

ORIGINAL ARTICLE

Qualitative study exploring general dental practitioners' views of MIH and its management in the UK and Australia

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Abstract

Background: Molar–incisor hypomineralisation (MIH) is a prevalent condition, and how it is managed varies greatly between professional groups.

Aim: To explore, and compare, the UK and Australian general dental practitioners' management of MIH in children.

Design: Face-to-face (remote) semistructured interviews were undertaken, using country-specific topic guides. Participants were purposively sampled and recruited through national conferences and research networks (eviDent Foundation and Northern Dental Practice Based Research Network). Interviews (from each country) were audio-recorded, transcribed verbatim and independently analysed using thematic analysis.

Results: Two major themes arose from the UK interviews: (i) decision-making complexities and understanding of treatment options and (ii) need for specialist input. The main Australian themes were (i) multidisciplinary approach to management supporting decision-making complexities and (ii) economic implications for care. Several difficulties, such as financial implications, multidisciplinary care and clinical decision-making, were identified as barriers to effectively managing MIH by GDPs in primary care.

Conclusion: There are similarities and differences in the knowledge and management of MIH amongst UK and Australian nonspecialists. The different healthcare systems played a significant role in shaping how GDPs manage MIH with barriers relating to affordability, multidisciplinary care and clinical decision-making.

KEYWORDS

decision-making, MIH, molar, qualitative

1 | INTRODUCTION

Deciding the optimum management strategies for children with molar–incisor hypomineralisation (MIH) remains a complex dilemma and is yet to be fully understood by patients, parents, clinicians and policymakers. Several

challenges to the dental team exist as there is limited evidence to support best strategies.^{1–3}

Societal, cultural and health service factors are thought to impact treatment approaches in different settings, locations and professional groups.¹ Anecdotally, children from the UK and Australia are likely to have similar

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presentations of MIH but may have different treatment experiences.^{3,4} Prevalence rates of 16% in the UK⁵ and 14.7% in Australia⁶ have been reported. In the UK, general dental practitioners (GDPs) prefer to restore hypomineralised molar teeth,³ whereas in Australia, a wide variation in chosen management has been reported.⁴ Distinct differences exist in how dental care is provided for children in the UK and Australia. In the UK, the NHS provides dental care to children free at the point of delivery. Most of these children will be managed by GDPs who can refer any child to specialist services on the NHS. Specialist services can provide care, including access to dental general anaesthetic, at no cost to the patient.⁷ A small percentage of children are seen on a private basis, but access varies significantly across the UK. Conversely, according to the Australian National Child Oral Health Survey,⁸ most children are seen by general dentists, or GDPs, on a private basis with direct expenditure on children's dental services by the parent without government contribution. Despite regional variability, access to specialist paediatric dental services are available to those who can afford treatment in the private system. Eligibility for public services varies across Australian states and territories. Generally, access to specialist public dental services is limited to individuals with a government-issued healthcare card or for medically compromised children.

Understanding the barriers to managing children with MIH in two different countries and healthcare systems has yet to be fully explored or contextualised. Therefore, the aim of this study was to explore, and compare, the knowledge, barriers and attitudes of GDPs in the UK and Australia regarding their views and experiences of managing children with MIH.

2 | MATERIALS AND METHODS

This study adopted a qualitative methodology.

Face-to-face (remote video) semi-structured interviews were carried out with nonspecialist dentists in the UK and Australia. An initial topic guide (including clinical images) was developed by the research team to focus on key areas, such as diagnosis, knowledge and experience of MIH. Management strategies and factors that influence treatment decisions were explored along with challenges and barriers to providing care for affected teeth in children, as well as the short- and long-term implications that are considered by dentists. The influence healthcare systems had on managing MIH was another key area discussed. The topic guide included country-specific questions that related to the differences in healthcare systems adopted in each country. The topic guide was iteratively adapted, following a constant comparative approach, to allow for further exploration of theoretical notions and concepts highlighted in earlier interviews.⁹

Why this paper is important to paediatric dentists

- MIH is a common condition that can and is managed by both nonspecialists and specialists in paediatric dentistry.
- This paper highlights the challenges nonspecialists have when managing hypomineralised teeth in children.
- Understanding barriers nonspecialists face in managing MIH will be important for paediatric dental specialists as it is likely to impact how specialist services are shaped and delivered in future in the UK and Australia. Appreciating these barriers will support specialists to educate, address and overcome these barriers with nonspecialists.

