

# Dental care – an emotional and physical challenge for the sexually abused

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The aim was to explicate persistent psychological and bodily memories of sexual abuse and how they are expressed during dental appointments. The participants comprised 13 sexually abused individuals (11 women), who recalled and expressed these experiences during a dental appointment. They were encouraged to describe, in detail, aspects of the appointment which triggered memories of the sexual abuse. The interviews were recorded, transcribed verbatim, and analyzed using Qualitative Content Analysis. The identified overall theme illustrating the latent content was ‘An echo of sexual abuse transformed into (dys) functional reactions’. The first category covering the manifest content was ‘The inner invisible struggle’, with two subcategories: (i) mental inscriptions of the abuse experience; and (ii) consequences of the dental encounter. The second category was ‘The discoverable manifestations’, with two subcategories: (i) enigmatic communication; and (ii) expressions of bodily memories. The dental appointment arouses similar psychological stressful reactions as the episodes of abuse; both implicit and explicit expressions are recognizable. Dental staff can contribute to disclosure by improved understanding of the strain a dental appointment can cause in patients who have been subjected to sexual abuse and familiarity with the associated bodily expressions.

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According to the World Health Organization (WHO) (1), sexual abuse is a common form of violence in society and is defined as:

*Any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic or otherwise directed, against a person's sexuality using coercion, by any person regardless of their relationship to the victim, in any setting, including but not limited to home and work.*

A review by FINKELHOR (2), of population-based studies on worldwide self-reported child sexual abuse prevalence, showed that 7%–36% of women and 3%–29% of men had been exposed to child sexual abuse. More recent systematic reviews and meta-analyses found prevalence rates of 18% for women and 8% for men (3). BARTH *et al.* reported prevalence rates of 8%–31% for girls and 3%–17% for boys (4). In a Swedish population-based study (5), 27% of women and 11% of men reported exposure to sexual abuse before the age of 18 yr, and 28% of women and 6% of men reported an experience of sexual abuse after the age of 18 yr (sexual humiliation and harassment excluded).

Few cases are actually reported to the authorities (1, 6, 7). This is alarming because sexual abuse, even in

the absence of persistent conscious memories, often leads to severe short- and long-term personal consequences for the victim's physical and mental health (1, 8–11). Compared with people who have never been abused, victims of early sexual abuse are more likely to experience health impairment later in life. The correlation is strong and cumulative (i.e., repeated violation of a person's integrity implies further deterioration in health) (8, 10). Thus, sexual abuse has a negative connotation in society in general, and disclosure is therefore important.

Victims of sexual abuse experience dental care as more anxiety-provoking and upsetting than other patients (12–16). Findings include: perceived discomfort associated with instruments in the mouth; increased gagging reflex; difficulty remaining silent and relaxed; aversion to being touched; and exaggerated feelings of lack of control (12–16).

Sexual abuse is also strongly associated with dental fear (12–14, 17). People who have been subjected to sexual abuse may find the prospect of dental attendance very stressful; hence, they are unable to benefit from preventive measures and/or early intervention (17), and are reported to have higher rates of missing teeth, dental caries, periodontal disease, and apical periodontitis (18–20).

The individuals often have difficulty in verbalizing incidents of sexual abuse (13,17,21). This is unfortunate because disclosure is key to recovery (22). Lacking words, the victims' bodies instead link past and present experiences by manifestation of physical and psychological symptoms (9). Memories of abuse may be provoked by the subordinate position in the dental chair and a feeling of powerlessness associated with the anticipation of painful procedures (13,17,21,23). Thus, dental treatment is delivered in a milieu in which memories of the abuse might be expressed physically or mentally. The varying ways in which the prospect of dental care may trigger these memories are not well understood.

The aim of this study therefore was to explicate and describe the persistent psychological and bodily memories of sexual abuse and how they are expressed during dental appointments.

