

# An exploration of the views of Australian mothers on promoting child oral health

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## ABSTRACT

**Background:** An important role for parents and caregivers in the prevention of dental caries in children is the early establishment of health promoting behaviours. This study aimed to examine mothers’ views on barriers and facilitators to promoting child and family oral health.

**Methods:** Semi-structured interviews were undertaken with a purposive sample of mothers (n = 32) of young children. Inductive thematic analysis was conducted.

**Results:** Parental knowledge and beliefs, past experiences and child behaviour emerged as major influences on children’s oral health. Child temperament and parental time pressures were identified as barriers to good oral health with various strategies reported for dealing with uncooperative children at toothbrushing time. Parental oral health knowledge and beliefs emerged as positive influences on child oral health; however, while most mothers were aware of the common causes of dental caries, very few knew of other risk factors such as bedtime feeding. Parents’ own oral health experiences were also seen to positively influence child oral health, regardless of whether these were positive or negative experiences.

**Conclusions:** Understanding parental oral health beliefs is essential to overcoming barriers and promoting enablers for good child oral health. Improving child oral health also requires consideration of child behaviour, family influences, and increasing awareness of lesser-known influencing factors.

**Keywords:** Beliefs, health behaviour, health promotion, oral health, parenting.

**Abbreviations and acronyms:** ECC = early childhood caries; MCHN = maternal and child health nurses.

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## INTRODUCTION

Dental caries is a highly prevalent childhood disease in Australia, being present in almost half of children aged 5–6 years.<sup>1</sup> The disease is often left untreated and when advanced, can lead to developmental problems, adverse education and social outcomes, pain, disfigurement, hospital admission, and lowered quality of life for children.<sup>2,3</sup> The distribution of dental caries is not equal across the population, with the greatest burden faced by children who are more socially disadvantaged,<sup>4</sup> and amongst those living in rural and regional areas.<sup>5,6</sup> While much is known about the pathogenesis of dental caries in general, the development of caries very early in life, early childhood caries (ECC), is less well understood. Caries is considered to

have a multifactorial aetiology<sup>7</sup> and there is growing recognition of the importance of social, behavioural and psychosocial factors in its development.<sup>8,9</sup>

The family unit itself also has an important role in the oral health of children. Research suggests that regular family routines and practices promoting good oral health and establishing positive behaviours early in life are important for promoting child oral health.<sup>10</sup> Parental behaviours, beliefs, knowledge, perceptions and self-efficacy play an important role in the extent to which other family members, particularly young children, perform oral health related behaviours.<sup>8,11–15</sup> Further, the importance of parental role modelling has been shown to continue well into the adolescent period for several oral health related behaviours.<sup>14,16</sup> In addition to parental self-efficacy, a

mother's sense of coherence (a psychosocial factor that enables people to identify and manage tension and use resources to promote effective coping strategies) has been associated with the use of dental care services by families of low socioeconomic status.<sup>17</sup> Similarly, parental stress and lower household income have been associated with ECC.<sup>8,9</sup>

Currently, there is little research available on the importance of parental perceptions, attitudes and beliefs about children's oral health, toothbrushing, and the causes of tooth decay, particularly in early childhood.<sup>12,18</sup> Further, only limited research is available using qualitative methodology to provide a deeper understanding of the influences of primary caregivers on child oral health. The purpose of the current study is to gain a greater understanding of the factors that influence children's oral health and to explore how the oral health related experiences, perceptions and beliefs of parents influence the oral health practices of their children.

## MATERIALS AND METHODS

This qualitative study is nested within a larger prospective birth cohort study named 'Splash!' which is following children from *in utero* to 5 years of age. The rationale and methods for the Splash! study are described in detail elsewhere.<sup>19</sup>

### Sampling frame

A sub-sample of 32 parents was purposively selected from the Splash! main study sample ( $n = 458$ ) to provide participants from a range of demographic variables, including socioeconomic status (education, income), family size (number of children in the family), and source of water consumed (tank, tap, bottled). These characteristics were chosen as they are analytically important and have been shown to play an important role in individual and family oral health.<sup>4,9,19</sup> Sampling continued until there was an adequate range of these demographic variables amongst participants to address the research question and develop a sound understanding of the phenomena under investigation.<sup>20</sup> All participants that indicated they would be interested in taking part in an interview were eligible for inclusion if their child taking part in the study was aged 6 months or older at the time of interviews. There may or may not have been other children in the family.