Clinical images of hypomineralised teeth (as shown in Appendix S2) were introduced in a consistent manner to prompt discussion of their views on different management options for molars and incisors, both mild and severe, independently. Participants who were primarily purposively sampled to ensure adequate breadth of dentists with important characteristics (public and private provider type; gender; and year of graduation) that were deemed to be relevant to managing MIH were recruited. Participants were actively recruited, targeting those with characteristics of interest, in later interviews, if they had not been included to that point. Recruitment was conducted via an open invitation to the UK and Australian participants, through national conferences, the Northern Dental Practice Based Research Network (UK) and the eViDent Foundation (Australia), which facilitates dental practice-based research, and local research networks. Recruiting GDPs was particularly challenging in the UK, so snowball sampling (asking recruited GDPs to identify future participants) was used to aid recruitment.

Interviews were conducted between March and August 2021, by one researcher (RO), a speciality trainee in paediatric dentistry. A pilot interview with a dentist, not included in the sample, was completed in each country to ensure the questions were valid and easy to understand and could be completed in a reasonable time. Interviews were audio-recorded and transcribed verbatim by one researcher (RO). Transcripts were uploaded to NVivo 12.0 Pro (QSR, Melbourne, Australia) for data management.

The first two manuscripts were coded independently, by RO and GT, using a thematic analysis approach.¹⁰ Initial themes were discussed with the full team (RO, GT and MS) to develop a coding framework and support triangulation of the data. This coding framework was used by RO

to code the remaining manuscripts, with GT reviewing the coding on a further manuscript to ensure consistency. The whole team discussed and arrived at a consensus on the themes. The evolution of the coding framework for both cohorts is attached as Appendix S1.

Interviews and data analysis were completed for UK dentists, in entirety, before starting the same process with Australian participants. This approach was preferred as inherent and significant differences in the provision of care in each country, meant combining the data would be illogical.

3 | RESULTS

A total of 10 general dentists from the UK and 11 from Australia were interviewed, at which point it was felt that data saturation was reached. This was determined when no new information was emerging from interviews. The sample included a breadth of gender, type of providers [NHS vs. private (UK) and public vs. private (Australia)] and year of graduation (ranging 1974–2019 and 1982–2017 for Australia and the UK, respectively). Participant demographics are summarised in Table 1. Interview lengths ranged from 27 to 36 min. The results from each country are presented in isolation, with a narrative discussion and comparison being reported in the Discussion section of this paper. The evolution of the coding framework for the UK and Australian interviews, including the final themes, are shown in Tables 2 and 3.

3.1 | UK interviews

Two major themes arose from the UK interviews: (i) decision-making complexities and understanding of treatment options; and (ii) need for specialist input.

3.1.1 | Theme 1: Decision-making complexities

The data showed that GDPs were generally confident in diagnosing MIH—although some reflected on perhaps misdiagnosing MIH that presented with significant post-eruptive breakdown, such as dental caries. In contrast, there was a lack of confidence in deciding how best to manage MIH in general in children, which was more apparent in younger children:

I'm looking back on kids that I have diagnosed [with] caries and thinking now it was actually MIH.

(Female, NHS, Qualified 2001)

TABLE 1 Participant demographic summary.