## Material and methods

### Ethical considerations

The study was conducted in accordance with the 1964 Declaration of Helsinki II (version 2002 revision, [www.wma.net](http://www.wma.net)). Written informed consent was obtained from each participant. The authorized secretary and the translator signed confidentiality agreements. The Regional Ethical Review Board, Lund University, Lund, Sweden, approved the study (Dnr 2014/780).

A relevant ethical issue is the risk of secondary traumatization, which would occur if interviewees are further traumatized by interviews about their abuse. However, this is not confirmed by current research. Although participation can cause psychological discomfort at the time, the overall experience of being involved in research is reported to be generally positive and not something that the participants later regret (24). This was confirmed in the present study and is supported by recent work showing that participation in such research enhances the lives of its participants, partly by providing them with dignity and respect, as experts on their own experiences (25).

It also is of utmost importance to avoid the informants feeling pressured to participate. The recruitment process, including an initial meeting between the informant and the interviewer, followed by an interval before the scheduled interview, made it possible for the informant to reflect on the task and to withdraw if so inclined. The majority of the participants contacted the interviewer after reading about the project, thus implicitly (and explicitly during the interviews) expressing a wish to help others. This was further confirmed by the fact that all those who participated in the initial meeting proceeded to the interview.

### Informants

A purposive sampling of informants in Sweden was based on the following absolute inclusion criteria: self-reported experience of sexual abuse as a child or adult; having been reminded of and expressed this experience during dental appointment/s; is or has been receiving psychological treatment for sexual abuse experience; and age  $\geq 18$  yr.

In all, 18 potential informants were contacted consecutively. Initially, private psychologists, trauma treatment

centers, and a retired midwife were contacted for recruitment of informants. Three potential informants declined to participate, after receiving advice by their therapist (one person) or by a contact at a treatment center (two persons). Four informants were recruited through the retired midwife. Further recruitment was undertaken by advertising via a recorded podcast on the website of the private practice of a psychologist with specialist knowledge in treatment of sexual trauma. The podcast was supplemented with written information and contact details of the first author (EW). Eight informants made contact under their own initiative, explicitly expressing a wish to contribute to improving knowledge of this field. One further informant contacted EW directly after an official event, bringing the total number of informants to 13. The informants comprised 11 women and two men, aged 19–56 yr. The social status of the informants varied: student; had taken early retirement; employed in private business; or employee.

The informants were single, married, or living in a partnership, with or without children. Some informants reported experiencing anorexia, bulimia, self-injury, drug abuse, prostitution, and imprisonment. All informants self-reported some degree of dental fear, mostly severe.

The experience of abuse ranged from sexualizing looks and allegations and isolated episodes of abuse, to repeated abuse over many years, with or without penetration, as well as being subjected to rape during several months in captivity. Eleven of the informants were exposed to childhood abuse; eight were abused as both children and adults. One or several perpetrators were reported, both men and women, mostly acquainted with the victims, but sometimes strangers.

After the primary contact with the interviewer, an individual initial meeting was scheduled with each of the 11 informants. Verbal and written information was provided. This initial meeting gave the potential informant the opportunity to ask questions about the project, and allowed the interviewer (EW) to ensure that sufficient depth could be achieved during the interview. The interviewer also noted the contact details of the therapist for each of the informants. For two of the informants, this initial 'meeting' was carried out via Skype and the written information was sent by e-mail. After the initial meeting, an interview was scheduled with each of the informants. Before the interview, EW contacted the relevant therapist to inform him/her about the study and also to ensure that, if needed, a therapy session would be available close to the interview. The informants were advised that the research grant included the cost of two therapy sessions per informant. Ten informants scheduled therapy sessions, of which four were paid for from the research grant. Three informants decided that no therapy session was needed.

### Data collection, processing, and analysis

The interviews, conducted by EW, were audiotaped in a mutually agreed, non-clinical environment. All individuals signed an informed consent form at the time of the interview. Between April 10 2017 and May 24 2018, each informant was interviewed once, for 41–93 min. The following questions were asked in all interviews, and remained unaltered during the data-collection period: (i) please describe, in as much detail as possible, one or more dental appointments at which you were reminded of sexual abuse you have experienced; (ii) how do you perceive the effect of

sexual abuse on your oral health?; and (iii) how do you perceive the effect of sexual abuse on your general health and quality of life?

