Roles of Dental Practitioners in Child Abuse and Neglect Responses: A Mixed-Methods Study in Aotearoa New Zealand

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Abstract

The United Nations Convention on the Rights of the Child asserts that all children have the right to protection from abuse and exploitation. Child abuse and neglect (CAN) remain a serious and ongoing social issue in Aotearoa New Zealand with significant implications for the health, development, and wellbeing of children. Oral health practitioners (OHPs) are uniquely positioned to support child protection efforts due to their regular contact with children and families through the nation's publicly funded dental care system for individuals under 18 years of age. Guided by a pragmatic paradigm and a commitment to finding practical solutions, this thesis aimed to explore how OHPs can be better supported to identify and respond to CAN concerns, and to develop evidence-based recommendations to strengthen their role in child protection.

The research adopted an explanatory sequential mixed-methods design, implemented in four phases. First, a quantitative online survey assessed OHPs' knowledge, attitudes, and perceived preparedness in responding to CAN. Second, a scoping review mapped international strategies aimed at enhancing the responsiveness of OHPs. Third, a review of legal and professional frameworks examined the regulatory requirements and ethical obligations surrounding CAN responses in Aotearoa New Zealand. Finally, qualitative interviews and focus groups explored the experiences and perspectives of OHPs, identifying barriers, enablers, and professional needs to enhance OHP responsiveness to CAN concerns.

Findings indicate that while OHPs are not legally mandated to report suspected CAN, professional guidelines and legislation frameworks require them to engage in safeguarding practices to protect children. However, despite demonstrating empathy and a readiness to support affected families, OHPs' practical engagement in child protection is hindered by limited capacities and support to respond to CAN concerns and participate in preventive strategies. Cultural misunderstandings, fears associated with the sensitive topic of CAN, and uncertainty about appropriate procedures were identified as key individual barriers. Systemic and organisational challenges, such as limited interdisciplinary collaboration, reduced trust in child protection agencies, and inadequate institutional support for OHPs, further hindered OHPs' ability to respond safely and effectively.

While these challenges were evident, the research also identified key strengths that OHPs bring to child protection efforts. Their ongoing relationships with children and families, clinical familiarity with orofacial manifestations of abuse, and trusted presence within community settings position them well to support prevention and early intervention approaches. Participants highly valued support through interdisciplinary collaborations and expressed a strong commitment to being part of collaborative practice. Participants emphasised the need for targeted training, culturally safe practice guidance, clearer legal and ethical frameworks, and stronger interdisciplinary collaboration to enhance their responsiveness and better support children and their families.

This thesis highlights that OHPs have the potential to play a more meaningful and proactive role in child protection when supported through system-wide, culturally responsive, and strength-based approaches. The findings offer practical recommendations for educational providers, professional bodies, healthcare organisations, and policymakers to foster a more streamlined and effective child protection response. These efforts ultimately aim to advance equitable health and social outcomes for all children in Aotearoa New Zealand; a goal that reflects a shared vision and collective responsibility across sectors, communities, and society to ensure all children grow up safe, supported, and free from harm.

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor used artificial intelligence tools or generative artificial intelligence tools (unless it is clearly stated and referenced, along with the purpose of use), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

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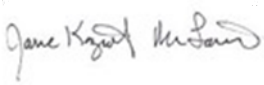
Supervisor Name	Jane Koziol-McLain	**Signature**		**Date**	18.06.2025

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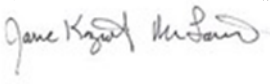
Supervisor Name	Jane Koziol-McLain	**Signature**		**Date**	18.06.2025

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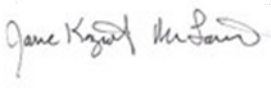
Supervisor Name	Jane Koziol-McLain	**Signature**		**Date**	18.06.2025

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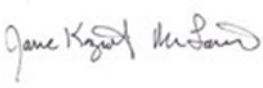
Supervisor Name	Jane Koziol-McLain	**Signature**		**Date**	18.06.2025

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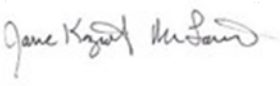
Supervisor Name	Jane Koziol-McLain	**Signature**		**Date**	18.06.2025

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제 평생의 본보기로 존경합니다.

감사하는 마음 평생 간직하며 살겠습니다. 사랑합니다.

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Title	Child abuse and dentistry: knowledge and attitudes among dental therapists and oral health therapists in New Zealand
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Appendix	Appendix A.1

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Glossary & Abbreviations

Key terms

Terms (reference)	Definitions (as used in this thesis)
Child abuse (UNICEF, 2023)	Child abuse refers to the deliberate actions that cause harm or pose significant risks of harm to a child. It encompasses physical, emotional (psychological), and sexual abuse.
Child maltreatment (WHO, 2024)	All types of physical and/or emotional ill-treatment, sexual abuse, neglect, negligence and commercial or other exploitation, which result in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power.
Child neglect (UNICEF, 2023)	The deliberate, unwanted and non-essential failure to meet a child's physical or psychological needs, protect a child from danger, or obtain medical, educational or other services when those responsible for the child's care have the means, knowledge and access to services to do so.
Dental therapy / dental therapist (DCNZ, 2021d)	The practice of dental therapy is the provision of oral health assessment, diagnosis, management, treatment and prevention of any disease, disorder or condition of the orofacial complex and associated structures in accordance with a dental therapist's approved education, training, experience and competence. Disease prevention, oral health promotion and maintenance are core activities aimed at achieving and maintaining oral health as an integral part of general health.
Oral health practitioner (DCNZ, n.d.)	A registered health practitioner who provides oral health care services, encompassing dentists, dental specialists, oral health therapists, dental hygienists, dental therapists, clinical dental technicians, dental technicians, and orthodontic auxiliaries. Each practitioner operates within their specific defined scope of practice, as regulated by the Health Practitioners Competence Assurance Act 2003. All practitioners are required to meet the Professional Practice Standards and Ethical Principles.
Oral health therapy / oral health therapist (DCNZ, 2021c)	The practice of oral health therapy is the provision of oral health assessment, diagnosis, management, treatment and prevention of any disease, disorder or condition of the orofacial complex and associated structures in accordance with an oral health therapist's approved education, training, experience and competence. Oral health education, disease prevention and oral health promotion for individuals and communities are core activities aimed at achieving and maintaining oral health as an integral part of general health.

Te Reo Māori glossary

Te Reo Māori is used throughout this thesis. Instead of presenting translations throughout the text, this glossary is provided to indicate the intended meaning of words in Te Reo Māori. I acknowledge that terms may have other meanings beyond those provided in this glossary.

Term	Meaning (as used in this thesis)
Aotearoa	New Zealand
Kaupapa Māori	Māori approach, Māori topic, Māori customary practice
Maata Waka	Pan-tribal organisation provides cultural, social, health, education, and justice-related services to Māori who are living away from their traditional tribal lands
Mana Mokopuna	New Zealand's independent crown entity, also known as the Children and Young People's Commission
Mana motuhake	Autonomy, self-government, self-determination
Mātauranga	Māori knowledge
Māori	Indigenous peoples of Aotearoa New Zealand
Mokopuna	Grandchildren
Oranga Tamariki	New Zealand statutory agency responsible for the welfare and protection of children and young people under the age of 18
Rangatahi	Youth, younger generation
Stand Tū Māia	National Aotearoa New Zealand charity that provides therapeutic social services for tamariki and their whānau affected by trauma, neglect, or complex family stress
Tamariki	Children
Tāne	Male
Tangata whenua	People of the land, indigenous people
Te Ao Māori	Māori worldviews
Te reo Māori	Māori language
Te Tiriti o Waitangi	Foundational treaty in Aotearoa New Zealand, establishing a partnership between Māori and the British Crown
Tikanga	Customs, practices
Tino rangatiratanga	Self-determination, sovereignty
Wāhine	Female
Whakapapa	Genealogy, lineage
Whānau	Extended family or a group connected through a common ancestor in Māori culture, and more broadly, to close familial or support networks among non-Māori in wider Aotearoa New Zealand society

List of abbreviations

Term	Full details
ACE	Adverse childhood experience
CAN	Child abuse and neglect
COHS	New Zealand community oral health services
COREQ	COnsolidated criteria for REporting Qualitative research
COVID-19	Coronavirus Disease 19
DCNZ	Dental Council of New Zealand
DT	Dental therapist
ICVAC	International Classification of Violence Against Children
JBI	Joanna Briggs Institute
NZDA	New Zealand Dental Association
OHP	Oral health practitioner
OHT	Oral health therapist
PANDA	Prevent Abuse and Neglect through Dental Awareness
PRISMA-ScR	Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews
RTA	Reflexive thematic analysis
UK	United Kingdom of Great Britain and Northern Ireland
UNCRC	United Nations Convention on the Rights of the Child
UNICEF	United Nations International Children’s Emergency Fund
USA	United States of America
WHO	World Health Organization

1. Introduction and Overview

1.1. Introduction

The research presented in this thesis aimed to enhance the understanding of the role of oral health practitioners (OHPs) in child protection and how to support them to be more responsive to child abuse and neglect (CAN) concerns. This research was motivated by a personal experience involving a case of concern for a child's wellbeing, which led to a deeper reflection on my own professional responsiveness and a commitment to improving it moving forward. My overarching goal for this research was to deepen my understanding of child protection and raise awareness among oral health professionals in Aotearoa – New Zealand about their role in protecting children so that all children can grow in safe and nurturing environments. This chapter provides my personal journey to the research project, followed by an overview of the thesis chapters.

1.2. Start of the journey

Researchers' backgrounds and experiences play a crucial role throughout the research process, from shaping the initial design to influencing data analysis and interpretation. To ensure transparency and provide context to my approach, I have detailed my own background and experiences below. This reflexive statement aims to offer the perspective I bring to this study and how it might affect the findings and interpretations.

My journey into research on child protection in oral health began with a period of personal reflection shortly after my undergraduate training. In 2019, I was working at a mobile dental clinic servicing primary and intermediate schools across South Auckland. One day, two siblings came to the clinic during my lunch break. The older brother expressed concern about his younger sibling's severe toothache. I examined the younger boy, revealing multiple carious lesions and associated odontogenic infections. During the examination, my dental assistant and I also noticed several bruises on both children, raising concerns about potential physical abuse. When I gently inquired about the bruises, the older brother quickly stepped in, preventing his sibling from responding. I sensed something was wrong, but at that moment, I focused on providing the necessary immediate dental care and did not pursue my suspicions further. Shortly thereafter, the clinic relocated to another school.