	Year of graduation	Gender	Current job role: Private/Mixed/NHS (UK) Private/Mixed/Public (Australia)
UK	1982	M	Mixed
	1988	F	Mixed
	2001	F	NHS
	2006	F	Private
	2012	F	Mixed
	2014	M	Mixed
	2015	F	Mixed
	2016	F	NHS
	2016	F	NHS
	2017	M	NHS
Australia	1974	F	Private
	1980	M	Private
	1986	M	Private
	1989	F	Public
	1995	M	Private
	2000	M	Private
	2001	M	Private
	2010	F	Mixed
	2012	F	Private
	2019	F	Mixed
	2019	M	Mixed

When anteriorly affected teeth were concerned, GDPs appreciated the psychosocial impact in not managing these teeth. Deciding how and when to intervene with anterior teeth, however, was challenging:

I am aware of options...but nothing destructive or that makes it worse. I would struggle knowing what to do and wouldn't be confident to plan. I would want help with this.

(Female, NHS, Qualified 2016)

When discussing posterior teeth, those affected by moderate-to-severe MIH were often the most complex for GDPs in terms of deciding whether to restore or extract. For most, a drive to restore was apparent and often supported by clinical observations that would conventionally favour restoration:

... [I would] always give it a go to restore...as long as a clear margin of sound enamel [with] no involvement of the pulp.

(Male, mixed NHS/private, Qualified 2014)

TABLE 2 Evolution of the coding framework for the UK, including the final themes.

RO codes	GT codes	Themes and subthemes after discussion following two manuscripts	Final themes
Access to specialist opinion	Willingness to seek specialist care	DECISION-MAKING	Decision-making complexities and understanding of treatment options
Confidence in managing	Altruism	- Treatment decision	
Confident in diagnosis	Confidence	- Knowledge	
Decision-making retreatment option for molars	Cooperation	- Child factors	
Difficulty in predicting long-term prognosis of molars	Cultural impacts	- Parent factors	
Financial implications	Decision-making factors	- Prognosis	
GDP pressures	Dentist	- GDP pressures/scope/experience	
Impact on patient	Parent	- Restorative factors	
Knowledge	Diagnosis	SPECIALIST INPUT	Need for specialist input
Limited experience managing affected incisors in children and not confident	Different management options for children vs. adults	- Limited access	
Material choices	Education	- Barriers—geographic, travel, cost and waiting times	
Parental factors	Impact of MIH	- Type of speciality	
Patient factors	Lack of specialist care	- When to refer	
Adult vs. child treatment planning	Lack of understanding of options	UNDERSTANDING OF MIH	
Restore if possible	Management challenges	- Diagnostic Challenges	
Unhappy to make extraction decision in child	MIH in adults	- Materials/bonding	
Specialist input	Patient parental awareness		
	Specialist involvement		
	Understanding of disease		
	Worried about what you might do		

Predicting long-term outcomes of restorations for hypomineralised teeth, in comparison with those affected by dental caries, appeared to be more challenging, particularly when more of the tooth surface became affected:

It's hard to predict the path of MIH teeth for the future [unlike] caries which is predictable.
(Male, NHS, qualified 2017)

...difficulties knowing what will happen with these teeth makes treatment decisions blurred especially where multiple surfaces are affected.
(Female, NHS, Qualified 1988)

As such, always restoring may not always be the most appropriate. Instead, the decision should be more about how long the tooth is going to last, rather than whether it can be filled. Extraction of a posterior hypomineralised tooth was regularly considered by GDPs, although making the decision in isolation made them feel uncomfortable:

It's such a big decision for somebody to make because once it's gone, it's gone, and that's a big responsibility....
(Female, Private, Qualified 2006)

3.1.2 | Theme 2: Need for specialist input

The need for specialist input in managing, and/or treatment planning, children with MIH was apparent. This was more so for posterior teeth, but not exclusively. It was clear that this need was primarily driven by GDP's own self-doubt and lack of confidence, as often how specialists managed patients who were referred was often different from GDP's initial plans for these teeth:

From referring I feel perhaps it may have made me refer more as they sometimes plan extractions when I would have filled.
(Female, Private, Qualified 2006)

Despite wishing a specialist input, circumstances such as long waiting times, geographic variation in access to specialist paediatric services and the need for some parents having to travel considerable distances were reasons for some parents wishing treatment to be attempted by a GDP although these were not universal for all:

...the parent may prefer you manage yourself which might make you try harder to manage in house.
(Female, NHS, qualified 2016)

TABLE 3 Evolution of the coding framework for Australia, including the final themes.