The interview technique encouraged the informants to describe experiences in their own words and from their own perspectives. Follow-up questions were asked in order to enhance reflection and development.

The data were analyzed using Qualitative Content Analysis (26). The interviews were transcribed verbatim. All transcripts were checked and supplemented with non-verbal expressions. The English translation was checked for authenticity by EW. The researchers undertook analysis of the text in their respective native language (i.e., EM analyzed the English translation and EW and GP analyzed the original Swedish text).

The interview transcripts were read several times to gain an overall impression of the material. Then, the text was cut at the point where a change in meaning occurred; *meaning units* containing text related to the same content and context were identified. Finally, meaning units were condensed into more succinct formulations by excluding all unnecessary words; *condensed meaning units* were identified.

Meaning units covering the informants' experience of how the dental appointment reminded them of episodes of sexual abuse were identified and selected for analysis. The meaning units covering how the sexual abuse affected oral health, general health, and quality of life will be reported elsewhere.

The condensed meaning units were analyzed by focusing on the emotions and meanings tied to expressions in the narratives, and each condensed meaning unit was assigned a code (by EW) reflecting the central meaning in the unit (Table 1). When codes were clustered, varying patterns in the informants' experiences were revealed. Re-reading the interviews enabled re-contextualization of the identified patterns. To communicate the content's descriptive level (manifest level), emergent patterns (including variations) were identified and then classified into categories and sub-categories. Via questions, comparisons, and discussion, the authors reached consensus. The participants did not provide feedback on the findings. Verbatim quotations were

selected from the interviews to illustrate the categories, but occasionally some words, unnecessary for understanding, were deleted; these are denoted in the text as '[...]'].

## Results

An overall finding was that the dental appointment not only triggered the body to recall the abuse situation but also raised the risk that the individual might be forced to relive the sexual abuse, as exemplified by the quote below.

*In fact, it's the body which reacts to things I have been subjected to. That somewhere I have to learn that they are not going to subject me to further abuse ... What I said just now: "It isn't happening here and now. It isn't happening here and now" and blah, blah, blah. So, hello there. No, perhaps not, but it darned well feels like it. Yes ... So ... No ... You can't convince yourself. [...] But it is in fact in my brain that ... it is happening ... Or in my head. My memories and my ... So ... It's very difficult to tell the difference sometimes.*

The analysis identified an overall theme illustrating the latent content 'An echo of sexual abuse transformed into (dys) functional reactions'. Thus, the dental appointment arouses emotions and reactions quite comparable with those experienced during the sexual abuse, illustrating a situation of double exposure – to an abuse situation and to the dental setting (Fig. 1). As a response to a true threat, as in the abuse situation, these reactions are considered adequate and temporarily functional. At the dental appointment, however, such reactions are considered dysfunctional. The informants' emotions and reactions demonstrate their perceived sense of reliving the abuse situation.

Two main categories covering the manifest content were identified. First, 'The inner invisible struggle', with

Table 1

*Qualitative content analysis process used to analyze interviews and extract results: the identified pattern described in the theme, covering the latent content, is presented, together with categories and subcategories, covering the manifest content, as well as examples of codes and condensed meaning units*

Theme: An echo of sexual abuse transformed into (dys) functional reactions			
Category	Subcategory	Code	Condensed meaning unit
The inner invisible struggle	Mental inscriptions of abuse experiences	Induced insecurity	This is one of those situations where you never know beforehand who you are going to end up with. One believes it's my dentist who is going to remove calculus but it's the dental hygienist who does it and you don't know what she is like. There is a loss of control that you never know.
	Consequences of the dental encounter	Awakening of shame	Now I have kept putting this off, sure to have ten holes. They'll think that I am not a good person. This feeling of having no self-worth came back. I am disgusting, I am worthless. My teeth became me.
The discoverable manifestations	Enigmatic communication	Escape	In order to get myself there then I need to take tablets, a big dose to manage. I am rather out of it. I get there as late as possible, so that I don't have to sit and wait, I can't bear the waiting. Then it can in fact happen that I walk out.
	Expressions of bodily memories	Nausea	It was much about the oral abuse one had experienced. Fed with sperm, forced in, pushed down into my throat even though I couldn't cope with the size. So I easily get feelings of nausea.