Reflecting on this experience, I knew my responsibility as a health practitioner was to respond to my concerns, to do something, to act. However, although the clinic was conveniently located within a school, allowing direct liaison with school staff, public health nurses, or social workers, I found myself uncertain about the appropriate steps to take. My undergraduate education did not equip me with the practical knowledge needed to handle such situations with confidence. Moreover, I did not have the opportunity to engage in any relevant in-service training that could have strengthened my preparedness to act. In fact, there may have been opportunities for further

training, but I did not recognise their significance or engage sufficiently at the time, which limited my retention of key knowledge; hence, I do not recall any specific training opportunities. Prior to this experience, I had assumed that I would encounter such situations at some point in my career, but I had not fully considered how to respond effectively to ensure the safety and support of children. I knew those two boys needed support, however, I did not act on my concerns, partly due to a lack of education and access to appropriate support at the time. This incident profoundly impacted me and sparked an interest in researching child protection and the role of OHPs in these critical interventions. To this day, I remain unsure whether those two boys and their family received the adequate support they needed. Motivated by this experience, I committed myself to investigating and addressing the training and preparedness gaps I had encountered, hoping to contribute to the oral health profession by sharing practice-informed insights gained through my journey.

1.3. Conceptual and theoretical lenses

This study is interpreted through two complementary lenses: children's rights and equity. The children's rights lens, aligned with the United Nations Convention on the Rights of the Child (UNCRC) (United Nations Human Rights, 1989) (Chapter 2.5), centres the safety, wellbeing, participation, and best interests of children, affirming OHPs' responsibilities to protect children and support families to nurture children in safe environments. The equity lens, grounded in Te Tiriti o Waitangi commitments (Chapter 2.3), emphasises culturally safe practice and partnership, and attends to the structural inequities that shape risk, access, and health and social outcomes, particularly for Māori (Indigenous peoples of Aotearoa New Zealand) and Pacific communities. Together, these frameworks provide the conceptual scaffolding for the research questions, study design, and analytic focus, and they underpin the translation of findings into practical recommendations.

1.4. Overview of chapters

This thesis comprises nine chapters, as summarised in Table 1. Chapters 4 through 8 include a series of published peer-reviewed articles, each preceded by a prelude. These preludes set the context and background of the subsequent article. They outline the key questions addressed, describe key events or circumstances encountered during the research, and include my reflection on the work's broader implications. Each chapter concludes with postludes, which offer post-reflections and learning from the research process and the dissemination of the findings. Since the thesis comprises a collection of published articles, there is some repetition in the discussion sections and core concepts across various chapters.

Table 1. Overview of the Thesis Chapters

Chapter	Overview
1: Introduction and Overview	The current chapter introduces my personal reflection and provides an overview of subsequent chapters.
2: Narrative Literature Review	This chapter provides background information about CAN, children's rights to safety, its impacts, and the role of OHPs in child protection. The chapter also introduces the thesis rationale, research gaps, and the research question.
3: Study Design	This chapter presents the methodology of the research, including the philosophical worldview and the research design.
4: Quantitative Research	This chapter presents quantitative research aimed at investigating New Zealand OHPs' current knowledge and attitudes regarding detecting and reporting child protection concerns.
5: Scoping Review Protocol	This chapter presents a detailed protocol of a scoping review aimed at mapping current international strategies used to enhance the responsiveness of OHPs against child protection concerns.
6: Scoping Review	This chapter presents a scoping review conducted following the protocol outlined in the previous chapter.
7: Legal and Professional Frameworks Review	This chapter presents a review of legal and professional frameworks to understand and document the requirements for OHPs in responding to child protection concerns in New Zealand.
8: Qualitative Research	This chapter presents qualitative research aimed at exploring the experiences and perspectives of New Zealand OHPs and oral health service managers in child protection responses, including the barriers and facilitators they encounter. It concludes with targeted recommendations for practitioners, organisations, education providers, and policymakers to better support OHPs in their roles.
9: Integrated Discussion	This chapter integrates findings from the different research components, highlighting opportunities for OHPs to strengthen their roles in responding to child protection concerns. It documents the strengths and limitations of the research, offers recommendations for future studies, and concludes with a personal reflection on my journey throughout the doctoral process.

Note. CAN = child abuse and neglect; OHPs = oral health practitioners.

2. Narrative Literature Review

2.1. Introduction to the literature review

In this narrative literature review chapter, I explore the body of literature related to CAN, detailing both national and international prevalence rates, definitions of various types of violence against children, and their impacts on children's development and adverse health and social outcomes. In New Zealand, OHPs have regular interactions with children and families and have opportunities to build relationships due to the free dental system for children and young people under 18 years of age (Health New Zealand, 2024a). Despite this unique positioning, little research has been conducted to explore OHPs' perspectives and attitudes toward CAN concerns and their subsequent actions in child protection contexts. Recognising that the healthy development of children is the foundation of the future wellbeing of society (United Nations International Children's Emergency Fund [UNICEF], n.d.), it is crucial to address these research gaps. This review outlines the specific orofacial manifestations of CAN and the current international understanding of the role of OHPs in child protection.

The review is developed inductively throughout the study, rather than adhering to a predefined systematic search protocol. The review unfolded through iterative, organic engagement with the literature; cycling between searching, reading, and sense-making as new questions emerged from fieldwork, supervisory discussions, and dialogue with practitioners. Sources were followed by relevance and conceptual contribution with attention to Aotearoa New Zealand contexts. Through this exploration of existing literature, I present research gaps and introduce the research questions that guided this thesis.

2.2. Definition of types of violence against a child

Defining terms related to violence against a child, particularly in an international context, is challenging due to varying cultural norms and levels of social acceptance across different countries (UNICEF, 2023). This complexity presents additional challenges for New Zealand, a nation characterised by its diverse array of cultures and ethnic groups. The internationally recognised definition is from the World Health Organization (WHO) (2024), which defines child maltreatment as:

> *All types of physical and/or emotional ill-treatment, sexual abuse, neglect, negligence and commercial or other exploitation, which results in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power.*

The definition recognises both "actual" and "potential" harm to a child, highlighting the importance of identifying and addressing risks before they result in irreversible damage (WHO, 2024). This approach is proactive, aiming to safeguard children by acknowledging and mitigating both immediate and future threats to their wellbeing. The International Classification of Violence

Against Children (ICVAC), a report to develop the internationally agreed definition of violence against children, indicates that violence is an act or omission to act that is deliberate, unwanted by the victim, non-essential for survival or fitness of the child, and harmful (UNICEF, 2023). Harmful acts “include any act that results in or has a high likelihood of resulting in death, injury, or other forms of physical, psychological suffering” (UNICEF, 2023, pp. 14-15). ICVAC classifies violence against children into five categories: (1) homicide of a child, (2) physical violence against a child, (3) sexual violence against a child, (4) psychological violence against a child, (5) neglect of a child (UNICEF, 2023).

In New Zealand, Section 2(1) of the Oranga Tamariki Act 1989 defines child abuse as “the harming (whether physically, emotionally, or sexually), ill-treatment, abuse, neglect, or deprivation of any child or young person”. Oranga Tamariki[1] (2020) classified CAN into four categories: (1) physical abuse, (2) sexual abuse, (3) emotional abuse and (4) neglect. Definitions align with ICVAC apart from using the term ‘emotional abuse’ instead of ‘psychological abuse’ and not having ‘homicide’ as a separate category. The terms ‘emotional’ and ‘psychological’ are used interchangeably in various international standards, and both address aspects of mental and emotional harm that negatively impact an individual’s psychological wellbeing. In New Zealand, homicide, including that of a child, is specifically addressed under the country’s criminal law (the Crimes Act 1961), reflecting its severe implications and the distinct legal framework required for such cases. Table 2 summarises the definitions from ICVAC (UNICEF, 2023) and Oranga Tamariki (2020).

When addressing CAN, it is essential to take into account the cultural contexts worldwide, as different cultures have different perceptions of children, parenting and disciplinary means (Abdullah & Thattengat, 2025; Lansford et al., 2015). Community characteristics, society, and cultural traits significantly influence the determination of abusive and neglectful behaviours (Abdullah & Thattengat, 2025). Misunderstandings or a lack of cultural awareness can sometimes lead to wrongly labelling certain behaviours as abuse or neglect when, in fact, they are accepted practices within their culture. Caregivers may not be aware that their actions are classified as CAN in certain parts of the world away from their primary cultural demographics. For example, in New Zealand, ‘reasonable force’ cannot be used as a defence for disciplining children (Oranga Tamariki, 2021). The Crimes Amendment Act 2007 repealed the legal defence that allowed parents and caregivers to use reasonable force for the purpose of correction and discipline. However, individuals new to the country may not be aware of the legislation, which may conflict with the legal norms in their countries of origin. Therefore, careful considerations are required when defining CAN to ensure they are sensitive to cultural nuances and respect diverse parenting norms while safeguarding children effectively across different environments (Abdullah & Thattengat, 2025).