### Design and data collection

Semi-structured interviews ( $n = 32$ ) were conducted across the Barwon South Western Region of Victoria, Australia from March to June 2011. The interview

guide consisted of 11 open-ended questions (Table 1); each participant was asked the same questions but not necessarily in the same order. Several interview questions explored participant attitudes and perceptions; these questions examined participants' thoughts, practices, skills, knowledge, beliefs, feelings and influences around oral health. They also explored where and how parents access information and services in relation to child and family oral health.

Consistent with standard methodology, the development of the interview guide was informed by a comprehensive review of the literature to identify key areas of interest.<sup>21</sup> The draft interview questions were piloted with four primary caregivers with children aged between 6 months and 3 years who were not involved in the Splash! study. Pilot testing was to ensure questions were interpreted and answered to reflect true differences in primary caregivers' beliefs, attitudes and perceptions towards individual, child and family oral health.<sup>21</sup> No changes were required to the interview guide after the piloting was undertaken.

Three researchers from The University of Melbourne were trained in interview techniques. Each interview was conducted by one interviewer accompanied by one note taker. The interviews were conducted in participants' homes or at a location convenient to them and took approximately 30–40 minutes. All interviews were digitally recorded using an Olympus digital voice recorder (WS-321M) and transcribed verbatim and verified by independent researchers. The content of the interviews was dis-

**Table 1. Qualitative interview topic guide – oral health questions**

|  |
|--|
| Now I'd like to talk about your oral health and the oral health of the child in the Splash! study?         |
| 1. What does 'oral health' mean to you?  |
| 2. How do your beliefs about oral health influence your own oral health practices and those of your child? |
| 3. Where do you learn about dental care?   |
| 4. What have been some of your personal experiences going to the dentist?                                  |
| 5. How have you felt about the dental care you have received?  |
| 6. How have your experiences influenced your decision to take your youngest child to the dentist?          |
| 7. How serious do you think dental problems are?   |
| • <i>as serious as other health problems?</i>  |
| 8. When thinking about dental problems you and your family may have, how big a priority is it?             |
| 9. What factors do you feel impact on the dental care (e.g. teeth brushing) practices of your child?       |
| • <i>skills</i>  |
| • <i>knowledge</i>   |
| • <i>time pressures</i>  |
| • <i>child's behaviour</i>   |
| 10. What influence if any does your child's behaviour have on their toothbrushing practices?               |
| 11. If child is uncooperative what strategies if any do you use to overcome this behaviour?                |

cussed amongst the interviewers and research team throughout the data collection and analysis process which shaped and informed subsequent interviews and analyses as per the method by Green *et al.*<sup>22</sup>

### Approvals

Ethics approval was received from the Human Research Ethics Committees of The University of Melbourne (Melbourne, VIC, Australia) and Barwon Health (Geelong, VIC, Australia). Participants provided written and verbal informed consent for participation, recording of discussions and use of data.

### Data management and analysis

Transcripts were imported into NVivo 9.1 (QSR International, 2011) for coding. A thematic analytic technique was used to analyse the transcripts based on methods used by Fossey *et al.*<sup>20</sup> This method involved constantly comparing, classifying, grouping and refining sections of transcripts to generate a collection of themes within the data.<sup>20</sup> Specifically, items in each interview were compared with the other interview transcripts to inform the development of analytic categories and conceptualize relationships between the data.<sup>20,22</sup>

All analyses were performed by the three interviewers as they were the most familiar with the data and brought their experience and understanding to the process of analysis.<sup>22</sup> Inductive thematic content analysis was conducted with each transcript. In this coding process, interviewers examined the data so that embedded relationships and meanings could emerge based on methods used by Fossey *et al.*<sup>20</sup> Using a similar process, interviewers then identified common codes across participants. The next phase involved looking at how codes could be linked, and in this process, categories which relate to different aspects of the issues being explored were developed as per the previous study by Green *et al.*<sup>22</sup> The final phase of analysis required the researchers to move beyond just describing the categories identified, to generating themes which provided interpretation of the issues being explored, based on methods described by Green *et al.*<sup>22</sup> In this process themes were generated from the identified categories in reference to relevant literature on children's oral health which enabled detailed explanation and interpretation of findings on parental influences on child and family oral health. Transcripts were cross-coded to verify consistency in coding. The three interviewers met as a group to discuss any inconsistencies in coding and reach a consensus across all major themes to ensure that the results of the research reflected the participants' experiences and provided an accurate interpretation of the data based

on methods used and described by Green *et al.*<sup>22</sup> and Whittemore *et al.*<sup>23</sup>