RO codes	GT codes	Themes and subthemes after discussion following two manuscripts	Final themes
Access to GA	Access to specialist services	MULTIDISCIPLINARY APPROACH	Multidisciplinary approach to management supporting decision-making complexities
Accessibility to specialists—good access in the city	Aesthetic implications	- Type of speciality	
Geographic differences in access to specialists	Aesthetics—delay until older	- Access to specialist	
Speciality type refers to orthodontic value	Business vs. oral health	- Geographic variation	
Need for specialist opinion	Caries—MIH link	- Informal opinions	
Travel to specialist services	Child vs. adult	- When to refer	
Professional relationships between specialities	Confidence		
Ethical issues	Costs relative to other treatment		
Extracoronaral restorations to maintain teeth	Cultural—private		
Guidelines to help clinician	Decision factors		
Knowledge on treatment options	Diagnosis—challenging		
Material choice	GA expectation—harder to take out in children		
Past experiences guiding treatment	Information available to support		
Determining prognosis	Legality implications		
Restorative factors	Longevity issues—best option		
Degree tooth affected	Minimally interventive approach		
Treatment decisions	Miscommunication between specialist and GDFs		
Early decisions at young age	Molars not as much of an issue		
Child factors—cooperation	Occlusal influences		
Symptoms affecting management	Parental influence		
Communication	Parents able to pay for specialist treatment		
Parental influence	Procedural challenges		
Parental income		DECISION-MAKING	Economic implications for care
Parent priorities		- Tooth factors	
Pathogenesis		- Guidance/info to support	
Patient information		- Restorative factors	
Psychological factor		- Future planning	
Cost		- Experience dictating management	
Socio-economic factors		- Confidence	
Private systems		- Parent and child factors	
Diagnostic challenges			

TABLE 3 (Continued)

RO codes	GT codes	Themes and subthemes after discussion following two manuscripts	Final themes
		ECONOMICS - Private vs. public - SES - Cost - Values CHILD vs. ADULT - Maintaining teeth - Delay until older	
	Patient challenges QoL impact on children Retention helps with future planning—keeps options open Socio-economic status Severity dictating treatment Shared care approach Size of defect dictating treatment Specialist involvement Specialist supporting GDPs Willingness to seek specialist care		

Consultant-led community units in local areas in more recent years have made it easier for patients and dentists.

(Male, NHS/Private, qualified 1982)

On a more concerning note, specialist input was motivated by either litigation or service provision pressures of working in a primary care setting. Making the ‘wrong’ decision prompted litigation concerns. Similarly, service pressures, particularly the financial remuneration from the national health service in the UK, were identified as a real barrier to providing care:

I’m always really wary that if you get it wrong and with the litigation culture we have, there could be issues. So that’s why I tend not to treat it in practice unless it’s mild. It feels safer to refer.

(Female, Private, qualified 2006)

...financially not lucrative to carry out lots of treatment on [MIH molars in] an anxious child and therefore attractive to refer for some dentists.

(Female, NHS, Qualified 2016)

3.2 | Australian interviews

Two major themes arose from the Australian interviews: i) multidisciplinary approach to management supporting decision-making complexities; and ii) economic implications for care.

3.2.1 | Theme 1: Multidisciplinary approach to management support decision-making complexities

The data showed that managing posterior hypomineralised teeth was generally deemed to be complex and challenging, but confidence across the cohort was evident. Dentists who had been qualified for longer were more confident when deciding to make the decision on how to manage these teeth, primarily based on their previous experiences, whereas those dentists who were more recently qualified based their decisions on observing and reviewing outcomes from previously restored hypomineralised teeth by other dentists:

Long term follow-up of these patients is what tells you what works, which can be a challenge for less experienced colleagues.