[1] New Zealand statutory agency responsible for the welfare and protection of children and young people under the age of 18

Table 2. Definition of Types of Violence Against a Child from ICVAC and Oranga Tamariki

Types of violence	ICVAC definitions	Oranga Tamariki definitions
Homicide	Any deliberate, unwanted and non-essential act that leads to the death or intends to cause the death of a child	
Physical violence	Any deliberate, unwanted and non-essential act that uses physical force against the body of a child and that results in or has a high likelihood of resulting in injury, pain or psychological suffering	Any act that may result in physical harm to a child, which can be, but is not limited to, bruising, cutting, hitting, beating, biting, burning, causing abrasions, strangulation, suffocation, drowning, poisoning, and fabricated or induced illness
Sexual violence	Any deliberate, unwanted and non-essential sexual act, either completed or attempted, that is perpetrated against a child, including for exploitative purposes, and that results in or has a high likelihood of resulting in injury, pain or psychological suffering	Any act that involves forcing or enticing a child to take part in sexual activities, whether or not a child is aware of what is happening, which includes contact abuse and non-contact abuse
Psychological violence (ICVAC) & emotional violence (Oranga Tamariki)	Any deliberate, unwanted and non-essential act, verbal and non-verbal, that harms or has a high likelihood of harming the development of a child, including long-term physiological harm and mental health consequences	Any act or omission that results in adverse or impaired psychological, social, intellectual, and emotional functioning or development, which can be but not limited to patterns of isolation, corrupting, exploiting, or terrorising a child, and exposure to family violence
Neglect	The deliberate, unwanted and non-essential failure to meet a child's physical or psychological needs, protect a child from danger, or obtain medical, educational or other services when those responsible for the child's care have the means, knowledge and access to services to do so	Physical, emotional, neglectful supervision, medical neglect and educational neglect - most common form of serious harm and although the effects may not be as obvious as physical abuse, the impact on the child is often just as serious

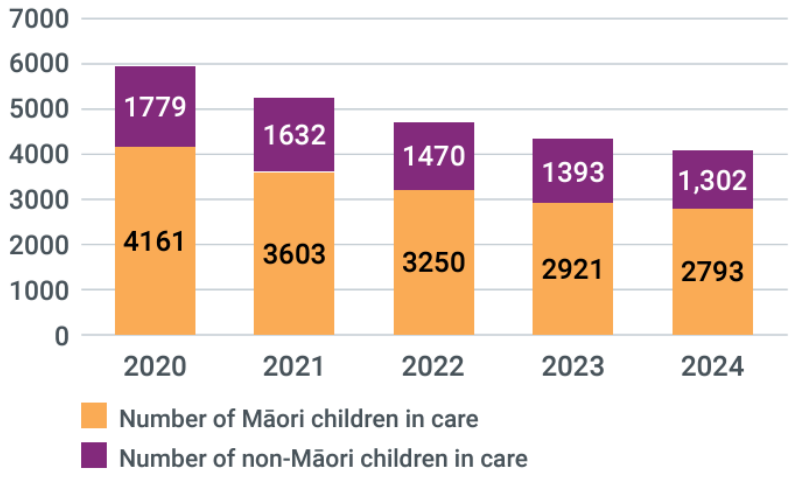
Note. Definitions of different types of violence against a child from the "International Classification of Violence against Children (ICVAC)", by UNICEF. (2023, pp. 46-47), available on https://data.unicef.org/resources/international-classification-of-violence-against-children/, and from "Oranga Tamariki Child Protection Policy", by Oranga Tamariki. (2020, pp. 8-9), available on https://www.orangatamariki.govt.nz/assets/Uploads/Working-with-children/Childrens-act-requirements/Child-Protection-Policy-2020.pdf. The term 'homicide' was not included in the Oranga Tamariki report.

2.3. Prevalence of CAN and social inequity

CAN is recognised as a significant social and public health issue globally (WHO, 2024). Under UNCRC (United Nations Human Rights, 1989), all children have rights and freedoms against harm, punishment, and discrimination and should be afforded the necessary protection and assistance for their growth and wellbeing. The ideal vision is one where every child not only lives free from harm but thrives in supportive, nurturing environments that foster their health, self-respect, and dignity. Unfortunately, not all children are in safe and fostering environments. WHO (2020) indicates around one billion children worldwide (one out of two children) suffer from some form of violence each year, and around 300 million children aged two-to-four-years (nearly three in four children) regularly suffer physical punishment and/or psychological violence by their parents or caregivers. Furthermore, it is estimated that 120 million females aged under 20 years have suffered from coerced sexual interactions (WHO, 2020).

In New Zealand, while the majority of children and young people grow up in environments where they are protected and nurtured by their whānau and communities, some still require intervention by child protection agencies, such as Oranga Tamariki (Oranga Tamariki, 2024). In the financial year ending 31 March 2024, approximately 161,000 New Zealand children and young people were estimated to be at risk of CAN, 60,000 received support or services from Oranga Tamariki and its partners (excluding care or custody), and 4,100 were in the care or custody of Oranga Tamariki for care or youth justice matters (Oranga Tamariki, 2024). There has been a decreasing trend in the number of children in care since 2017; however, children who whakapapa (genealogy) Māori are overrepresented in the care and protection system (68% in 2024; 2,793 Māori children out of 4,095 children in the care of Oranga Tamariki) (Figure 1) (Oranga Tamariki, 2024). The cumulative prevalence analysis of all children born in New Zealand between 1998 and 2015 (overall sample of 55,443 children) highlighted 23.5% had been subject to at least one report to child protection services, 9.7% had been a victim of substantiated CAN, and 3.1% had experienced out-of-home placements by the age of 17 years (Rouland & Vaithianathan, 2018). Further investigations indicated disproportionate outcomes for Māori children with 42.2% with child protection reports, 20.4% substantiated as victims, and 7.1% experiencing out-of-home placements by the age of 17 years (Rouland et al., 2019). These figures should not be interpreted as reflective of cultural or parental deficiencies, but rather as a clear indicator of systemic failure — a result of colonisation, racism, and institutional structures that have consistently failed to uphold Te Tiriti o Waitangi (the foundational treaty in New Zealand, establishing a partnership between Māori and the British Crown). Māori children continue to endure the ongoing negative impacts of colonisation, assimilation, and social, economic, and educational disadvantage compared to non-Māori. Māori face systemic barriers to accessing primary healthcare and welfare services, resulting in unmet needs (Keddell et al., 2022; Lacey et al., 2021).

Figure 1. Number of Children who Identify as Māori and non-Māori in the Care of Oranga Tamariki



Note. Number of children (under the age of 18) in the care of Oranga Tamariki and the number of those who identify as Māori and non-Māori. From "Pūrongo-ā-tau: Oranga Tamariki annual report 2023/24", by Oranga Tamariki. (2024, p. 5), available on https://www.orangatamariki.govt.nz/assets/Uploads/About-us/Corporate-reports/Annual-Report/Annual-Report-2023-2024.pdf.

Te Tiriti o Waitangi affirms Māori's rights of tino rangatiratanga and the responsibility of "the Crown to act, to the fullest extent practicable, to achieve equitable health outcomes for Māori" (Waitangi Tribunal, 2023, p. 163). Article 3 of Te Tiriti o Waitangi states "nga tikanga katoa rite tahi ki ana mea ki nga tangata o Ingarani" confirming Māori have the same rights as the people of England (Waitangi Tribunal). However, health and social inequities clearly demonstrate the Crown's failures to uphold Te Tiriti o Waitangi and protect Māori children, as guaranteed under Te Tiriti o Waitangi (Came et al., 2020; Cox, 2020). Historical and continuing impacts of colonisation have led to systemic issues in social services, which indicate culturally inappropriate care (Department of Social Welfare, 1988; Hyslop, 2021). The Waitangi Tribunal's Health Services and Outcomes Kaupapa Inquiry (the Hauora report - Wai 2575) found that the Crown has failed to address persistent Māori health inequities and to give effect to tino rangatiratanga (self-determination) (Waitangi Tribunal, 2023). The Hauora report recommends the primary health care system adopt Te Tiriti principles[2] (Waitangi Tribunal, 2023, p. 180) of: (1) the guarantee of tino

[2] **Recommended principles of the Hauora Report (Wai2575)** (p. 180)

a) The guarantee of tino rangatiratanga, which provides for Māori self-determination and mana motuhake in the design, delivery, and monitoring of primary health care.
b) The principle of equity, which requires the Crown to commit to achieving equitable health outcomes for Māori.
c) The principle of active protection, which requires the Crown to act, to the fullest extent practicable, to achieve equitable health outcomes for Māori.
d) The principle of options, which requires the Crown to provide for and properly resource kaupapa Māori primary health services.
e) The principle of partnership, which requires the Crown and Māori to work in partnership in the governance, design, delivery, and monitoring of primary health services.

rangatiratanga, (2) equity, (3) active protection, (4) options, and (5) partnership. This aligns with Whakamaua: Māori Health Action Plan 2020–2025, which sets a clear mandate for achieving Māori health equity and outlines specific actions for embedding Te Tiriti principles in policy, planning, and service delivery (Ministry of Health, 2020). These findings collectively highlight a persistent failure of the Crown to uphold its obligations under Te Tiriti o Waitangi, particularly actively protecting the rights and wellbeing of Māori tamariki.

Oranga Tamariki (2024) has been in the process of developing and piloting multiple innovative strategies, such as implementing Māori and community-led approaches and involving allied support workers, such as health workers, to support social workers to address this inequity. Recent research highlights the emergence of collaborative models that involve a community-based Maata Waka[3] organisation, which offers culturally grounded and holistic services to tamariki, rangatahi, and whānau Māori (Lewis et al., 2023). This community-based approach aimed to empower whānau through respect and validation of their aspirations, build interconnected relationships, and collaborate to support whānau (Lewis et al., 2023). Despite these promising developments, significant structural barriers, including power imbalances, limited resource allocation, and historical mistrust between statutory agencies and Māori communities, remain challenges requiring ongoing attention.

Despite these initiatives, Oranga Tamariki and government agencies still require further attention to protect our children from violence, abuse and neglect. Integrating the AAAQ (Availability, Accessibility, Acceptability, and Quality) framework by the Committee on Economic, Social, and Cultural Rights (United Nations, 2000) has gained its attention with potential to address these persistent systemic issues. Although the framework was originally developed for the healthcare sector, it can also serve as a tool to improve access to any other social setting. Availability requires that sufficient health and welfare services are accessible to all. Accessibility ensures that services are obtainable without discrimination and at affordable costs. Acceptability requires that services are culturally appropriate and respect medical ethics. Lastly, quality emphasises that services are scientifically sound and of the highest standard. By striving to meet the AAAQ standards (United Nations, 2000), there is substantial potential to improve these systemic unmet health and social needs (Harris et al., 2006; Rouland et al., 2019).