## RESULTS

Respondents were all mothers, aged 19 to 42 years at the time of recruitment into this study. Their children were aged between 4 and 12 months at the time of the interview. For almost one-third of mothers interviewed, the infant in the study was their first child. Ninety per cent of the interview participants were Australian-born and all participants spoke English at home. Over three-quarters of the participants had completed year 12 and 34% had completed a Bachelor-level degree. Over half of mothers were engaged in casual, full- or part-time work. Twenty-five per cent of participants had a health care card (that provided discounted health care fees for low income households and/or people with chronic medical conditions).

In the thematic analyses, 12 major topic areas were identified for drinks, 12 for food and 14 for oral health. This study will report only on the topic areas related to oral health. Within the 14 topic areas identified for oral health, six main categories emerged: the meaning of oral health, causes of child tooth decay, influences on own child's oral health, strategies to overcome barriers to oral health, priority of oral health care, and sources of oral health advice.

### The meaning of oral health

When asked 'what does oral health mean to you?', themes emerged around the absence of disease and taking care of teeth and gums. However, these themes were rarely mentioned in isolation, and most mothers reported that for them 'oral health' encompasses both good oral hygiene practices and absence of illness in the mouth. The strongest categories reported by mothers included healthy mouth and gums, brushing teeth every day and flossing.

ID 230 *I guess oral health means the condition of your teeth and mouth as a whole so looking at whether there is any tooth decay, any like gum diseases, just the overall condition of your oral cavity I guess and then to maintain oral health it's like brushing your teeth, dental check-ups I know you have got to floss ...*

ID 281 *So it's just again care and maintenance, brushing regularly, flossing, mouth wash, if you want to ... regular visits to the dentists and check-ups and those sort of things and clean and scale every six months. ... yeah that's pretty much it.*

## Causes of child tooth decay

Participants saw the causes of tooth decay in children as the opposite of oral health. Themes included oral hygiene, diet, genetics and parenting styles. Most mothers had an understanding of the most recognized causes of dental caries in young children. Mothers reported that not looking after your child's teeth by not brushing them and not taking the child to the dentist had an influence on dental decay. Giving children sugary foods and drinks, introducing such foods too early in life and giving sugary foods too frequently were also mentioned as contributing factors.

ID 100 *Because the parents don't set the boundaries the parents don't rub their little gums with face washers when they're little and don't treat tooth brushing like a fun activity that's why children get tooth decay.*

ID 77 *How early they are introduced to lots of sweet things and cordial ... and how they brush their teeth.*

ID 247 *Well I think probably it's related to diet and how well or not children are able to brush their teeth how much fluoride they have in their early years and yeah probably a lot to do with food choices in terms of whether they are eating a lot of sugar types of foods frequently.*

While a majority of the factors mentioned by parents were ones that were able to be controlled, a small number of mothers also reported factors which they felt were beyond their control such as a genetic predisposition to developing dental caries.

ID 11 *Look, I imagine that part of it might be genetic factors, some might be just prone to it and diet ... yeah so I think it's both diet and genetics is my guess.*

ID 301 *I reckon its hereditary, brushing, their susceptibility to the sugar ... acid on their teeth ... and obviously food choices and the amount or frequency of sugar that they have.*

Most mothers reported that it was a combination of all these factors that made some children more prone to dental decay than others. However, few mothers mentioned less well known risk factors such as infants falling asleep whilst being fed milk or drinks containing sugar, and transmission of cariogenic bacteria from caregiver to child as reasons that some children may be more likely to get tooth decay than others.

## Influences on own child's oral health

In response to questions about the main influences on their child's oral health, several themes emerged around parental beliefs, parental experiences, time and child behaviour.

### Beliefs

The belief that it was important to establish good oral health routines early in life appeared to be a motivator for establishing good oral health behaviours for their children at a young age. This included establishing routines for regular brushing, regular visits to the dentist, and limiting sugary foods and drinks.

