

Experiences and perceptions of infant dental enucleation among Somali immigrants in Sweden: a phenomenographic study

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ABSTRACT

Objective: The aim of this study was to explore and describe ways of experiencing and perceiving the Eastern African practice of infant dental enucleation (IDE) among immigrants of Somali origin living in Sweden.

Material and methods: Six informants, three men and three women aged 26–54 years, were recruited for semi-structured individual interviews. Phenomenographic analysis of the interview transcripts was performed.

Findings: Informants described four ways of experiencing and perceiving IDE: as an effective, necessary treatment; as a disputed tradition; as an alternative to failure; and as a desperate measure. The experiences and perceptions were highly influenced by the contexts the informants had been in, namely, communities in which traditional treatments were used frequently, in which other people were influential over their daily lives, and in which negative experiences of formal health care were common, as well as other difficult circumstances beyond the informants' individual control.

Conclusions: The findings contribute to deepened understanding of IDE and the importance of context to the practice of it. Further, the findings deepen understanding of the decision to have the practice performed on infants, which may help dental and health care personnel to adequately communicate with individuals of Somali origin about the harmfulness of IDE.

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Introduction

Infant dental enucleation (IDE) is the traditional practice of removing dental buds in infants [1,2]. The aim is to treat or prevent bodily diseases or symptoms, such as diarrhoea and fever [2–4]. This usually takes place before the age of one year [5–7], and the mandibular primary canines are usually enucleated. The practice appears to be equally common in boys and girls [8,9]. IDE is practiced mainly in parts of the Eastern African countries of Ethiopia [9,10], Kenya [3], Somalia [11,12], Sudan/South Sudan [13,14], Tanzania [4] and Uganda [15,16]. More often performed by traditional health practitioners, non-sterile instruments such as knives, bicycle spokes or fingernails are used, and no form of pain relief is given prior to enucleation [5,13,17].



The prevalence differs both between and within the countries [18]. To the best of our knowledge, no study in Somalia has reported the prevalence [11,12]. However, a study on a group of children of Somali immigrants in England indicated that almost one third may have been subjected to IDE, and of those, 22% were born in England [8]. Prevalence as well as indication of continuance of IDE has also been reported in Israel [19,20].

Little is known about what motivates its continued use. It appears to be more common in rural areas and among populations with low socioeconomic status [2,5,14]. Research has also suggested inadequacy of and distrust in formal health care services as well as trust in traditional forms of treatment as possible promoters of continuance [3,9,21–23].

The practice may cause general health complications such as bleeding and systemic infections [23] as well as oral health-related complications such as the absence of one or more teeth, various types of dental hard tissue defects, tooth disfiguration or eruption deviance [8,19,24].

A few qualitative studies on IDE have been found in which mainly local or ethnic communities, reasons for the practice, and perceptions of bodily conditions preceding IDE are explored [3,17,21,25–27]. However, there is little knowledge on how IDE itself may be experienced and perceived by individuals in communities in which it is practiced.

Results from a previous study in Sweden suggested that some patients of Eastern African origin had been subjected to IDE [28]. Statistics Sweden shows that between 2010 and 2015 the number of people in Sweden born, or with parents who were both born, in Eastern Africa, increased from 95,000 to almost 160,000 [29]. The majority are from Somalia.

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Considering the size of this group, the lack of knowledge regarding IDE, and indications of continuance in immigrant communities, there is a need for studies to gain a deeper understanding of how the practice may be experienced and perceived among individuals of Somali origin. The aim of this study was, therefore, to explore and describe ways of experiencing and perceiving IDE among a population of Somali origin living in Sweden.

Methods

Design

A qualitative design based on phenomenography was applied.

Description of the approach

Central to the phenomenographic analysis is the description of how people perceive, understand, experience and/or conceptualize various phenomena in, and aspects related to, the world around them [30]. These different ways of experiencing, perceiving, understanding and/or conceptualizing phenomena are analysed qualitatively and described in categories of description. If relationships such as internal order emerge between categories, the categories and the relationships between them are described and presented as the outcome space [31].