WHO (2019) calls for multidisciplinary and multisectoral approaches to effectively respond to and address CAN concerns. Locally, a New Zealand-specific Oranga Tamariki Action Plan highlights the role of different sectors, including the health sector, in meeting children’s and young people’s needs and building whānau resilience before issues and challenges escalate further, impacting the wellbeing of whānau:

[3] Pan-tribal organisation provides cultural, social, health, education, and justice-related services to Māori who are living away from their traditional tribal lands

> *There is a particular focus on urgently meeting the health, education, and housing needs of children and young people, as these are key determiners of wellbeing that other agencies play a lead role in*. (Child and Youth Wellbeing, 2022, p. 7)

2.4. New Zealand oral health system for children

In New Zealand, OHPs are an essential component of the primary health care system. OHPs are in a unique position due to the free oral health care system for children and young people under 18-years-of-age (Health New Zealand, 2024a). From birth, all children born in New Zealand or any children moving to the country (who meet the eligibility criteria) are encouraged to enrol with the community oral health services (COHS) (the oral health service administered by Health New Zealand). Upon enrolment, children are seen at least annually or more frequently, depending on their oral health disease risks. For any children who are not enrolled with COHS, public health nurses and schools will actively encourage caregivers to enrol their children and access free dental care. Although COHS has faced challenges in meeting community needs post-Coronavirus Disease 19 (COVID-19) pandemic, the system provides opportunities for OHPs to have regular contact with children in various dental settings, including community-based dental clinics and school-based dental clinics, as well as community settings, including preschools and community events. Once children reach school year nine (around 12 to 14 years old), they will be referred from COHS to private dental practices where oral health therapists (OHTs), dental therapists (DTs), or dentists, continue to provide free dental care to teenagers until they turn 18-years-old (Health New Zealand, 2024b). In the financial year of 2023/24, 73.1% of children aged zero to 14 years had at least one dental visit in the COHS (Ministry of Health, 2024). The current system of oral health care delivery for children and young people places OHPs at the forefront of identifying and responding to CAN concerns compared to any other health professional in New Zealand. Children may only see doctors or nurses for specific events, such as vaccinations and when illnesses or accidents require medical attention, emphasising the infrequency and event-driven nature of these interactions compared to the regular check-ups provided by OHPs. During these interactions within dental settings, OHPs can collaborate with other health and social practitioners to help meet the health needs of the individual child and adolescent (Singh & Lehl, 2020). The following section outlines a definition of CAN, identifies and discusses CAN's health and social impacts, and highlights the research gap.

2.5. Children's rights to safety

Ensuring the safety of children is undoubtedly the paramount concern, and all adults bear the responsibility to protect them. Therefore, health and social professionals, including OHPs, must work collaboratively to uphold this critical duty (WHO, 2019). UNCRC (United Nations Human Rights, 1989) and many other international treaties and standards advocate for the protection of children's rights from all forms of violence and discrimination. The International Covenant on

Economic, Social and Cultural Rights (United Nations, 1966) emphasises the right to education, the highest attainable standard of health, and adequate standards of living, which are fundamental to children's wellbeing and development, while the European Convention on Human Rights (European Court of Human Rights, 1950) upholds the rights to education and family life which protect children's welfare and development.

New Zealand ratified the UNCRC on 6 April 1993 with specific reservations (Ministry of Justice, 2024). Some of these reservations included the government reserving the right not to legislate further or take additional measures as outlined in Article 32(2)[4], which pertains to the protection of children from economic exploitation in employment (Ministry of Justice, 2024). This decision was based on the assessment that existing laws in New Zealand already provide sufficient protection for children in this regard. Additionally, the government reserved the right not to apply Article 37(c)[5] under certain conditions, such as a shortage of appropriate facilities to house juveniles and adults separately for detention or imprisonment, situations where the interests of other juveniles necessitate the removal of a particular juvenile offender or circumstances where mixing juveniles and adults are deemed beneficial to those involved (Ministry of Justice, 2024). All other rights in relation to the UNCRC are fully ratified by the government, which confirms its commitment to upholding the principles and protections afforded to children under the convention. Section 5(1)(b)(i) of the Oranga Tamariki Act 1989 states:

> *The wellbeing of a child or young person must be at the centre of decision making that affects that child or young person, and, in particular,—*
>
> > *(i) the child's or young person's rights (including those rights set out in UNCRC and the United Nations Convention on the Rights of Persons with Disabilities) must be respected and upheld, and the child or young person must be—*
> >
> > > *(A) treated with dignity and respect at all times*
> >
> > > *(B) protected from harm*

These children's rights are crucial as children must rely on adults to grow towards their independence. The healthy development of children is the foundation of the future wellbeing of societies (UNICEF, n.d.). Accordingly, the government is obligated to "take all appropriate measures to ensure that the child is protected against all forms of discrimination or punishment on

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[4] **Article 32(2) of UNCRC** states Parties shall take legislative, administrative, social and educational measures to ensure the implementation of the present article. To this end, and having regard to the relevant provisions of other international instruments, States Parties shall in particular:

(a) Provide for a minimum age or minimum ages for admission to employment;
(b) Provide for appropriate regulation of the hours and conditions of employment;
(c) Provide for appropriate penalties or other sanctions to ensure the effective enforcement of the present article.

[5] **Article 37(c) of UNCRC** states Parties shall ensure that every child deprived of liberty shall be treated with humanity and respect for the inherent dignity of the human person, and in a manner which takes into account the needs of persons of his or her age. In particular, every child deprived of liberty shall be separated from adults unless it is considered in the child's best interest not to do so and shall have the right to maintain contact with his or her family through correspondence and visits, save in exceptional circumstances.

the basis of the status, activities, expressed opinions, or beliefs of the child's parents, legal guardians, or family members" (Article 3(2)) (United Nations Human Rights, 1989).

In New Zealand, Mana Mokopuna[6] actively promotes the implementation of the Convention in legislation and policy, raises awareness of children's rights, works collaboratively to help children access their rights, and monitors the government's implementation of the Convention. Mana Mokopuna (n.d.) asserts that children have rights to "access to the best standard of health, their language and culture, things they need, and to a say in everything that affects them". These rights are derived "from whakapapa and from legal documents like Te Tiriti and the United Nation's Children's Convention" (Mana Mokopuna, n.d.). Mana Mokopuna (2024) is underpinned by a rights-based approach, advocating for children, families, and communities to prevent, address, and heal from violence while ensuring that children's voices are meaningfully heard and integrated into decision-making processes.

2.6. Signs and symptoms of CAN

Significant immediate and long-term impacts of CAN are well-known and have been explored extensively. Not only impacting children's physical health, CAN has been associated with mental and psychosocial wellbeing in their childhood as well as their later adulthood (Danese & Widom, 2023). The evidence clearly indicates that CAN places a substantial burden on children, their families, communities and the wider society (WHO, 2014). Immediate physical manifestations of CAN include unexplained or recurring patterns of injuries (including bruising, fractures, burns and other forms of trauma) (Dubowitz & Bennett, 2007; Leeb et al., 2011). These manifestations can range from small ulcers, bruising and lacerations to permanent impairments, chronic disorders, and early deaths, as a variety of external and internal injuries can be life-threatening. Abusive head trauma, which can result from shaking or a blunt impact on the head, is the most common cause of death due to child physical abuse (Joyce et al., 2023). Injuries to fleshy body parts and multiple bruises in different shades are often indicators of physical abuse (Maguire & Mann, 2013).

Sexual abuse is more subtle than physical abuse, as manifestations are often internally expressed. Therefore, it is often identified with child disclosure. However, victims of sexual abuse often present somatic symptoms, such as dysuria, and intraoral injuries, such as bruises and lacerations (Leeb et al., 2011). They may present with sexually transmitted diseases in their early stages of life and show over-sexualised behaviour compared to their peers (Slavin et al., 2020). Sexual abuse has shown the strongest association with sexual risk behaviour, delinquency and suicidality compared to other forms of abuse and neglect (Kalmakis & Chandler, 2015). Bite marks of an adult on a child are often associated with sexual and physical abuse, which requires further attention to the explanation given by caregivers (Costacurta et al., 2015).

Psychological abuse often does not present superficial signs and symptoms to children at the time of abuse. It is often characterised by ongoing caregivers' behaviour toward their children

[6] New Zealand's independent crown entity, also known as the Children and Young People's Commission

(UNICEF, 2023). Psychological abuse can lead to chronic patterns or outstanding incidents of destructive behaviours and mental health conditions, such as aggressiveness, depression, anxiety, withdrawal behaviours, hyperactivity, and eating disorders (Strathearn et al., 2020).

Neglect is the most common form of CAN, which encompasses various neglectful actions, including physical neglect, emotional neglect, neglectful supervision, medical neglect and educational neglect (Oranga Tamariki, 2020). Therefore, its pattern can vary from medical non-adherence and unmanaged health conditions to school failure and poor hygiene (Avdibegović & Brkić, 2020). Similarly to psychological abuse, identification of neglect often requires vigilant monitoring of children and their caregivers' interactions over time. It is important to differentiate if unintentional neglect is caused by educational and cultural factors, which do not classify actions or omissions to act as "deliberate, unwanted and non-essential failure" (UNICEF, 2023, p. 47).

2.7. Long-term impacts of CAN

There is substantial evidence that the effects of CAN extend into adulthood, resulting in significantly worse health outcomes compared to individuals without such histories (Avdibegović & Brkić, 2020; Hughes et al., 2017; Petruccelli et al., 2019; Strathearn et al., 2020). The impact of CAN on health accumulates over time, leading to more severe physical and psychosocial consequences. A large longitudinal project from USA, involving 3,521 children with documented cases of CAN, demonstrated a linear increase in adverse health outcomes (one or more) proportionate to the number of CAN reports; no report: 29.7% with adverse health outcomes, one report: 39.5%, two reports: 53.8%, three reports: 59.8% (Jonson-Reid et al., 2012). In New Zealand, a population-based cross-sectional retrospective survey, the 2019 New Zealand Family Violence Survey - He Koiora Matapopore, involving 2,888 individuals, presented strong associations between adverse childhood experience (ACE) scores and adverse health outcomes (Hashemi et al., 2021). ACE is a scoring system used to measure the number of different types of ACE a person has encountered before the age of 18, such as abuse, neglect or household dysfunction (Hashemi et al., 2021; Hughes et al., 2017; Kalmakis & Chandler, 2015). The study included multiple ACE variables, such as food security status, witnessing family violence, exposure to substance abuse, and general health (Hashemi et al., 2021). In adulthood, 17.3% and 13.6% of adults with no history of adverse childhood experiences reported poor mental health and some form of disabilities, respectively, compared to 47.0% and 30.0% among those with four or more different adverse childhood variables (Hashemi et al., 2021). At the same time, ACE scores decreased positive health outcomes in adulthood: 82.1% and 78.6% of adults with no history of adverse childhood experiences reported good general health and positive mental health, respectively, compared to 65.9% and 62.1% among those with four or more adverse childhood variables (Hashemi et al., 2021).