ID 252 *No it's always been a good routine. She knows she brushes her teeth then goes to bed so it's always a good routine. She knows that's what's going to happen.*

ID 272 *Well it's like the doctor I suppose. The dentist and the doctor same thing. Try and make it positive and you don't wait till it's painful. You know they have a tooth ache and you have to go and it's scary. You want to do it when its positive ...*

ID 230 *I guess my belief is that we should try and limit sugary drinks and umm too much sugary caffeinated foods and drinks yeah, and regular brushing of teeth morning and night and regular check-ups at the dentist ... so I guess just try and instil in the children brush your teeth in the morning and brush them at night before you go to bed.*

### Parents' own experiences

Many mothers reported that their own experiences growing up in relation to oral health and oral health care influenced the oral health care they provided for their child. This seemed to be the case regardless of whether the mothers' experience was positive or negative.

ID 317 *I brush my teeth once a day. I floss if I feel like it and use mouth wash if I think about it, but yeah I would rather have her have a better routine. Once again, growing up I really didn't have any structure. I wasn't told to do it, I just, you know, did it my own way, did whatever I wanted to do, so I would rather have a structured thing for her.*

ID 247 *Well I think because I have had the upbringing that I have I want the same oral*



*health for (study child) that I've had. So, umm you know, we try and work-in teeth cleaning as part of the routine pretty early so she's used to it and hopefully we get along to see the dentist so she's not scared of dentists.*

### Time

Lack of time in busy schedules was reported by mothers as a barrier to providing good oral health care for their children.

ID 299 *Oh time, I think time's a big one. You get to that time of night where you know they need to be fed, they need to be put to bed, it all becomes a rush and then the teeth cleaning is just a little annoyance on top really. But it is obviously really important so you do it.*

### Child behaviour

Mothers also reported that young children are often uncooperative which can make it difficult to get in their mouths and clean their teeth.

ID 133 *Yeah look she's compliant for a couple of minutes or not even a minute and then the moment's gone yeah she's closed up shop even if we try.*

ID 133 *Yep children's behaviour and also at this age they don't always allow you to get in there yeah, so it's a big thing ...*

ID 236 *Because he's trying to eat my finger and won't hold still and won't hold his mouth open and it's just tricky.*

### Strategies to overcome barriers to oral health

Themes that emerged, in response to questions about strategies used by parents when their children were uncooperative with respect to cleaning their teeth, were around creating positive experiences (primarily making it fun), giving the child no alternative, and leaving brushing for another time.

ID 169 *I try and make it a fun thing, not a chore for them because I know some kids it is a chore.*

ID 252 *We try and make it like fun because she tends to just eat the toothpaste so I tend to say, make as many bubbles as you can by brushing it. Just make it a competition, oh you have more bubbles than me. Just stuff like that.*

Other mothers seemed to adopt a more permissive approach, reporting that on occasions it was an easier option to 'stop trying' and to clean their children's teeth on another occasion if the child was not cooperative.

ID 301 *It's just when they get independent, you know, if they're tired they've had enough and you don't get like you've got to brush their teeth. But if you've been out and all that happens and they fall asleep in the car, you're not going to wake them up and brush their teeth. They could have been eating crap all day and you know, and how your time schedule is at home and fitting it all in ... you know brushing their teeth isn't a priority to them.*

ID 76 *No I just give up because I think what's the point of pushing, he's going to hate it if I keep pushing him, so ... he will get there eventually ... he is only 14, 15 months, just. He'll get there and you know when he is there I will get the brush and start helping him but if he's sick of it I won't.*

Other mothers seemed more authoritarian in their approach, reporting that if their children were uncooperative when cleaning their teeth they would persist – giving in to their child was not an option.

ID 151 *No no, they play by my rules. I'm the boss (laugh), I'm the boss aren't I? yeah so he can't go to day care if he hasn't brushed his teeth. He knows that's the drill and he wants to go, so a bit of bribery and corruption there.*

And others displayed an authoritative (rather than authoritarian) approach:

ID 100 *Yep there's a good routine. They enjoy brushing their teeth. If they don't enjoy brushing their teeth and they're not getting teeth then they'll sit on me and I'll hold their heads back and I'll brush their teeth ...*

### Priority of oral health care

When asked 'when thinking about dental problems that you and your family may have, how big a priority is it?', most mothers reported dental problems as a high priority for their family. Some mothers explicitly assigned a higher value to their child's oral health, compared to their own.