Informants and setting

Informants were recruited through purposive sampling. The two inclusion criteria were being ≥ 18 years old and defining themselves as being of Somali origin. Variation was sought regarding sex, age and level of education. To further increase the possibility of exploring perceptions, variation was also sought regarding those who had allowed the practice to be performed on their children and those who had not. Recruitment took place between March 2013 and January 2016. The main recruitment setting was a public dental health clinic providing dental care in an area of Örebro, a Swedish municipality with a population of approximately 140,600 residents in 2013 [32]. The area served by the dental clinic had a population of 14,300, of whom 54% were born, or had parents who were both born, outside Sweden. Of these, 34% were of African origin [32]. Potential informants were invited to participate in the study if they had knowledge or experience of the practice of IDE, identified either by it having been confirmed that a child they had accompanied to a dental visit had been subjected to the practice or by them having discussed the practice for other reasons. The personnel at the clinic made the first approach, asking if they would agree to be contacted by a researcher. If they agreed, one of the authors (JB) then contacted them by telephone to provide information about the study and ask if they would be willing to participate. Other potential informants among the acquaintances of the recruited informants and of the authors were contacted. Six informants were

Table 1. Demographics of the six informants in the study.

Age, median (range) (years)	45 (26–54)
Female/male (<i>n</i>)	3/3
Education (<i>n</i>)	
Primary school or below	3
>Secondary school	2
University	1
Residency in Sweden, median (range) (years)	4 (1–25)
IDE performed on own child (<i>n</i>)	4
Type of practice (<i>n</i>)	
Enucleation	3
Burning	1

recruited, three men and three women. Demographic data are given in Table 1. All four performed cases of traditional practice had occurred in Somalia.

Data collection

Data were collected through semi-structured individual interviews using an interview guide. The interview guide was tested in a pilot interview, and minor revisions were made to the interview guide, changing wordings and reducing the number of questions. As the pilot interview contained rich and valuable information, this was included in the study. All the interviews were conducted by the first author (JB), and an interpreter was provided upon request. The guide consisted of four open-ended questions:

1. Can you tell me what you know about the removal of teeth in infants?
2. What are your thoughts about the practice?
3. Do you see anything good in this that you can tell me about?
4. Do you see anything bad in this that you can tell me about?

The informants were encouraged to speak freely about their experiences, feelings and perceptions. The purpose was to capture what the informants really thought of the practice, how they related to it, and what it meant to them. Probing and follow-up questions were frequently asked, such as 'Can you tell me more about it?' and 'Can you elaborate?' In cases where informants had their own experiences of the practice, they were asked to elaborate on them.

The interviews were conducted in a place of the informant's choice. One informant chose to be interviewed in his own home, while the others chose to come to a private meeting room at the dental clinic. Before the interviews, chairs and tables were rearranged to create a more comfortable and relaxed area on one side of the room.

The length of the interviews varied from 22 to 59 minutes. The interviews were recorded on a digital mini-recorder and transcribed verbatim by one of the authors (JB). An interpreter was requested by two of the informants; otherwise, the interviews were conducted in Swedish. Two different professional Somali interpreters were provided. A third interpreter was engaged to check the translations of the two interpreters present during the interviews.

Data analysis

The phenomenographic analysis was performed by two of the authors (JB and KS), guided by the steps described by Sjöström and Dahlgren [33]. Although the interviews were semi-structured, most contained sections where the informants spoke in a narrative form about their experiences and perceptions. They also referred to and described contexts that were essential to both their experiences and perceptions. In our assessment, the narrations and the contexts constituted a complex intertwinement that was important to the understanding of the experiences and perceptions. Efforts were therefore made to preserve the descriptions in the narrations, and the impact of contexts in the analysis.