ACEs have been linked to significant chronic health consequences, including cardiovascular disease, chronic lung disease, and sleep disturbance (Hughes et al., 2017;

Kalmakis & Chandler, 2015). A greater prevalence of chronic pain syndromes, more lifetime surgeries, and greater risks of various somatic symptoms have been noted in people with ACEs. A large population-based study (n = 2,051) conducted in USA showed that childhood physical abuse was associated with a 15% increase in medical diagnoses, a 16% increase in medical symptoms, a 19% increase in depression, a 22% increase in anger, and a 21% increase in anxiety in adulthood (outcomes controlled for family backgrounds and childhood adversity variables between two groups with and without abusive experiences) (Springer et al., 2007). Some literature highlights the limitations of ACE screening, including its inability to accurately assess the frequency and intensity of exposures and related risks, as well as the potential for underestimating or overestimating actual exposures (Anda et al., 2020). Additionally, it raises concerns about the risk of stigmatising or discriminating against children and families based on an ACE score (Anda et al., 2020). Importantly, it lacks adequate cultural and racial considerations that might lead to traumatic experiences being overlooked or misunderstood (Bernard et al., 2021). While it is crucial to approach ACE screening with caution, these assessments still provide valuable insights into the long-term impacts of adverse childhood experiences on health outcomes.

Furthermore, CAN has shown a strong relationship with lifelong mental health and addiction issues, including depression, anxiety, post-traumatic stress disorder and substance abuse (Avdibegović & Brkić, 2020; Strathearn et al., 2020). A systematic review and meta-analysis conducted by Norman et al. (2012) indicates that physically abused (OR=1.54; 95% CI 1.16–2.04), emotionally abused (OR=3.06; 95% CI 2.43–3.85), and neglected (OR=2.11; 95% CI 1.61–2.77) children were more likely to develop depressive disorders than children who had not experienced such forms of violence. Results also showed statistically significant increases in risks of developing anxiety and eating disorders (Norman et al., 2012). A history of CAN increases the likelihood of engaging in various health-risk behaviours, including smoking, binge drinking and abusive substance use during childhood, but also in the later stages of life, including pregnancy. Unfortunately, it is known to increase the risk of suicidal ideation and attempts during childhood as well as into adulthood (Carr et al., 2020; Kalmakis & Chandler, 2015; Leeb et al., 2011). Numerous studies noted that child sexual abuse makes children more vulnerable to later sexual revictimisation, high-risk sexual behaviours, and sexual assaults (Lalor & McElvaney, 2010). A 40-year longitudinal study in Christchurch, New Zealand, involving 1,265 individuals, revealed that adults who experienced child sexual abuse involving contacts were twice as likely to develop mental health issues (OR = 2.02; 95% CI 1.39–3.91), with a greater risk when sexual penetrations were involved (OR = 3.45; 95% CI 2.39–4.98) (Telfar et al., 2023). The study also indicated increased risks of developing mental issues for adults who experienced childhood neglect as well: some of the time (OR = 1.98; 95% CI 1.54–2.46), most of the time (OR = 2.40; 95% CI 1.86–3.09), and severe neglect (OR = 3.58; 95% CI 2.70–4.74) (Telfar et al., 2023).

Furthermore, CAN often exposes children to poor nutrition and sanitisation (Kalmakis & Chandler, 2015), reduced cognitive abilities and educational attainments (Avdibegović & Brkić,

2020), making them more vulnerable to other developmental conditions. With multiple associations with eating disorders and adverse psychological outcomes, CAN is also known to increase the risk of obesity in adulthood, which is considered one of the most prevalent global health issues that is associated with significant morbidity and health impairments (Danese & Tan, 2014). A meta-analysis of 41 studies (190,285 participants) indicated an increased risk of developing obesity over the lifetime (OR =1.36; 95% CI =1.26–1.47) (Danese & Tan, 2014). Therefore, stressful psychosocial experiences during childhood could be considered potentially modifiable risk factors for obesity.

CAN has a significant impact on the development of the brain and represents a major risk factor for psychiatric disorders in adulthood (Lang et al., 2020). There is evidence that CAN leads to neurobiological development disruption, including a reduction in overall brain volume and changes to specific physical structures (Price et al., 2021). It is suggested that traumatic events during critical periods of brain growth and development can cause the brain to engage in chemical activities in a dysfunctional manner, changing its anatomical structures (Price et al., 2021). Leeb et al. (2011) indicate that childhood victimisation can alter salivary and urinary cortisol levels in adulthood, suggesting chronic activation of increased stress responses, which may lead to hypersensitivity or increased vulnerability to pain.

The impacts of CAN extend beyond physical and psychological impacts. Children become vulnerable to experiencing difficulties across multiple domains, including educational outcomes (Carr et al., 2020; Font & Maguire-Jack, 2020). Children with CAN experiences often exhibit impairments in academic performance, presenting lower grade point averages, higher absences and lower high school education completion rates than their peers (Font & Maguire-Jack, 2020; Romano et al., 2015). Interestingly, children who have experienced neglect showed poorer performances than children who have experienced other types of CAN, in particular physical abuse (Romano et al., 2015). Abnormal brain development and insufficient sensory experiences during critical periods of brain development can disrupt basic cognitive processes, such as concentration, memory, language, and organisational abilities, increasing the risk of academic difficulties (Romano et al., 2015). Therefore, children who are exposed to abusive and neglectful environments at an earlier stage of their development may exhibit more significant impacts on their brain development. This reduces the long-term quality of life for those affected by CAN.

Abuse and neglect rarely result from a single cause; rather, multiple risk factors interact with each other to lead to CAN. Factors such as parental mental disabilities (including anxiety and depression), familial exposure to intimate partner violence and poverty can contribute to the risk of maltreatment (Dubowitz & Bennett, 2007). It is shown that witnessing violence in the home is significantly associated with the psychiatric outcomes of affected children (Kalmakis & Chandler, 2015). Contrarily, some factors, including caregivers' willingness to seek help, caregivers' education levels, supportive communities and accessible healthcare, are keys to effective intervention to prevent CAN at its early stages (Dubowitz & Bennett, 2007). Associations between

CAN and other types of family violence and the positive impacts of early intervention and prevention strategies are discussed further in Chapter 9.2.

From an economic perspective, CAN leads to significant costs to individuals and society, both direct (such as hospitalisation, healthcare, welfare, and judicial expenses) and indirect (such as loss of work productivity and social burdens) (Leeb et al., 2011). A considerable portion of global healthcare expenses can be attributed to CAN, which often requires extensive health and social care, dealing with complex long-term consequences (Leeb et al., 2011; McCarthy et al., 2016). A cost analysis in Australia suggested that the total lifetime financial cost related to CAN was estimated to be 9.3 billion Australian dollars (averaging 176,437 dollars per affected child), with non-financial costs associated with reduced quality of life and premature mortality of 17.4 billion Australian dollars (averaging 328,757 dollars per affected child) based on data from 2012 and 2013 (McCarthy et al., 2016). The cost included healthcare utilisation, special education to support children who experienced CAN, criminal justice expenses, supported accommodation and public housing costs, and long-term productivity and deadweight losses (McCarthy et al., 2016). Impacts on childhood health, growth, development and education lead to significant gaps in employment and income in adulthood. Individuals who have a history of childhood abuse and neglect have a great risk of experiencing economic consequences in their adulthood (Currie & Spatz Widom, 2010). Although economic considerations should not overshadow individual rights to health and protection, a compelling economic argument exists for increased funding and support for prevention and early intervention strategies for CAN (McCarthy et al., 2016).

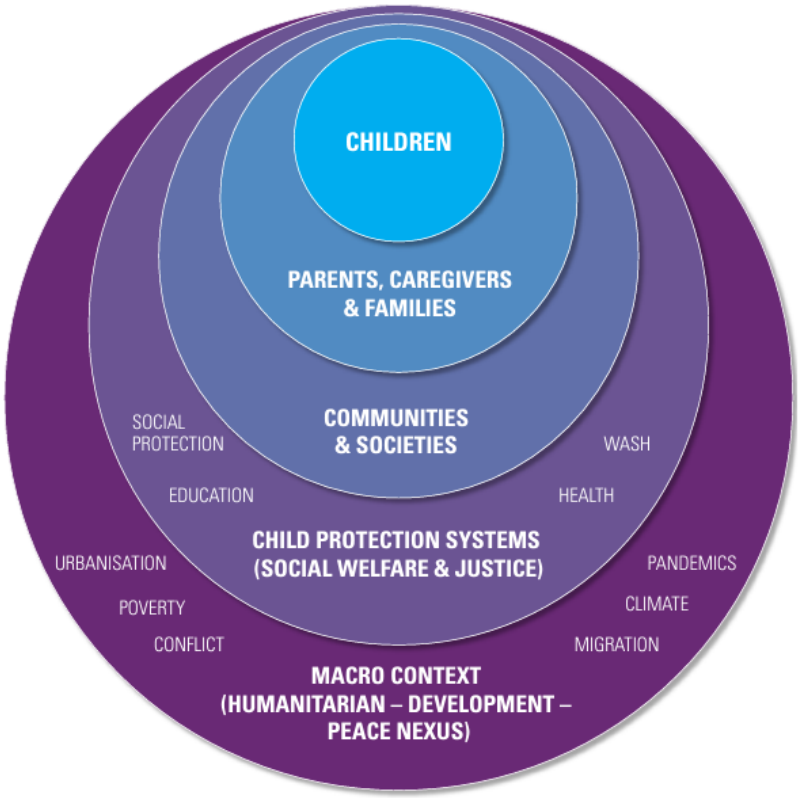
2.8. Child protection framework

To prevent adverse impacts from CAN and intervene at the earliest stage of abuse and neglect, everyone should proactively address child protection concerns and contribute to community and professional initiatives focused on safeguarding children. In 2015, the United Nations adopted 17 sustainability development goals as a “plan of action for people, planet and prosperity” (p.1) leading to 2030. Among these goals, goal 16 is to “promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels”. Goal 16.2 specifically aims to “end abuse, exploitation, trafficking and all forms of violence against and torture of children” (United Nations, 2015, p. 25). The agenda urges coordinated efforts from all countries and stakeholders to reach the outlined goals. Similarly, WHO (2014) advocates for the expansion of comprehensive, systemic and collaborative violence prevention programmes involving governmental and non-governmental agencies to protect children.