(Male, Private, Qualified 2000)

I've seen big composites by previous clinicians which are often failing, so for me I think what the long-term prognosis of these big composites in a young tooth is... and should we lean towards extracting?

(Female, Public/Private, Qualified 2019)

GDPs reported that where possible parents were more inclined to want hypomineralised teeth to be saved. This includes consideration to endodontic treatment, to extend the lifespan of these teeth. GDPs, however, felt that when a younger child was involved, deciding whether extraction, as a first-line option, may be a more appropriate option:

I would be quite happy to place a large filling if the pulp wasn't involved. I'd not usually consider endodontics as it won't last forever...

(Female, Private, Qualified 1974)

...removing the tooth removed the need for long term maintenance [and] can be best for the patient long term.

(Male, Private, Qualified 1995)

It was clear that a multidisciplinary approach, involving a range of specialists, was routinely used more so when extraction was considered, with the final decision often being left to a specialist in paediatric dentistry, in conjunction with an orthodontic treatment plan:

It would be foolish to make the call on your own when there are specialists there to help. I'd be reluctant to grab for the forceps without a second opinion from a specialist...

(Male, Private, Qualified 2000)

This multidisciplinary approach was deemed to be mutually beneficial for both GDPs and specialists as this approach often drove bidirectional referrals and drove business. Specialist access, however, varied across regions. This was most problematic for GDPs based in more rural areas as, even if specialist-level treatment/adjuncts, such as general anaesthetic, were required, they were not always easily available (even if the parents could pay for the treatment):

There's good proximity to specialists in the city [but] less so in the country creating another hurdle to jump if you need to refer.

(Male, Public/Private, Qualified 2019)

GA can be very costly and there is limited access in some areas, for some it is just not an option.

(Female, Private, Qualified 1974)

Nevertheless, if parents could not afford specialist care, or geographical distance precluded travelling to a specialist, then informal and/or 'pro bono' advice from a specialist was often obtained by utilising engrained and historic relationships that came from routine interdisciplinary working:

I often send clinical photos and x-rays electronically to get an opinion on options depending on the case, I usually prefer the patient to see them face to face but if they can't this can be the next best thing.

(Female, Private/Public, Qualified 2010)

3.2.2 | Theme 2: Economic implications for care

Economic implications were not a burden to accessing care for all patients with MIH. In some cases, parents could easily afford private care, whereas for others, they were eligible to access public care. Those in the middle, however, were often affected the most when managing MIH was concerned:

...for some families in the middle, cost is the biggest problem [and a] barrier to management as they are not eligible for a healthcare card and can't afford private treatment.

(Female, Public, Qualified 1989)

Despite concerns noted for those in the middle, it became abundantly clear that for patients who were eligible for public care, attempting to actually access this care was particularly problematic:

...a huge backlog and multi-year wait for public treatment [often] affected options and outcomes for teeth.

(Male, Public/Private, Qualified 2019)

It was felt that children with hypomineralised anterior teeth were often the most disadvantaged as either their parents could afford the 'optimal' treatment or they could not receive treatment as these teeth failed to meet the accepted threshold for treatment under public care services. As a result, GDPs often felt pressurised to adjust treatment plans, which may have been beyond their level of competence:

...where the parents are unable to afford it, rather than sending it off to a specialist, I've had to manage it myself in some way that improves the situation for them....

(Female, Private, Qualified 2012)

That being said, parents who were able to afford private care still posed a challenge for GDPs in managing MIH. In particular, affluent parents were less accepting of professional advice, from a GDP or a specialist, when an elective extraction of compromised MIH molars was recommended:

...[they] are happy to spend whatever it takes to save their child's teeth [and] may not be accepting of advice to extract the tooth....