First, we read the transcripts several times with the purpose of becoming **familiar** with the transcripts and of identifying the experiences and perceptions. Second, we **compiled** statements/extracts from each transcript and **reduced** them to a condensed version containing relevant statements/extracts. This was done to obtain an overview of the essential elements regarding experiences and perceptions, contexts, and the relationships between them. Descriptive summaries of each transcript were also written at this stage to further aid the analysis. Following this, we **grouped** similar statements/extracts preliminarily, followed by **comparison** of the statements/extracts to identify similarities and differences and to discern groups of experiences and perceptions. Next, we gave descriptive **names** to the groups (the categories of description) that captured their essence. Finally, following **contrastive comparisons** between the categories to describe profoundly what made each category discerned, we arranged an outcome space of the categories that summarized ways of experiencing and perceiving the practice and which reflected the internal relationship between them. All steps except the first were reiterated until agreement was reached between the analysing authors (JB and KS) and the analysis was deemed satisfactory. Throughout the analysis, all statements/extracts, groupings and emerging categories of description were cross-checked to avoid interpretation and to reduce overlap.

Ethical considerations

The study was approved by the Regional Ethics Review Board in Uppsala, Sweden (reference numbers: 2012/316 and 2012/316/1). All informants received information about the study. Written informed consent was obtained prior to each interview. Informants were assured that participation was voluntary, and confidentiality was guaranteed. They were also informed that they could abstain from answering a particular question or withdraw from the study at any time without any consequences.

Results

Four categories of description emerged that described essentially different ways in which the informants experienced and perceived IDE. The categories were **an effective, necessary treatment; a disputed tradition; an alternative to failure; and a desperate measure**. The outcome space with internal relationship between the categories is shown in Figure 1. An order was identified within the outcome space, with one category, **an effective, necessary treatment**, emerging as fundamental to the other three categories. The fundamental category was identified as being shared by all informants, and it was also included in the other three categories. Furthermore, variation in perceptions emerged between and within the categories of descriptions.

The experiences and perceptions emerged as being highly influenced by contexts the informants had been in previously. These contexts were described as the following: communities in which traditional treatment practices were perceived as important and used frequently, communities in which other people held influence over their daily lives and family matters, communities in which negative experiences and perceptions of formal health care were common, and other difficult circumstances outside the individual's control.

Statements/extracts are given to illustrate the categories of description, and to exemplify relationships between categories and contexts. Most statements/extracts illustrate more than one perception and context. Bolded parts exemplify key aspects of the category in which the statement/extract is given. Statements in brackets are the authors' clarifications.

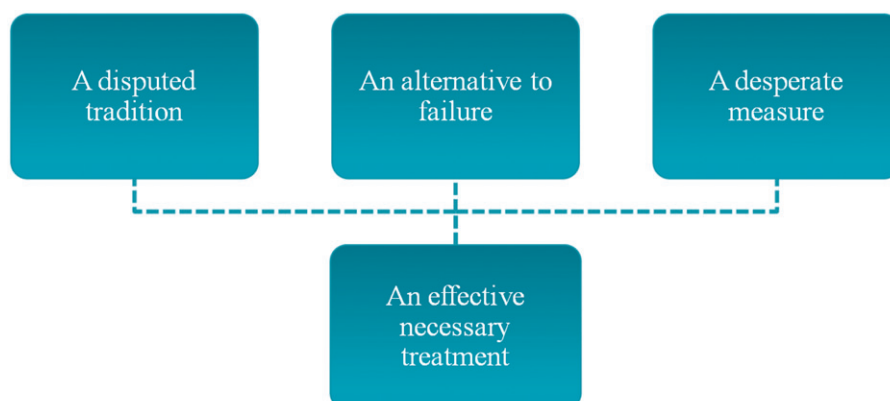


Figure 1. The outcome space showing the ordered internal relationship between the four emerging categories of description, where *an effective necessary treatment* was fundamental to the other three categories. The dashed lines illustrate the connections between the categories due to influence of contexts.