Fig. 1. The dental care visit as an echo of former episodes of sexual abuse, illustrating double exposure to an abuse situation and to the dental setting.

two subcategories: (i) mental inscriptions of the abuse experience; and (ii) consequences of the dental encounter. Second, 'The discoverable manifestations', with two subcategories: (i) enigmatic communication; and (ii) expressions of bodily memories (Table 1).

The first category 'The inner invisible struggle' comprises the invisible combat that the informants experience. This is impossible for any external observer (dental staff) to detect but is very stressful for the patient, supine in the dental chair. Such reactions are sometimes even experienced beforehand; for example, when the patient is contacted by dental clinic staff to arrange an appointment.

The first subcategory is *mental inscriptions of the abuse experience*; that is, the mental consequences of the abuse, including, for example, impaired self-esteem, feelings of shame and guilt, as well as self-blame.

*Just that guilt and shame. I can't even look after my teeth, like .... [...] It was the same when one had to blame oneself because one was abused. I went in fact to that room; I went there in fact and ... Now you have to blame yourself for not looking after your teeth.*

What has also been developed is a major control requirement, as crossing boundaries is difficult and loss of control is perceived as devastating.

*One has no control. And it's as if ... yes, but as if one's boundaries are walls, then they sort of collapse. It is sort of that sensation, that one is falling a little. Ehh ... Yes which is clearly related to the situation when you are being abused, that one ... when someone invades your boundaries, it is exactly as if: "ok, it isn't going to stop here. Instead it's just straight in".*

The individual also perceives loss of control when dental staff, when communicating with each other and

presenting dental status and findings to the patient, use terminology which the patient does not understand.

*But expressions that one doesn't know what they mean and ... and when it doesn't ... [...] And so they seemed to understand each other well, but I didn't understand and ... Ehh ... [...] But it is probably the fact that one can't follow everything that is being said and done. [...] I think that's the hardest part ... precisely because I link it to ... no, but to one of the assaults.*

Unpredictability about what will happen, unanticipated events, and who the dental care provider will be, are other examples of how the loss of control creates a mental inscription that is awakened in the dental surgery.

The second subcategory symbolizing the internal invisible struggle is *consequences of the dental encounter* (i.e., the consequences that arise in association with dental appointments). A condition frequently mentioned by the informants was that the severity of dental fear was related to the nature of the sexual abuse experience. Some informants stated that the sexual abuse initiated the dental fear, whereas others claimed that the dental fear worsened with age as a consequence of the abuse and also that the dental fear persisted even after processing, with the therapist, the mental trauma caused by the abuse.

*Even if everything else feels as if it's been worked over and dealt with, it's this (the dental fear) that remains so awfully long.*

This dental fear means that there is great internal resistance to keep dental appointments. To present for the appointment and endure the treatment therefore requires great courage and thus self-persuasion, for example, expressed as a positive autosuggestion.

*Therefore, when I first come in, I try to adopt the attitude that this person is probably nice and that it isn't going to be too bad. That is the attitude I try to adopt, because in fact, I don't know.*

Another very frequently mentioned aspect of dental appointments was the sensation of feeling trapped in the dental chair.

*But it's like this, just want to get away from there. And one is trapped there and so ... \*laughs\* ... Yes, one comes, one can't really get out. Ehh ... ... Because the dental chair is like this. And you are on the spot, in some way. \*laughs\* Then it is in fact ... Ugh.*

*EW: Yes, it is the bracket table you are talking about?*

*Yes, precisely. With the tubes and it is ... Yes. ... So one feels really ... Really trapped.*

Also mentioned was an overwhelming powerlessness, an emotion awakened, for example, when the

informant feels unacknowledged, dental staff talking to each other without involving the patient, when it is not possible to make yourself understood or the horizontal body position itself causes the feeling; a multifactorial powerlessness.