Following the adoption of the 17 sustainability goals, UNICEF (2021) developed child protection strategies aiming to bring all sectors together to address child protection issues. The strategy acknowledges that a child’s safety is influenced by a complex web of interconnected factors, extending from immediate family environments to broader social, economic, systemic, and

humanitarian contexts (Figure 2) (UNICEF, 2021). These influences align with well-established social determinants of health, including poverty, housing insecurity, caregiver mental health, and intergenerational trauma. The strategy highlights that safeguarding children cannot be achieved through reactive interventions alone; it requires structural approaches that address root causes across populations (UNICEF, 2021). One of its approaches is to “build capacity for child protection prevention and service delivery across sectors”, including the health sector (UNICEF, 2021, p. 35). This approach recognises that effective prevention depends not only on recognising and responding to individual instances of abuse, but also on reducing upstream risk factors.

Figure 2. Conceptual Framework for the Child Protection Strategy



Note. Conceptual framework for the child protection strategy showing factors that influence child wellbeing. From “Child Protection Strategy 2021-2023”, by UNICEF. (2021, p.19), available on https://www.unicef.org/documents/child-protection-strategy.

In the local context, Te Aorerekura: the New Zealand national strategy to eliminate family violence and sexual violence (New Zealand Government, 2021) reinforces the importance of addressing structural and social conditions that place children and whānau at risk. The strategy and action statements emphasise that ensuring access to stable housing and quality healthcare, as well as ending poverty, are foundational to preventing harm (New Zealand Government, 2021). Supporting parents and caregivers to heal from their own adverse childhood experiences and

intergenerational trauma is central to preventing the continuation of violence and neglect. This requires a sustained commitment to delivering culturally grounded, trauma-informed, and whānau-centred services that respect diverse cultural views, strengthen protective factors, and empower communities (New Zealand Government, 2021). Te Aorerekura (New Zealand Government, 2021) envisions a future where safety and wellbeing are not reactive goals but are proactively cultivated through collective responsibility, interdisciplinary collaboration, and long-term investment in prevention. Embedding these principles across legislation, policy, service delivery, and professional practice is essential for transforming the systems that interact with children and families.

In the effort to implement strategies that aim to achieve foundational rights to safety, it is critical to ensure that children's voices are heard. As a framework, the child impact assessment is often used locally and internationally to evaluate how legislation and policy might affect children and young people (Ministry of Social Development, 2018). As children cannot fully advocate for their own rights, the tool aims to focus on the positive impacts on children and young people, while mitigating any adverse effects or unintentional consequences resulting from policy and legislation development. The assessment recognises the importance of being holistic and child- and youth-centric, ensuring the views of children and young people are heard (Ministry of Social Development, 2018). Mana Mokopuna (2024) emphasises the incorporation of children's perspectives in legislative and procedural changes to ensure that all changes address their needs. The United Nations Committee on the Rights of the Child (2023), in its sixth periodic report on New Zealand, acknowledged the nation's progress, including legislative measures and improvements in the child protection and child justice system. However, it also recommended mandating the application of the child impact assessment tool in the development of policy and legislation affecting children and called for the training of government officials and legislators on its application (United Nations Human Rights, 2023). While this study does not apply the tool, its mention highlights the importance of child-centred approaches in policy development relevant to child protection.

2.9. OHPs in child protection

As discussed previously, OHPs are in a unique position to identify potential signs and symptoms of CAN and respond to prevent further harm to affected children while supporting their families. They can also monitor interactions between siblings and caregivers to identify potential risks of psychological abuse and neglect. Within the dental profession, there is a growing international understanding of the roles they play in child protection (Jameson, 2016). In New Zealand, the absence of a mandatory reporting requirement further complicates decision-making (Han, Koziol-McLain, Diesfeld, et al., 2024). Although OHPs have ethical and professional responsibilities to act in the best interests of children, limited research exists on how they actually respond when faced with suspected cases of CAN. This gap highlights the need to explore the

factors that influence OHPs' responsiveness to child protection concerns and the extent to which they engage in multidisciplinary safeguarding efforts.

The relationship between poor oral health and CAN and orofacial manifestations of CAN is well-evidenced (Bradbury-Jones et al., 2021). Multiple orofacial manifestations of CAN, particularly physical abuse, can be detected by OHPs. A systematic review conducted by Sarkar et al. (2021) highlighted multiple soft tissue injuries, such as bruises, lacerations, abrasions, and burns on extraoral (including face, external ear, and neck) and intraoral regions (including frenal attachments, lips, tongue and palate) as common manifestations of physical abuse. Dental injuries on the teeth and jaw, including tooth fractures, condylar fractures, and avulsions, were identified as common hard tissue injuries (Sarkar et al., 2021). Oral lesions and injuries in different stages of healing can be associated with abusive actions, while tooth discolouration can signal past trauma (Costacurta et al., 2015; Singh & Lehl, 2020). Unintentional or accidental injuries to the mouth are common; therefore, it is crucial to determine whether the injury history aligns with the characteristics of the injury and the child's developmental stage (Fisher-Owens et al., 2017). OHPs have knowledge of orofacial structures, injuries, and developmental stages, enabling them to identify concerns about whether the described incident could realistically result in the observed injury. This knowledge is vital in distinguishing between accidental injuries and potential indicators of abuse or neglect and working collaboratively with a multidisciplinary team to provide necessary support to children and their families. Hence, their assessments are integral to ensuring accurate diagnoses and appropriate interventions.

Although the oral cavity is a frequent site for injuries related to sexual abuse in children, it is not easy to identify them clinically, yet OHPs can detect specific oral manifestations, including traumatic ulcers, erythema, and vesicles with purulent drainage (Costacurta et al., 2015). Erythema and petechiae of unknown or unexplained cause on the palates or the floor of the mouth are strongly associated with forced oral sexual abuse (Costacurta et al., 2015; Spiller, 2024). OHPs should monitor behavioural markers, such as improper sexually explicit conduct and heightened defensive behaviours, when suspecting sexual abuse (Singh & Lehl, 2020).

Dental neglect is the most prevalent form of CAN that OHPs would encounter in clinical settings. The American Academy of Pediatric Dentistry (2024) defines dental neglect as "willful failure of parent or guardian to seek and follow through with treatment necessary to ensure a level of oral health essential for adequate function and freedom from pain and infection" (p. 18) (adopted in 1983, last reaffirmed in 2020). Dental neglect can lead to oral health diseases, such as dental caries, periodontal diseases, and other oral conditions, which can result in pain, infection, loss of function, and worse outcomes if not addressed (American Academy of Pediatric Dentistry, 2024; Spiller, 2024). A population-based retrospective study from the Netherlands (205 children) indicated that 27% of children who underwent multiple tooth extractions due to dental caries under general anaesthesia were found in the database of the national organisation against domestic violence and child abuse, demonstrating a statistically significant association between a severe

form of dental caries and CAN (Smitt et al., 2017). As discussed before, actions or omissions to act by caregivers must be “deliberate, unwanted and non-essential failure” (UNICEF, 2023, p. 47). Therefore, OHPs should differentiate between caregivers with adequate knowledge and those with wilful failure (Fisher-Owens et al., 2017). Poor general hygiene and frequent respiratory diseases are often related to general neglect. Conversely, poor oral hygiene, halitosis, early childhood caries, odontogenic infections, and aphthous ulcers are common manifestations of dental neglect, which can be linked to nutritional deficiencies (Costacurta et al., 2015).

Importantly, OHPs must consider cultural, social, and educational factors when determining if something is negligence. In many cases, failure to access appropriate dental care may not result from caregivers’ disregard but from broader issues such as geographic isolation, financial hardship, limited health literacy, or a lack of perceived value in maintaining good oral health (Costacurta et al., 2015). In the New Zealand context, while Māori and Pasifika communities possess collective strengths to support and advance the wellbeing of their families, persistent oral health inequities reflect systemic structures and health policies that do not align with their worldviews (Lacey et al., 2021; Smith et al., 2019). These misalignments can create significant barriers for families seeking health and social services, contributing to cycles of poverty, reduced access to care, and limited health literacy—factors that directly impact the overall wellbeing of children and their families. Therefore, OHPs should recognise these systemic inequities and provide clinically effective and culturally safe care. Rather than label families with poor oral health outcomes as neglectful or reinforcing harmful stereotypes, practitioners should adopt a responsive and empathetic approach that supports equitable access and promotes community trust (Lacey et al., 2021).

2.10. Research gaps and research question

Despite the potential of OHPs to play a pivotal role in child protection, a substantial gap exists in the current literature regarding their knowledge, attitudes, and practices in New Zealand. This gap highlights the need for a deeper understanding of how OHPs can enhance their responsiveness in child protection responses while working with other health and social professionals.

Research question:

How can OHPs be more responsive to child protection concerns?

Research aim:

To understand the role of OHPs in child protection by exploring their professional engagements and responses within diverse dental and multi-disciplinary settings

Research objectives:

1. To investigate the current knowledge and attitudes of OHTs and DTs in detecting and reporting child protection concerns
2. To map international strategies to enhance the responsiveness of OHPs against child protection concerns
3. To understand OHPs' legal and professional requirements in child protection responses
4. To qualitatively explore diverse perspectives from OHPs and oral health service managers on the roles of OHPs in child protection
5. To qualitatively explore barriers and facilitators for OHPs to be responsive to child protection concerns

Beyond these primary objectives, I focused on enhancing my personal and professional capabilities to engage effectively with key stakeholders. This included Māori communities as tangata whenua (people of the land), oral health professionals, experts in child protection, prevention, and responses, tertiary education providers, and Health New Zealand – Te Whatu Ora (New Zealand's primary publicly funded healthcare system). This aspect is crucial for incorporating culturally responsive and interdisciplinary practices tailored to the unique needs of New Zealand's population. The significance of this work extends to influencing pre-service curricula and ongoing professional development for OHPs, enhancing their preparedness to respond to child protection issues safely and support children and families. Furthermore, the findings could inform policy adjustments that better support collaborative and culturally appropriate child protection strategies within oral health practices in New Zealand.