An effective, necessary treatment

This category was founded on perceptions of explanations and reasons preceding the practice as a method of treatment for a sick child. The main reason for treating a child with IDE was diarrhoea, especially if it was persistent or recurrent. Other specified reasons were headache, fever and vomiting. Some informants described how the area of the canine tooth bud became infected with bacteria or larvae, which caused symptoms in children. Other informants were unsure of why the areas became sick. Several informants described the illness as showing itself by whitening and swelling of the area around the tooth buds. This was referred to as a condition known to them as *ilkow* or *ilko dowo'o*. Some informants were unsure whether *ilkow/ilko dowo'o* was a real condition, or they perceived that other reasons explained the symptoms, such as generally poor hygiene or unsanitary food and water:

Informant 5: **The idea is to cure the disease, diarrhea or whatever it may be, and also to save the teeth—I mean the real teeth that come through [eventually]. So this tooth, the milk tooth, is ruined, by larvae and bacteria. This way, you want to win two things—to save the tooth and to cure the diarrhea and everything. If you remove it [the tooth], then the child will get well.**

Informant 2: **I don't think it exists, this disease [ilkow]. It's not a disease people have.** No doctor will tell you after an examination that your child has *ilkow*. Since no doctor or dentist gives you that term, it means that it is something made up ... **I have tried to understand what it might be, if they may have gotten bacteria or something else.**

According to the informants, two types of treatment could be performed. Beside enucleation of canine tooth buds, some also described burning of the area around the tooth buds with a heated object. Both methods were said to be performed mainly by traditional practitioners but could also be performed by a parent or someone in the community. The choice between enucleation and burning was usually made by the person performing the procedure.

Nonetheless, both practices were perceived as effective against symptoms they had seen or had knowledge of, and the informants who had their own experience of IDE/burning had perceived improvement in the sick child shortly after having it performed.

Informant 1: As you know, mothers are more sensitive than fathers. It's the mother who is constantly with the children. When the children get sick and can't sleep at night, eventually you get tired ... **and when a mother is good, a mother that fights for her children, who wants her children to be well and looks for medicines, [she tries] to get treatment when the children get sick—that's why the mother does such a thing.**

A disputed tradition

Here, perceptions were concerned with the practice as a proven method and/or as following the collective experiences of the community. The two kinds of treatment were described as traditional methods and as being different from formal health care. They were also perceived by several informants

to be a common and unremarkable practice that had existed in their communities for a long time. Additionally, it was perceived that the legitimacy of the practice was proven by informants' own personal experiences or by the experiences of others in their community. In this category, the perceptions emphasized trust in traditional methods and/or in the knowledge and experience within their community:

Informant 1: **We Somalis don't know [much] about this tradition, because it was there before me ... when children get this diarrhea, older women like relatives and neighbors come and say, 'This child has *ilkow*,' and this means this problem with the teeth, that it's them that cause diarrhea.** The treatment is like antibiotics ... Somalis have different traditions that they use and that make them well ... The burning was not a big procedure, just a bit on the gum ... It's normal in our homeland and you aren't scared by it. It's nothing remarkable, nobody gets scared. It becomes a part of life.

According to the informants, although the parents were those who decided whether the symptoms required traditional treatment, advice could be sought from their families or other people in their communities. Their decisions were also perceived to be influenced by the expectations of, encouragement by, and/or pressure from family members or other members of the community. People in the community were also perceived to influence the choice between traditional methods and formal health care. This was because the latter was perceived to be ineffective or foreign to their local traditions. Conversely, some informants described themselves, or described knowing of mothers who had decided to have the practice performed without their husband's knowledge or in spite of their disapproval:

Informant 1: **The [neighboring] women nagged me because the child had become sick many times,** and they said, 'Come, there's a *sheikh*, he can help the girl. We'll show you.' I didn't have any money, and they said, 'We can help you pay.' We did it ... **Even my husband didn't know about it ... He didn't want this procedure to be done on the children—he didn't allow such things.**

Informant 4: My father, he's good when it comes to this ... after a few days, he said, **'This child, this girl, she doesn't need to be taken to the hospital. She has only *ilkow* ... You only have to remove these.'** Then I thought: **No, dad, no [the informant laughs and rolls his eyes], this is only tradition,** it's nothing. We have medicines, and we'll try medicines first to make the child well ... When I saw that nothing from the doctors or the hospital helped, I decided to take my father's suggestion ... **and sometimes you respect other people's opinions. You just say 'OK,' even if I wasn't a hundred percent fine with it. I thought, if it makes her better, then I'll take it.**

