in implementing trauma skills. For example, do those who accessed ongoing supervision from the training facilitators value this and how do their experiences of applying their trauma knowledge differ to those who did not access this support?

Main conclusions

Overall, this publication relates not to research, but to a trauma training pilot which aimed to increase the knowledge and confidence of dental staff and helping them to ultimately adopt more trauma-informed ways of working. This pilot could not include service users, in line with good practice guidelines for developing trauma training,[2] since there was no funding associated with this project and so no way to pay them for their time. However, the feedback from the pilot provides preliminary support that trauma training is relevant for and valued by members of the dental team. In time, with more robust data and staff and patient feedback, conclusions about the effectiveness of trauma training at improving the dental experience of those with trauma may be drawn. But for now, it appears that trauma training events like the one described are a promising solution to the question of how we can make dental services more accessible for those with psychological trauma. We recommend that dental services offer access to psychological training and support staff to implement these skills in an effective and safe way. We all have a role to play in supporting our patients and overcoming inequalities in outcome and access. Online training, targeted at supporting all healthcare staff to work in more trauma-informed ways, is available. One example of this is the National Education for Scotland's trauma training modules.[14] While these do not specifically highlight the ways that psychological trauma can impact patients in a dental environment, accessing this more generic training could be a valuable first step in enabling dental staff to respond more reflexively to those who have experienced psychological trauma. Dental staff can also familiarise themselves with local adult and child protection policies which they can consult if they suspect a patient is at risk of ongoing abuse. Equally, dental staff can access reliable information on a range of mental health conditions (including post-traumatic stress disorder) on the NHS UK website if they would like to find out more about the difficulties their patients may be having. Dental teams may also wish to signpost patients to this website because it contains useful self-help resources and information on how patients can access different levels of mental health support.

Author contributions

Lindsay-Jo Sevier Guy and Abigail Heffernan facilitated the trauma training event referenced in this document and contributed the idea for the document. Elise Gunter is responsible for the drafting of the opinion piece while Lindsay-Jo Sevier Guy and Abigail Heffernan provided comments and suggested revisions to the drafts.

Ethics declaration

The authors declare no conflicts of interest.

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