*Just that they are standing over one ... , or are sitting over one – like this therefore – just that is a big thing, very big. Because it puts them in a position of power. And I feel very little just because I'm sitting in the chair, or lying in it, and they are towering over me.*

Dental appointments are described as extremely demanding, not only emotionally but also physically.

*And then I have so much pain in my body afterwards. Yes. Feels as if I have had a session at the gym. ... Actually. ... It shouldn't really do that \*laughs\**

The second category identified was labeled 'The discoverable manifestations', and comprises signs which the dental staff should be alert to when interacting with patients in the dental surgery. The first subcategory was *enigmatic communication*, in the form of expressions and behaviors that can be considered elusive and as such difficult to recognize, but identifiable to the attentive observer.

This subcategory includes reactions, during a treatment session, that the dentist might perceive as strange. There may be mixed messages from the patient, expressed by one informant as accepting a suggested treatment immediately with words, but at the same time with tears in her eyes. Aggressive behavior, or even violence, are other examples, as well as fear of being touched, which is expressed as difficult to tolerate.

*I am very careful not to let people touch my face. And you know, dentists do just that. ...*

*I withdraw. I really feel just: "Take your hands away" I don't like ... And it is something too that dentists have to ... , have to do of course. But I really dislike it intensely. [...] And it has also made me feel sick.*

What the dental staff might interpret as an intensified response to a routine treatment procedure is also an example within this subcategory. Sounds or smells may be the trigger, or saliva or water running into the throat: a consequence of this experience may be that the patient never goes back to the dentist again.

*Then when it happened ... then when I reacted really forcefully ... then it was as if I panicked like: "Take everything out. Take it out, take it out." Yes ... Then I never went back there again.*

Non-disclosure to the dentist of a history of sexual abuse is more the rule than the exception, just as the informants do not always reveal their dental fear. Some informants express that this fear should be obvious to the dentist.

This subcategory also includes behaviors such as leaving the waiting room after arrival but before

treatment, repeated cancellations or unexplained absence, and failure to seek dental care for extended periods of time despite an obvious treatment need, and also situations wherein an adult patient is always accompanied by another adult, friend, or relative. There are also reactions in relation to sedation. Some informants report that they absolutely require sedation for any treatment. Others state that they do not really want sedation because this creates a situation of loss of control. Moreover, for those informants who have previously been addicts, sedation is perceived as completely ineffective.

The second subcategory, *expressions of bodily memories*, is the most obvious to an external observer. The most significant of these might be dissociative reactions, such as mentally leaving the body when conditions become intolerable.

*Yes it, ... I am not at all conscious of what is really happening in the surgery. Instead I am back in that situation. ... Ehm ... and sometimes it happens in fact that I ... shut everything down. So that I ... , I am neither in an abuse situation and I am not in ... in the dental surgery. I am just away. Because it becomes too sensitive.*

According to one of the informants it is possible for dental staff to recognize this defense reaction.

*My thought is in fact when I myself can see how I change when I like separate myself or dissociate, then I think that then others must also see it – how one in some way ... becomes different. Curl up inside your body and just: "Ahh." Resignation.*

*EW: But you answer if you are spoken to?*

*...Yes ... but it is just as if I am not the one speaking, but that it is someone else.*

*EW: Does one have to know you then, in order to observe it, do you think?*

*... No, I don't believe so in fact. Because my experience was in fact that ... I thought that my voice changed, that my whole expression changed. Then I don't know what the others in, in, in the room ... , if they experienced the same thing, but ... that is my experience of it.*

During dissociative reactions, the informants frequently state that they stop breathing, freeze, and become paralyzed, and are sometimes unable to talk. In this state, the informant might accept any proposed treatment because of the feeling of standing outside him/herself, with no defense and unable to think clearly.