Mixed feelings were described about the practice because of the traditional methods used. The methods were perceived to be harsh, very painful and unsanitary. There were also concerns about the practitioners being unqualified for medical practices and unprepared to manage complications. While a few informants noticed long-term negative consequences, such as discolouration and deviance of permanent teeth, others perceived the complications that they knew of to be negligible. In addition, some informants described scepticism of traditional methods in general:

Informant 5: To me, when I think back, **the practice is very barbaric in the way it's done.** One does this to one's own children... taking a knife or a sharp object and cutting into the jaw or the gum, then removing it... **That looks painful... and a bit... or very bad in that way. But the perception I had was that it was a real disease, and to do it in that way was no problem. It wasn't wrong, since it was right, it was justified to do it, but the way it was done was really awful.**

Informant 6: A thought (I had) was what would happen to his [the child's] teeth in the future. They erupted in wrong places and were delayed. He did not get canines even though everyone else [at the same age] had shed [the primary canines] and gotten [the permanent canines].

An alternative to failure

In this category of description, perceptions concerned resorting to this practice because of a lack of trust in the formal health care available or the perception of formal health care as ineffective. Here, the traditional methods were explained as being an alternative after having tried the preferable alternative of formal health care. The traditional method followed outcomes such as absence of either improvement in the child's symptoms or recovery. Some informants expressed frustration following several attempts at treatment with formal health care, which led them to distrust formal health care. Others described continuing distrust based on previous experiences of ineffective health care on their own part or that of the community. These experiences led to some informants being unwilling to continue seeking formal health care and/or feeling it necessary to turn to traditional practices:

Informant 4: My daughter became sick and we tried to take her to the hospital. **We used a lot of medicines; we tried everything, but it did not help... The first ones, normal doctors or nurses, said she has bacteria. Others say malaria, you know... And everyone prescribes medicine... In the end, the family says [informant laughs briefly]: the solution is not medicine.** It's only you who thinks medicine can do something. Just remove those teeth, and the child will get well immediately [informant snaps his fingers]. So I tried it, and she got well.

A desperate measure

The perceptions in this category of description were concerned with finding a solution under difficult circumstances and with the lack of other alternatives. Here, enucleation/burning was perceived as a solution under difficult living circumstances. Factors prompting the choice were unavailability or admitted inadequacy of formal health care, insecure residency status in society, and lack of economic resources. Some informants also perceived themselves as being desperate or at a loss as parents to handle the sick child. Additionally, informants expressed fear of serious consequences if the sick child remained untreated. The decision was described by a few informants as difficult, because of the ways in which enucleation/burning was performed, and the practice being the only available resource:

Informant 6: My son had a lot of diarrhea. He had become thinner and was very sick, and they [friends of husband] said, 'You are refugees here, and he may die because of this,' and I had it in the back of my mind that I didn't want my son to die of these diarrheas... I was a refugee, and my family and close ones, I mean my family, my siblings, my mother weren't there. Even though I was with my husband and his family, I felt lonely. Because as a young girl, a young mother, when her child becomes sick in the homeland, most of the times she goes to her mother. She goes back to her mother and says 'Mother, I need help. The child is sick.' I did not have that support. **And I went to the health care clinic, and they couldn't help me, and I didn't know what to do. Then these two men came [friends of husband] and asked how the boy was, and what they said at the clinic. I told them, and they said, 'There's another solution. We will go to this woman.' And I went with them.**

Discussion

The aim of the study was to explore and describe ways of experiencing and perceiving IDE among residents of Somali origin in Sweden. Four categories of description emerged, showing that the informants experienced and perceived the practices in four different ways. An order was identified among the categories in the outcome space, in which **an effective, necessary treatment** was fundamental to the other three categories, **a disputed tradition, an alternative to failure, and a desperate measure.** Also, another method of treatment was described apart from enucleation, namely, burning of the area surrounding the canine tooth buds.