(Male, Private, Qualified 1995)

4 | DISCUSSION

Several challenges face nonspecialists when managing MIH in children, as reported elsewhere,^{3,4,11} this study, however, has explored them in greater depth and compared them across two different countries.

Decision-making challenges for children with MIH were evident, with most decisional conflict noted regarding the management of hypomineralised molars. Severity of the hypomineralisation added a layer of complexity as it often dictated treatment choices. The uncertain prognosis of moderately affected hypomineralised molars in particular caused most confusion as both restoration and extraction were valid options, despite insufficient evidence to suggest superior effectiveness of one over the other.^{1,3,12} Composite resin is recommended as the material of choice, despite the limited high-quality evidence and the pooled estimate of success to support this.² In contrast, spontaneous space closure, through mesial migration of the unerupted second permanent molar following extraction, is more likely if favourable prognostic radiographic features are evident¹³; perfect space closure, however, is not guaranteed.^{2,14} Despite having both options available, the lack of good decision-making tools available for children with MIH meant that navigating this uncertainty with families can be challenging. Decisional complexities can continue if molar became symptomatic, as balancing the benefits of an endodontic procedure versus removal is a challenge. Increased use, and success, of vital pulp therapies could make this decision simpler and provide an alternative to an elective extraction.¹⁵ Practitioner's preference to restore was apparent, which is consistent

with the previous literature.³ Such a preference could be explained by a combined lack of experience, confidence and knowledge when discussing the advantages of elective removal. An alternative explanation could be that an extraction is a more invasive procedure, especially in children, and a reluctance to undertake this is apparent. Restoration of a hypomineralised molar, however, is not the panacea for all moderately affected hypomineralised molars of uncertain prognosis, as for some patients, extraction may be the more appropriate choice.¹⁻³ Ultimately, deciding whether to restore or extract moderately affected hypomineralised molars of uncertain prognosis must be based on a full clinical and radiographic assessment of the developing dentition as well as incorporating and understanding patient/parent preferences for each of the options.^{1,12}

Making decisions for children with MIH often requires specialist input, in isolation, or as part of a multidisciplinary approach. Differing healthcare systems influence the demand and expectations for specialist opinions and services that are offered. The predominately privatised Australian system relies on clinician-driven informal referral networks of providers, which appear to be mutually beneficial. In contrast, nonspecialists working in the public sector expressed that limited access to specialists, coupled with long waiting times, often meant multidisciplinary care failed to achieve a satisfactory outcome, exacerbating dental health inequalities.¹⁶ In contrast to Australia, almost all children in the UK will access care through the public NHS system, with those who need referral being sent to a specialist working in centrally located NHS units. Similar issues with access and waiting times are apparent in the UK. The development and emergence of speciality-specific models of care, known as managed clinical networks (MCNs), in the UK are an attempt to reduce these concerns; although this is not the case for all UK regions currently,¹⁷ focussing efforts on commissioning and funding models of care that are efficient, formal and organised could improve care both in the UK and in the public sector in Australia.

Cost of treatment was specifically raised as a barrier to providing care in Australia. It has been reported previously that some Australian parents are unable to meet their child's dental needs as they cannot afford the full range of private care but are ineligible for government support.¹⁸ This is likely to lead to compromised outcomes, due to suboptimal treatment planning, and could increase dental anxiety by forcing options such as extraction under local anaesthetic in young children by options such as general anaesthetics not being available. Marginal improvements were observed after the government introduced a child dental health benefit schedule.¹⁶ Disparities in accessing care at all or