*Yes, but if I shut down, then you can carry on, because I'm used to that in any case. There you go ... [...] So that ... yes, what does it matter if one more person ... abuses me? Because if they say: "Now we*

*are going to the moon.” “Ok, let’s do that then”. [...] I mean if you think ..., think about the abuse situations. All you can do is accept it. [...] So if they say: “Now we are going to pull out all your teeth.” “Yes do it.” Therefore ... it doesn’t matter, because in that situation I just accept everything. It doesn’t matter what ... I can’t like think clearly then.*

Among reactions that it is possible for dental staff to detect during treatment are that the patient has a gaze that shifts a lot, wants to rinse repeatedly with water, perspires, and has a constant flow of tears, body cramps, and nausea caused by a memory of being *fed with sperm*.

A bodily reaction caused by remembering prior violence was also exemplified in the quote below.

*And then it’s more as if the body ..., my body is reminded (prolonged exhalation) of it. It is more that than the thoughts themselves, but it is in fact ..., that is to say ... it is the same disagreeable feeling or ... so ..., as with ... abuse.*

Another bodily reaction is to remain seated upright when the dental chair is being reclined, especially if there is no forewarning. Informants also describe holding very tightly onto the armrests in an attempt to maintain control.

## Discussion

This study showed that the dental appointment may be interpreted as an echo of an episode of sexual abuse. Psychologically stressful reactions were expressed during dental appointments, but sometimes these were not easily identified by the dental staff. Bodily expressed memories, which can be identified, are adaptive defense responses to sexual abuse, but are not really helpful in the dental surgery.

An advantage of this study was the inside perspective of how dental appointments can be experienced by a patient who has been subjected to sexual abuse as a child or an adult. The method and analysis illuminate the complexity of the participants’ experiences, aiming at a broader depth and understanding than would be disclosed by solely statistical analysis (25). This meant not only affirming findings from previous studies of the possible impact of a history of sexual abuse on dental care (12–20, 27), but also showing *in what way* this experience has implications, and that memory is not limited to that which can be verbalized. However, the interviewees’ narratives are filtered through interpretative and experiential lenses developed over time and as a consequence of psychological treatment. The study results, in terms of psychological and bodily expressions at dental appointments, are probably transferable to other individuals who have been sexually abused and also suffer from dental fear. As yet it is unknown whether transferability also applies to patients who have been sexually abused but have not disclosed their experience and thus not received any psychological

treatment. Transferability may be more unlikely if dental appointments are not associated with great discomfort.

The focus of this study was the response to dental treatment of individuals subjected to sexual abuse. People who have been exposed to potentially traumatizing events have often experienced more than one type of exposure (28) and this is especially common for those subjected to sexual abuse (29). This was also the case for several of the informants in the present study. It might be difficult to verbalize the specific impact of the sexual abuse on the individual’s experience of dental treatment. While some informants identified sexual abuse-specific factors that clearly impacted on their experience of dental care, the aggregated experience of different types of trauma and challenging life circumstances and their impact on dental care were described at a more general level.

When using a research method for qualitative data, a strategic (purposive) patient selection (not random) is required. The size of the selection group is not a determinant of transferability of the results; it is important that the informants have experience of the phenomenon being investigated and are encouraged to give a detailed description (30). This was considered to be the case in the present study and saturation was achieved. However, the material is probably somewhat biased, because the majority of informants (nine of 13) contacted the author themselves and showed interest in participation. Another purpose of strategic sampling was to cover a range of experiences other than the two main inclusion criteria mentioned above. This was achieved: the informants represented diverse abuse experiences, and their age varied, as did their socio-economic status.

During the interview, the informants were given the opportunity to describe their experiences in their own words. An interview conducted with open questions and based on the individual’s own experiences creates a unique opportunity for in-depth understanding of how meaning is created for the individual (30). This approach also follows a model of feminist phenomenological research in which participants are empowered by having their voices heard rather than silenced (31, 32). Nonetheless, associated with the proposed project was the risk that severe traumatic memories would surface. This was seen as inevitable, given that discussion of these events was a prerequisite for the study. Therefore, before recruitment, the informants had been treated by a therapist and had, at least partially, worked through their trauma. This was a criterion for inclusion.