Although the interviews were semi-structured, most contained sections of narration, where the informants spoke of their experiences and perceptions. They also referred to and described contexts that were highly essential to both their experiences and perceptions. Central to the findings is the perception, in accordance with previous research [2–4,9,21,25], that the practice is effective and necessary to treat a sick child. The category summarized a conviction shared by the informants in our study, regardless of their views of the methods used or their doubts about what caused the symptoms. Therefore, this perception was a key finding and crucially fundamental to the other perceptions. The outcome space shows that although the categories are in principle separated, they are connected by influences of shared contexts. Therefore, the informants' perceptions could be described as being founded on a complex intertwinement of overlapping contexts. This complexity was apparent both in the perceptions and in the decisions to allow the practice to be performed on a child.

The informants made a distinction between traditional practices and formal health care. This was emphasized by the perceived history of traditional practices and also by proof that the practices were effective, derived through collective experiences in local communities. Furthermore, the experiences and perceptions of those in their communities influenced their own perceptions, implying that the informants were strongly influenced by experiences of others in their communities. Although the informants considered themselves to be responsible for the well-being of their children, it was common for relatives and others in their

community to be aware that their children were ill, and for them to interfere with the parents' decisions. Furthermore, distrust in formal health care could be fuelled by the perceptions of others in their communities.

The perceptions concerned with the inability to make use of formal health care, due to its unavailability and/or a lack of economic resources, bring to light further important contexts. These suggest the influence of major factors in the informants' lives and their communities that were beyond their control. The main difference between the categories **an alternative to failure** and **a desperate measure** was in the perception of formal health care: in **an alternative to failure**, the *perception* of inadequacy of, or distrust in, formal health care was crucial to the category. The informants *chose*, and perceived it as reasonable, to reject formal health care, regardless of the competence of formal health care units. In **a desperate measure**, the *perception* of the unavailability of formal health care in desperate situations was crucial, as the informants did not *perceive* themselves as *having the choice* of formal health care. Interestingly, IDE/burning of tooth buds was justified by some informants by the conditions prevailing in Somalia. In addition to describing their experiences and perceptions of IDE, some informants elaborated on their thoughts regarding the likelihood of these traditional practices being performed in Sweden. This was perceived to be highly unlikely, as the practices were perceived to be unnecessary here due to a high living standard, good sanitary conditions, and the availability of reliable formal health care. However, they emphasized that the conditions in Somalia may be such that traditional practices are trusted, and/or are the only alternatives available. Although the informants' decision to have IDE performed may have been difficult or regrettable, perceptions on formal health care in Somalia and perceptions of likelihood of IDE being performed in Sweden suggest that the ruling conditions may prompt IDE to be perceived as justified. Availability of reliable formal health care and absence of prompting social conditions of IDE suggest that conditions in Sweden may discourage from the practice of IDE.

An additional important aspect is that different contexts appeared to have more influence on some perceptions than on others. In some narrations, experiences of others in their communities emerged as more influential for informants' perceptions of the practices as being effective and necessary. Other conditions led informants to resort to enucleation/burning, even when they preferred formal health care. Some informants resorted to traditional practices after exhausting formal health care alternatives, while the decisions made by others were preceded by the perceived inadequacy, or distrust, of formal health care. However, this does not mean that certain conditions alone explain a certain perception. Rather, it suggests reasons for some of the differences between the experiences and perceptions.

There are some similarities between our findings and those from previous studies. It has been suggested that trust in traditional treatments may be a reason for the continuance of IDE in Ethiopia, Kenya, Sudan, Tanzania and Uganda [2–4,9,13,34]. Importance has also been ascribed to the

influence of family members and others in the community. In Kenya, Sudan, Tanzania and Uganda, this may take the form of advice, encouragement or pressure to subject their children to traditional IDE [2–4,21,35]. The inadequacy or unavailability of formal health care, together with a general distrust in formal health care, has also been discussed as a potential prompter of IDE. In some cases, a lack of alternatives has been suggested as one of the main reasons for resorting to the practice [2,4,23].