3. Study Design

3.1. Introduction to the study design

In this study design chapter, I outline philosophical worldviews and research designs and present a rationale for the chosen research framework. The philosophical worldview influences the research design and methods that can be adopted or adapted to answer the research question. The selection of methodology is often based on the nature of the research question and the profound issues being addressed (Creswell & Creswell, 2023). Therefore, understanding the interconnection between the philosophical worldview, research design, and methods is critical to addressing the research question (Creswell & Creswell, 2023).

3.2. Philosophical worldview

The philosophical and ideological stance of a researcher significantly influences how the knowledge is studied and analysed (Mackenzie & Knipe, 2006). This stance is determined by the intent, motivation, and expectation of research and its outcome. When I started my research journey (Masters in Health Science), my worldview aligned with a post-positivist approach as I believe in critical realism, which claims that reality exists but is only imperfectly and probabilistically apprehendable (Grant & Giddings, 2002; Guba & Lincoln, 1994). I believed in the existence of objective reality (exact causes for reduced responses from OHTs and DTs against CAN); thus, the research aimed to draw numeric measures of self-reported knowledge and attitudes in their responses. This influenced data collection and analysis methods, which led to a survey study (Chapter 4) with a focus on quantitative data collection. Positivist researchers claim to be detached from personal experiences and maintain a clear distinction with the participants to find objective truths, while post-positivism accepts the integration of the interpretivism paradigm, which believes reality as being subjective and socially constructed (Gelo et al., 2008; Grant & Giddings, 2002). My intent in conducting the quantitative survey was to investigate an objective truth or truths of the current knowledge and attitude of OHTs and DTs, while recognising my own views and values as an OHP can potentially affect the research (Grant & Giddings, 2002; Guba & Lincoln, 1994).

As my research transitioned from a master's to a doctoral project, the scope was broadened from understanding current knowledge of OHPs in child protection and their attitudes in CAN responses to understanding the roles of OHPs in child protection responses and approaches to support them to be more responsive to child protection concerns. My intention was broadened from understanding the reality of an issue to exploring complex social and professional issues. The previous post-positivistic approach, which focused on determining objective reality and verifying the causal relationships (Creswell & Creswell, 2023), somewhat restricted my further exploration of nuanced social behaviours that OHPs exhibit in clinical settings when child protection issues are encountered. This realisation prompted a shift in my philosophical worldview towards pragmatism to find practical answers rather than focus on defining ontology (Creswell & Creswell, 2023; Gray,

2018; Morgan, 2014). Pragmatism shifts the focus away from determining whether a proposition aligns with a particular ontology, instead allowing a proposition to serve its purpose (Gray, 2018). It treats reality as contextual and dynamic, and what counts as ‘real’ is what makes a practical difference. In child protection within oral health care, the ‘realities’ of private and public services differ due to unique workflows, accountability structures, and available supports. A pragmatic stance provides epistemological warrant for methodological pluralism, mixing approaches and even paradigms when this best serves the problem at hand (Gray, 2018; Onwuegbuzie et al., 2009). In pragmatism, knowledge is action-oriented and is evaluated by its utility for achieving the study’s aims; multiple ways of knowing are legitimate as long as they ultimately advance OHP responses in child protection.

There was an underlying assumption that answers to my research questions may not exist in a consistent or consolidated form. However, I aimed to find practical answers to support OHPs in being more responsive to CAN concerns. Furthermore, pragmatism agrees that research is always influenced by social, historical, and other contexts (Creswell & Creswell, 2023). Pragmatism is particularly valuable in fields like dentistry and child protection, where practitioners must navigate complex social, historical, and professional landscapes. Dental practitioners are heavily influenced by political stances, and their behaviours are often constructed by professional engagements. Adding to this, CAN is a social issue that has significant historical impacts (Cox, 2020). I believed that understanding and addressing these influences were keys to answering my research questions. Furthermore, I believed that the experiences of OHPs in encountering CAN cases and engaging in responses have shaped their beliefs and actions (Morgan, 2014). Therefore, I adopted a pragmatic approach to assessing and interpreting these experiences within the context of dentistry, aiming to find pragmatic truths and generate practical outcomes for dental communities.

By adopting a pragmatic approach, I aimed to synthesise diverse perspectives and methodologies to find the most effective strategies for enabling OHPs to address CAN. This approach allowed me to explore the practical needs of the field instead of fitting myself within a rigid ontological framework. Pragmatism allowed me to explore diverse perspectives related to the research question but also gave me opportunities to reflect on my experiences, ensuring that the findings were both relevant and actionable.

3.3. Research design: Explanatory sequential mixed-methods design

The mixed-methods design, as described by Ivankova et al. (2006), implies collecting and analysing both quantitative and qualitative data in multiple, consecutive phases in one primary study. The approach enables researchers to elaborate on or expand on the findings of one method with another method (Creswell & Creswell, 2023). How to prioritise and give weight to the quantitative and qualitative data collection and analysis, connect different phases and integrate the results need careful consideration (Ivankova et al., 2006). The explanatory sequential mixed-

methods design is “to explain initial quantitative results with qualitative data by connecting the two databases” (Creswell & Creswell, 2023, p. 240). With a shift in philosophical worldview from post-positivism to pragmatism, qualitative research and other literature examinations were planned in a series to understand practitioners’ behaviour and explore means to support them to be more responsive to child protection. A qualitative approach can explain the practical importance for professionals related to a specific topic to generate clinically relevant and applicable findings (Sandelowski, 2000; Thorne, 2016). Sandelowski (2000) indicates that a qualitative approach is particularly suitable for research where little is known about the topic, such as exploring the nuanced experiences and perceptions of OHPs in responding to CAN cases.

A traditional form of the sequential mixed-methods design involves two phases, a quantitative study followed by a qualitative study, where the qualitative strand is built to expand on the quantitative findings (Creswell & Creswell, 2023). In this study, the two-phase explanatory sequential structure was intentionally extended to a multiphase design to incorporate additional literature review components (one scoping review and one narrative analysis) as connecting “bridges” between the quantitative and qualitative strands. Fetters et al. (2013) note that researchers can implement multiple sequential phases within one programme of study. The research project consists of four major phases (Figure 3):

(1) Quantitative research (Chapter 4);
(2) Scoping review (Chapters 5 and 6);
(3) Professional and legal framework analysis (Chapter 7);
(4) Qualitative research (Chapter 8).

Each research phase addresses one or more research objectives to answer the overall research question posed in Chapter 2.10: How can OHPs be more responsive to child protection concerns?

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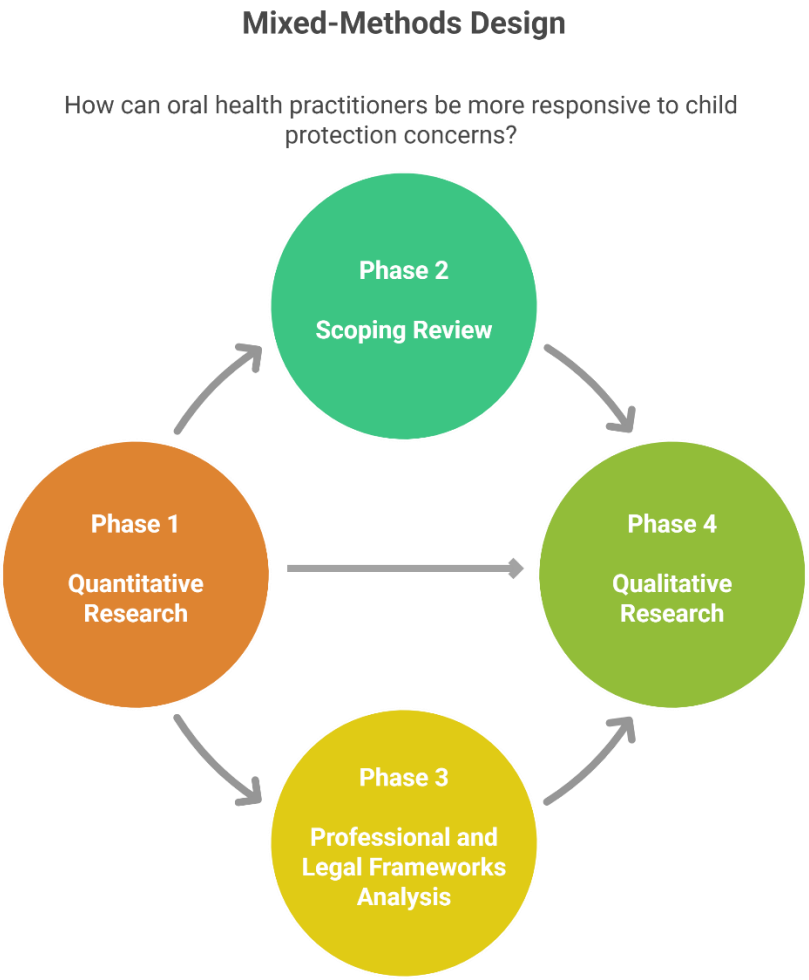
Figure 3. Overview of the Research Design and Four Phases of the Project



Note. The image was created using the online visual artificial intelligence tool Napkin AI (USA).

Importantly, the inclusion of the intermediate review phase does not alter the explanatory sequential intent of the design. Instead, it aims to strengthen the connection between quantitative and qualitative components. The additional literature reviews were integrated into the connecting process between strands rather than presented as independent studies. In explanatory sequential designs, integration typically occurs by connecting or building between phases, where one phase's output shapes the next phase's inquiry (Fetters et al., 2013). The design ensures each phase directly builds on the prior one. As a result, the overall inquiry remains coherent and sequentially explanatory.

3.3.1. Phase 1: Quantitative research

When the current doctoral research project was initially planned, quantitative survey research (Chapter 4) was already conducted, and the data collated, though not yet fully analysed. The survey research comprised a comprehensive quantitative data collection with some open-ended questions that allowed brief qualitative analysis. While the original plan was to collect both quantitative and qualitative data through a single survey, the focus shifted predominantly towards

quantitative data collection due to the survey design and the limited scope of the master's project. Consequently, this stage was classified as the quantitative research phase of the doctoral research. The outcome of the survey confirmed limited knowledge and attitudes of OHTs and DTs in detecting and reporting CAN in a dental setting; however, the analysis to understand why participants demonstrated reduced attitudes to detect and report CAN was limited (Han et al., 2022). Insights from the survey highlighted a greater necessity for further qualitative research to understand social behaviour constructed by practitioners' experiences and interactions (Bryman, 1984; Creswell, 2014; Thorne, 2016).