ID 138 *Oh it's very important even if we didn't have money I would put it on Visa card or I would go to my parents [for money] ... so I mean what we're doing now, we need to be careful*

*because whatever happens to these teeth is going to impact adult teeth and that's a huge thing.*

ID 151 *It's one of those things you put off till you're in pain, which has always been the way ... but you tend to put your children before yourself and because of the cost too yeah of it.*

ID 237 *It's a bigger priority for me to get my kids teeth looked at, than mine because I currently need probably a filling, but I just haven't got time, but the kids, as soon as they need, its, you make time for them.*

### Sources of oral health advice

Mothers reported their sources of oral health advice comprised dental professionals, maternal and child health nurses (MCHN), and their own parents.

ID 7 *Umm well we learnt about it in school and then see the health nurse. They teach me about what I should be doing with (study child) and (other child) learns about it at school I'm pretty sure, and when we go to the dentist the dentist tells me what I should be doing or tells (study child) so we know what we should be doing.*

ID 11 *Yeah, but I remember certainly mum saying brush your teeth, brush your teeth.*

ID 169 *I know when she first starting getting teeth I was told by MCHN just to use a flannel and wash them with water and I started that ...*

ID 236 *Yeah yep well I've also learnt it from the maternal and child health nurse, I don't think she knows I'm a dentist, so I ask questions which I should know.*

Although some mothers reported that they found the information and advice they had received was very useful, others had received written information but had not read it or not yet acted on it.

ID 230 *No not yet I think I should probably start cleaning. I remember at her last check-up at the 8 month check-up once they have teeth you should get a flannel and wash with a flannel but I haven't done that yet.*

ID 301 *Once kinder starts you get some health promotion about it, but prior to that, well you do get handouts from maternal nurse, once again about dental and oral health and looking after your teeth. But the main thing wasn't until*

*(study child) had a few problems with his teeth that I started to like get a lot of information.*

### DISCUSSION

This study provides insights into parental influences on the prevention of dental caries and the promotion of good oral health in young children. The major themes which emerged were the importance of parents' and caregivers' oral health beliefs and perceptions, information-seeking behaviours, parenting styles, as well as their perceived ability to establish good child oral health related behaviours, and thereby manage their child's oral health.

Parental knowledge and beliefs about the causes of dental caries have previously been found to be associated with the adoption of protective behaviours.<sup>24</sup> It has also been found that parents who have a lack of knowledge about ECC are more likely to delay seeking treatment for their child.<sup>13</sup> In the current study, most mothers had an awareness of the association of poor plaque control and sugary foods with dental caries, which is consistent with other studies investigating parents' knowledge of risk factors for ECC.<sup>24-26</sup> They were also aware of the multifactorial nature of the disease, with few parents identifying only one factor. Although the evidence is not conclusive, there are indications that maternal practices (e.g. tasting food, sharing utensils, kissing on lips) can increase bacterial colonization in the oral cavity of young children.<sup>27-32</sup> However, most mothers interviewed were not aware of these relationships, a finding which is also consistent with an earlier study.<sup>33</sup> These findings suggest a need for increasing parental knowledge of the range of risk factors linked with the development of dental caries and the behaviours to avoid in young children. Although the evidence is mixed surrounding the effectiveness of educational interventions in reducing ECC,<sup>34</sup> several studies have found that interventions aimed at increasing parents' child oral health related knowledge, and knowledge of ECC prevention strategies, can foster behaviour change.<sup>26,35</sup>

Resistance from a child has been reported to be a major barrier to the provision of good oral health practices.<sup>18</sup> In our study, mothers discussed their child's behaviour and lack of time as barriers to improving their child's oral health practices. These findings are consistent with other studies which found that the stress of daily life often makes it difficult for parents to properly care for their children's teeth.<sup>18</sup> Further, Spitz *et al.* found children who were perceived as difficult by their parents were at higher risk of ECC<sup>36</sup> and were more likely to have their teeth brushed daily compared to 'easy' children who were more likely to have them brushed twice daily. The 'difficult' children were also more likely to be

bottle-fed and have white spot lesions significantly more often, and at an earlier age, than children perceived as 'easy'.<sup>36</sup> Further research is needed into the role of child temperament on the management of children's health related behaviours, and for developing effective strategies for caregivers to overcome this barrier.