Philosophers, and phenomenologists in particular, have claimed that the body is a site of knowledge and that consciousness is embodied (32–34). The relevance of this was expressed explicitly by some of the informants and may be considered as expressed implicitly by all informants, in accordance with earlier reports (9). These observations underscore that the body is not an object separate from the individual’s history and experience and therefore is something for dental staff to consider as an important source of information. However,

both patient and dental staff might label what is happening in other terms and be unaware that the behavior is actually an expression of a traumatic emotional memory (23). Individuals may disclose abuse when opportunities for such disclosure arise, if not in words, possibly with their bodies. Disclosure of a history of abuse is reported to be key to recovery (22); hence, the dental appointment, with the potential for discovery, must be considered as beneficial (35). The present study shows that bodily expressions do exist among these patients and are perceived to occur as a consequence of the abuse. Many of the reactions are recognizable to dental professionals, although most are probably not exclusively expressed by patients subjected to abuse. However, with an insight into the possible cause of these body expressions, the observant dental-care provider should be able to contribute to a disclosure. If not previously initiated, this would, in turn, facilitate guiding the patient toward professional help from a psychologist, in order to work through the trauma. When healthcare providers remain silent and inattentive to bodily reactions, they contribute to concealing a history of abuse. Thus, for the individuals concerned, memories of abusive episodes might be repeated, with further victimization as a consequence (6, 9). This risk is also highlighted by informants equating their experiences of dental treatment with the episodes of abuse.

It is important to be aware that dissociation, described by informants as a response to the stress associated with dental treatment, had also been a feature of their response during the former episodes of abuse. Using dissociation, a 'mental escape', as a protective measure to preserve dignity in situations of humiliation or enforced powerlessness (36), is considered an adequate defense reaction in cases of perceived great danger. However, a consequence of this 'mental escape' is that what happens is not integrated into consciousness and therefore is not a memory which can be verbalized. It becomes an unnamed fear that can be reactivated by similar situations and the person who perceives these feelings is unable to discriminate here-and-now from there-and-then (37). Boundaries should not be violated by dental staff, and there is a risk for this when the patient dissociates during dental treatment. The reactivation of a previously experienced violation might well mean that the consequences of the former violation are reinforced.

The findings in the present study of the invisible conflict regarding the informant's experience, the mental consequences of the abuse, and the emotional turbulence related to dental appointments, confirm earlier findings that dental appointments are upsetting and cause anxiety (12–16). This confirmation, and to some degree the development of earlier findings, is still of importance because it is reported that dental personnel lack adequate education about the vulnerability of their patients to violence (38–41). The findings also highlight the complexity of the informants' experiences, confirming the importance of bringing a phenomenological analysis to bear on the

qualitative data (25). The present results might therefore improve understanding of the implications of this reported vulnerability of the individual in the dental setting. Failure of dental staff to acknowledge this vulnerability is a potential barrier to achievement/maintenance of oral health. As confirmed in previous studies (42, 43), greater awareness by dental staff of possible reaction patterns among these patients might facilitate questioning the patient about experience of violence.

Strategies for management of patients suffering from dental fear have been developed (44) and successfully applied in dental practice. With greater awareness of the strain that a visit to the dental clinic can evoke in an individual subjected to sexual abuse, and with knowledge of bodily expressions, dental staff could contribute to disclosure of the abuse, and the individual could be referred for professional support. However, to achieve fully effective management of patients who have also been victims of sexual abuse, additional, more specific measures, such as trauma-informed care (TIC) (45), might be required. This question will be addressed in a separate paper.

To conclude, the dental appointment arouses similar psychologically stressful reactions as the episodes of abuse; both implicit and explicit expressions are recognizable. Dental staff can contribute to disclosure by improved understanding of the strain a dental appointment can cause in patients who have been subjected to sexual abuse, and familiarity with the associated bodily expressions.

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