delaying initial presentations, due to cost, however, will continue to drive inequalities.¹⁹ Further policy changes are required to reconcile such issues; implementing this in reality, however, is challenging.²⁰ Contrastingly, Australian parents with no financial constraints often demanded to save hypomineralised teeth, and in some cases contradicted what nonspecialists, and specialists, perceived to be in the best interests of the child. The pressure from parents and increased perceived risk of litigation, in particular with unwanted removal of a molar, when it is in fact clinically indicated, could force practitioners to change their opinions to align with the parent. Given these concerns, obtaining a specialist second opinion is likely to be more routinely requested as a method to mitigate against potential litigation.^{3,21,22} In contrast, the healthcare system in the UK meant having the ability to pay was not an issue. Cost, however, impacted care in a different way as, some considered, inadequate financial remuneration for the practitioners meant an onward specialist referral, when it was not clinically necessary, to counteract the low fee. Similar concerns have been reported prior^{3,23}; Nevertheless, in comparison, respondents in these studies suggested they would absorb these economic losses as referring a patient due to not making enough money was felt to be highly unethical.²³

Decisional conflicts for managing hypomineralised anterior teeth were not as evident compared with posterior teeth. Management options for anterior teeth are less irreversible and more predictable, suggesting nonspecialists perceive less risk in making decisions independently. Anterior hypomineralised opacities are complex to treat with each patient requiring a tailored approach based on clinical presentation.²⁴ Minimally interventive techniques are preferred over destructive approaches,^{1,24} although limited available evidence exists to guide optimal evidence-based treatments.¹ Future studies should focus on improving the clinical effectiveness of current treatments, support the development of novel approaches and obtain patient and parent values/preferences for treatment options.¹

There are several strengths and limitations of this study. To the best of the authors' knowledge, this is the first qualitative study to compare nonspecialist's opinions on managing MIH from two different countries. Qualitative methods permitted the understanding of how and why dentists might manage patients with MIH, rather than focussing solely on what they do. Using an online platform to conduct interviews enabled interviews to be carried out, by one interviewer, across two different continents.

Limitations do exist. The sampling strategy could have introduced a sampling bias as it may be that the

respondents included were more likely to have prior knowledge, or be more confident, in managing MIH. It is possible the interviewer's role as a clinician and a specialist trainee in paediatric dentistry may have caused a power imbalance and shaped the direction of the interviews, or interpretation of the data.²⁵ To minimise this, the interviewer's role was disclosed prior to the interview and transcripts were independently analysed by two researchers, before being discussed amongst the whole research team. Interpretation of UK and Australian data was triangulated by a member of the research team not practising in that country. These robust reflexive approaches helped reduce the potential power imbalance of the clinical researcher's role.²⁵ Social desirability bias may also have occurred with participants wanting to give 'the correct responses' to the interviewer, a trainee paediatric dentist. Measures to avoid this included giving participants limited information prior to the study with the hope to explore their true values and views, allowing respondents to be in a comfortable environment at a convenient time and briefing the interviewees that there are no right or wrong answers and that all data will be anonymised prior to analysis.

This study has demonstrated that there are similarities and differences in the management considerations of MIH amongst UK and Australian nonspecialists. High-quality clinical primary care research and alterations to both undergraduate and postgraduate education are both likely to be required to increase general dentists' confidence in treatment planning MIH in children. Different healthcare systems play a significant role in shaping how nonspecialists manage MIH, and policy changes in both countries are required to combat acknowledged barriers. This study's findings are important to specialists in paediatric dentistry as the need for specialist input and multi-disciplinary care is noted when complexity exists.

AUTHOR CONTRIBUTIONS

R. Osborne contributions to the study are overall design of the study; development of topic guides; undertaking, transcribing and analysing interviews; discussing the data; and compiling the manuscript. M. Silva contributions to the study are overall design of the study; discussing the data; and reviewing and refining the manuscript. G. D. Taylor contributions to the study are overall design of the study; analysing interviews; discussing the data; and reviewing and refining the manuscript.

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CONFLICT OF INTEREST STATEMENT

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DATA AVAILABILITY STATEMENT

The data used for this project were collected as part of the eviDent project. The views expressed are those of the authors and do not necessarily reflect the opinions or policies of evidence.

ETHICS STATEMENT

The project was approved by the Newcastle University Ethics Committee (Ref. No.: 10125/2020), and all participants provided written consent.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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