Parenting styles also appeared to influence whether a parent persisted or gave up when a child misbehaved or refused to have their teeth cleaned. In this study some mothers took an authoritative approach to ensuring their child(ren) had their teeth cleaned, even if they were uncooperative. Other mothers took a more permissive approach, giving in to their uncooperative child and deferring toothbrushing to a time their child may be more cooperative. In our study, the majority of mothers were confident in using strategies such as making toothbrushing fun and offering the child no alternative when being uncooperative with toothbrushing. However, there were some mothers who had little confidence in their ability to overcome such behaviours. These mothers were likely to defer brushing for another time rather than persist. This finding is consistent with previous research which found that parents who had little belief in their ability were less likely to persist with oral health behaviours over time, even if they appeared to have good intentions.<sup>18</sup> Self-efficacy has been linked to positive changes in oral health-related behaviour. Studies have found that parents who reported feeling confident in cleaning their child's teeth cleaned their child's teeth more frequently than parents who reported a lack of confidence.<sup>24</sup> Providing parents with strategies to combat uncooperative child behaviour at toothbrushing time may increase the parents' self-efficacy and help parents to be more successful in cleaning their children's teeth.<sup>18</sup>

Although limited, evidence suggests that parents' perceptions of their child's oral health is predictive of child oral health experience.<sup>10</sup> Our finding that maternal oral health beliefs and experiences were major influences on a child's oral health is consistent with this and other studies. In other studies, parents have reported that previous bad experiences of their own, or of their families, lead them to place a higher value on providing good oral health care for their children.<sup>13</sup> This was also the case in our study, with parents who had negative dental experiences themselves reporting strong feelings about making sure their children did not go through similar situations and had more positive oral health experiences. However, this contrasts a study by Hilton *et al.* which demonstrated that carers who had had negative and painful experiences at the dentist were actually reluctant to take their children for dental treatment for fear of exposing their children to the same pain they had experienced.<sup>37</sup>

When exploring where mothers obtained oral health information from, a variety of sources including families, dental professionals and MCHNs were identified. However, the primary source was family. A similar finding was reported by Lopez *et al.*, who found that mothers often sought oral health advice from their families as they were seen as a trusted source of information.<sup>25</sup> In our study the oral health advice sought by mothers was almost always in relation to cleaning the child's teeth. Few mothers mentioned that they had received advice from any sources about when to first take their child to the dentist, whether to give their child a bottle in bed, or the role of cariogenic bacteria transfer in caries development. Similarly, an earlier Australian study found that transmission of cariogenic bacteria was not mentioned as a key factor when interviewing a range of primary health care professionals about perceived causes of tooth decay.<sup>33</sup> Among these professionals the most commonly reported factors contributing to ECC were the child's diet and not taking a child to the dentist early enough.<sup>33</sup> With the demands placed on health care professionals it may not be surprising that the advice given to mothers regarding oral health is largely focused around the more well-known causes of ECC, such as consumption of sugary foods and drinks, not brushing teeth regularly and inadequate fluoride. Among health care professionals, there is a need for increasing advice to parents on other causes of tooth decay in young children such as cariogenic bacteria transmission and appropriate bedtime infant feeding practices.

In Australia, to date, there has been only limited assessment of the usefulness of the oral health advice and information provided by MCHNs to parents. The present study found that while some mothers found the information they received regarding oral health as very useful, others reported that they did not read the information provided. In addition, while the majority of mothers reported that the MCHN were a good source of oral health information, most mothers reported that they primarily sought advice from family members, highlighting the importance of social networks on influencing health related behaviours.

## Limitations

This study utilized purposive sampling. Whilst this has significant benefits and advantages, one limitation is that the sample does not necessarily represent the entire population. Interviews as a method for data collection have several strengths but also some limitations. They are well suited to explore the perceptions and beliefs of participants concerning complex, and sometimes sensitive, issues whilst allowing the

researcher to probe if a more detailed understanding or clarification of response is required.<sup>21</sup> They are, however, completely subjective. Three interviewers were also used in this study which may have resulted in differences in style, manner and language between interviews, potentially influencing the data collected. To minimize this, a semi-structured interview guide was used and all interview transcripts were cross-coded for verification and consistency.

## CONCLUSIONS

Findings from this study suggest that solutions for improving child oral health need to consider family influences, including parental self-efficacy in managing child behaviour and the stress of daily life, in addition to reducing cariogenic risk factors. Increasing parental awareness of the lesser-known risk factors for poor oral health is also necessary. In addition, the barriers parents face when in the process of adopting favourable oral health behaviours and practices for their children should be considered when planning future health promotion strategies. Finally, the results of this study emphasize the importance of promoting good oral health behaviours at a family level, for both parents and children, given the strong influence parents have on the behaviours of their children.

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