The findings in this study may contribute to a deeper understanding of the variations in perceptions of IDE/burning of tooth buds. The findings also highlight the importance of contexts in the perceptions of, and the decision to perform, enucleation/burning, despite the scepticism or mixed feelings of parents. Due to the complexity of the impact of contexts, informants described various experiences and perceptions simultaneously. It could be argued that presence of and trust in traditional practices, impact of and trust in experiences of social surrounding, and distrust in formal health care reflect aspects of local culture, thus playing a vital role in the maintenance and persistence of IDE/burning. As far as we know, this is the first study in which a qualitative approach was applied to a study on residents of Eastern African origin in Sweden, or outside Eastern Africa. It is also the first study in which the informants are of Somali origin, and in which variation in experiences and perceptions have been elucidated. It is also important to add that we the authors have no knowledge of a confirmed case of IDE performed in Sweden. In our estimation, the practice of IDE/burning of tooth buds is a violation of Swedish laws applied in health and dental care, particularly The Health and Medical Services Act (SFS 1982:763) and The National Dental Service Act (SFS 1985:125). A new study on knowledge and perceptions of IDE among Swedish dental and health care personnel reported that fewer than a fifth of the personnel had any knowledge on the practice [36]. Further, the personnel were unsure whether it was their responsibility to detect and to prevent cases of the practice. Our study provides insight that may be used in educational programs to deepen understanding of IDE/burning of tooth buds among dental and health care personnel, and further, to clarify their professional responsibilities.

Burning of the area surrounding canine tooth buds is a form of treatment not previously reported in the literature. Apart from enucleation, rubbing of herbs on tooth buds has also been reported in some areas of Eastern Africa [4,17]. The latter is suggested to be a transition away from enucleation by traditional practitioners. Similarly, burning may indicate a transition away from IDE. Burning also can be less invasive than enucleation, and may explain some of the minor dental complications reported previously, such as enamel defects in canines or adjacent teeth [8].

Methodological considerations

This study has some potential limitations. Although there is considerable demographic and phenomenal variation among the six informants [37], the sampling process and low

number of informants may not have fulfilled recommended purposive sampling [38]. There may also be a risk that only informants interested in discussing IDE participated in the study. During the recruitment period, we observed some hesitation to participate. Four additional individuals initially agreed to participate in the study, but they withdrew before the interview. Additionally, a potential informant declined the invitation because she was 'afraid,' without giving any further explanation. Although we initially wanted to include more informants, we believe the richness of the data obtained provided valuable information. The subsequent analysis indicated low risk based on the narrations, the broad descriptions of experiences and perceptions, and the variation between informants.

The third interpreter, who checked the interpretation of the first two, was invited to participate in the study *after* checking the translations. According to our assessment of the interview, this informant shared personal experiences and perceptions, and the interview was therefore included in the study.

Another important aspect of credibility is conceptual equivalence between the actual statements of the informants and the interpretations [39]. We addressed this by informing the interpreters about the study before the interviews, explaining our requirements regarding their task during the interviews, and ethical issues [39]. Further, a third, independent, interpreter was asked to reinterpret the recorded interviews to check the quality of the translations to ensure that no important words or nuances were lost and to avoid misinterpretation or misunderstanding [39,40].

Conclusions and implications

The study shows that IDE was perceived in four ways: as an effective necessary treatment, as a disputed tradition, as an alternative to failure, and as a desperate measure. Presence of and trust in traditional treatment practices in communities, the impact of the people in the communities, negative experiences and perceptions of formal health care, and difficult overall circumstances beyond personal control were highly important to perceptions of the practices of enucleation/burning of canine tooth buds. The narrations contributed to an understanding of the impact of contexts on decisions to allow these traditional practices to be performed. These results may illustrate the complexity that surrounds motivation to use traditional practices and the importance of the contexts in which decisions to agree to them are made. Understanding the complexity may facilitate communication with parents of Somali origin in the dental and health care settings, to inform them about causes of symptoms such as diarrhoea and vomiting in infants, and the risks associated with the traditional practices.

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