3.3.2. Phases 2 & 3: Literature reviews

Since the initial quantitative research was conducted prior to the detailed planning of the qualitative phase, a more extensive and in-depth exploration of the current literature became necessary. This was to enhance my understanding of the topic and to inform the creation of more refined interview and focus group questions for the subsequent qualitative research. The findings of the quantitative survey research (Chapter 4) informed a need to seek (1) an international understanding of the role of OHPs in child protection responses, (2) evidence-based approaches to support OHPs in child protection responses, and (3) a clear understanding of legal and professional requirements of OHPs practising in New Zealand. Consequently, a scoping review (Chapters 5 and 6) was planned to map the roles of OHPs in child protection responses as well as evidence-based approaches utilised to support OHPs. A separate literature review (Chapter 7) was planned to gain a better understanding of the New Zealand-specific professional and legal requirements of OHPs in response to CAN concerns.

These reviews were strategically inserted as an integration bridge. They contextualised and expanded upon the quantitative findings, helping to refine the qualitative research questions and design. In mixed-methods terms, this intermediate step served a building function, using the first phase's results to inform the approach of the second strand (Fetters et al., 2013). By exploring existing evidence and frameworks after the quantitative phase, the study ensured that the subsequent qualitative inquiry was grounded in current knowledge gaps and aligned with established definitions and criteria in the field. Notably, treating literature and documents as data sources in a mixed-methods sequence can enhance the rigour and depth of a qualitative phase (Cooper et al., 2024).

3.3.3. Phase 4: Qualitative research

The last phase, qualitative research (Chapter 8), involved one-on-one semi-structured interviews and focus groups with OHPs and stakeholders to understand their perspectives on their roles, explore barriers and facilitators in child protection responses, and explore strategies that can support OHPs in child protection responses. The qualitative design, including the sampling frame, interview guide, indicative questions, and analytic focus, was directly informed by the quantitative findings and the two evidence-synthesis reviews. The qualitative enquiry targeted gaps identified in

earlier phases, such as limited education exposure and inadequate organisational guidance for OHPs' child protection responses. reflecting a pragmatic stance that prioritises flexible, problem-focused inquiry and iterative refinement of prompts and sampling.

4. Quantitative Research

4.1. Prelude

This chapter is the output of the master's research project (Master of Health Science, AUT) initiated in 2020. The following published journal article presents the background, findings and discussion of the survey research, focusing mainly on quantitative data. Prior to this survey study, the only New Zealand study on CAN among OHPs was a cross-sectional study by Tilvawala et al. (2014), which examined the attitudes and self-reported practices of DTs regarding CAN. The study found that while OHPs acknowledged their critical role in child protection, their suspicions were frequently unreported (Tilvawala et al., 2014).

Since the Tilvawala et al. research, significant developments have occurred. The new oral health therapy profession was established in 2017 (Moffat et al., 2017), and the Family Violence Act was enacted in 2018 to enhance mechanisms for preventing and responding to family violence. The act promotes a multidisciplinary approach involving all social service practitioners, including social workers and health practitioners. Hence, I decided to build on the findings from Tilvawala et al. (2014) and conduct research to explore self-reported knowledge, attitudes and experiences of a broader professional group, OHTs and DTs. This research also assessed their awareness of the new legislation, the Family Violence Act 2018. OHTs and DTs were chosen for this study as they frequently provide care to children and adolescents under the public dental scheme, placing them in a strategic position to identify and respond to CAN. Ethical approval was obtained in March 2020 (AUTEC 20/39) (Appendix A.1). The participant information sheet for the survey and the survey questions are available in Appendix B.

When I conducted this research, I was at the very early stage of my research journey, with no prior knowledge in designing research plans, using research tools, and analysing data. Despite this, I was aware that I was venturing into uncharted territory, and I was eager to learn and grow. I soon realised that the research journey was challenging and unpredictable, yet every aspect was intriguing and rewarding. This process was instrumental in shaping my understanding of the scientific method and honing my skills as a researcher, laying a solid foundation for my future research endeavours.

I had not planned to expand this research into a doctoral study when I initially conducted the survey for my master's project. As a result, its scope was somewhat narrow, focusing solely on OHTs and DTs while excluding other OHPs, such as dentists and dental specialists, who also provide integral oral health care to children and adolescents in various dental settings. Reflecting on this, my research skills and understanding of both the topic and scientific inquiry were still in their nascent stages. Recognising this, I see several areas where adjustments could improve the study's rigour and produce more robust data and significant findings. As mentioned, the inclusion of all oral health professions could have strengthened the argument presented in the article.

Additionally, although the importance of interdisciplinary collaborative practices and the potential role of OHPs in CAN prevention were discussed in the article, my understanding of the role of OHPs was somewhat limited to identifying and reporting CAN cases. Despite these limitations, the findings provided insights into the limited responses from OHTs and DTs and identified barriers to their responsiveness.

The journal article, titled *Child abuse knowledge and attitudes among dental and oral health therapists in Aotearoa New Zealand: A cross-sectional study*, was published in *BMC Health Services Research* (BioMed Central Ltd.) on 10 December 2022 and is available open access online: https://doi.org/10.1186/s12913-022-08907-1.

4.2. Background

Children and young people's rights to safety and health are enshrined in the United Nations Convention on the Rights of the Child 1993. Child and adolescent age and developmental status mean that adults are responsible for protecting against abuse. Child abuse is any form of physical, emotional, or sexual ill-treatment or neglect resulting in actual or potential harm to the child's health and development (Leeb et al., 2011; WHO, 1999). Multiple studies confirm the detrimental impacts of adverse childhood experiences, including severe impairments to social development, learning, and physical and emotional health (Afifi et al., 2016; Petruccelli et al., 2019). Unfortunately, many New Zealand children and adolescents are still being harmed. A cumulative prevalence analysis of New Zealand children born between 1998 and 2015 (55,443 children) indicated that 23.5% had at least one report to a child protection agency (including the New Zealand Police and child protection agency Oranga Tamariki). Furthermore, 9.7% were confirmed as victims of CAN by the age of 17 years, and 3.1% had experienced an out-of-home placement (Rouland & Vaithianathan, 2018).

WHO (2014) calls for a scaling up of a comprehensive systemic and collaborative approach to violence prevention programmes involving governmental and non-governmental agencies to protect children. Health professionals hold significant roles in every phase of child protection responses, from prevention to victim support. However, the roles of OHPs in child protection have received little attention. The New Zealand public funding scheme for oral health allows children and adolescents to access free routine dental care from birth to 18 years. This scheme allows children to have multiple and regular interactions with OHPs in school-based, community-based, or private dental clinics with or without their caregivers. Oral health is often described as a window to overall health (Kane, 2017). Orofacial manifestations of CAN can be detected in a dental setting (Leeb et al., 2011). In a systematic review, Sarkar et al. (2021) confirmed various facial and intraoral indications, including abrasions, contusions, and lacerations, as common markers of child physical abuse. Behavioural and mental health manifestations of CAN include excessive defensive or aggressive behaviour, improper sexual behaviour, and excessive fear of caregivers (Costacurta et al., 2015). Lalor and McElvaney (2010) found a strong relationship between child abuse

experiences, particularly emotional abuse, and childhood aggressiveness, anxiety, depression, eating and attention disorders. OHPs can identify the oral and behavioural manifestations of CAN during routine check-ups and provide the necessary support to the patients. Unfortunately, no regional data is available to investigate the association between CAN and dental caries. However, international research confirms the strong relationship between the two, highlighting the critical role of OHPs in child protection (Smitt et al., 2017).

In New Zealand, preventive and restorative oral health care up to the age of 18 is mainly provided by DTs or OHTs in dental settings. DTs' practice includes providing oral health assessment, diagnosis, and treatment focusing on dental diseases, while the practice of OHTs focuses on dental and periodontal diseases. DTs and OHTs can provide care to all age groups, depending on the level of education. The New Zealand dental system puts OHPs in a favourable position to detect CAN signs and symptoms, provide the necessary support to families, and report to appropriate child protection agencies for multi-agency response (Tilvawala et al., 2014). Dental visits might be the only contact with health practitioners for some children and adolescents, as regular medical visits are not routine for many.

Since reporting suspected CAN is not mandated in New Zealand, OHPs are expected to respond to suspected CAN according to their clinical judgment and personal and professional ethical standards (New Zealand Dental Association, 2018). The Dental Council of New Zealand (DCNZ) (2021b, 2021c, 2021d) states that OHPs should "act to protect the interests of tamariki, mokopuna (grandchildren), rangatahi (youth) in cases of suspected neglect or abuse by disclosing information to a relevant authority or person" (p. 5). The Family Violence Act 2018 (the Act) and the escalation guideline from the Privacy Commissioner (2015) provide a framework and protection for health practitioners to share information when there are child safety concerns appropriately. However, international studies suggest that fewer than half of the suspected cases are reported for any further action (Al-Dabaan et al., 2014; Azevedo et al., 2012; Cairns et al., 2005). The pioneering study by Tilvawala et al. (2014) recognised New Zealand DTs' role in child protection while documenting limited reporting of suspected cases to authorities by DTs. Since then, professional education has evolved, and the new oral health therapy profession has been recognised in New Zealand since 2017 (Moffat et al., 2017). Furthermore, enacting the Act provides additional support and protection mechanisms for OHPs to respond to child protection concerns. These changes mean there is more to learn about how competent and comfortable New Zealand OHPs are in detecting and reporting potential CAN cases.

The current study set out to assess the knowledge and attitudes of both DTs and OHTs towards CAN, their experiences of responding to CAN, and their understanding of the impact of the Act. The study is based on the public health model of prevention for CAN, which offers a unique structure to address population-level health issues in a coordinated manner through a multidisciplinary approach, bringing evidence-based primary prevention strategies to the public

(Herrenkohl et al., 2016). The aims of this study were to 1) assess the knowledge and attitudes of New Zealand DTs and OHTs in detecting and reporting CAN, 2) understand potential barriers and facilitators to detecting and reporting suspected CAN, 3) investigate the impacts of the Family Violence Act 2018 on current knowledge and attitudes, and 4) evaluate perceptions on the mandatory reporting of suspected cases.

4.3. Method

4.3.1. Study design

This descriptive exploratory survey study was conducted in New Zealand between June 2020 and July 2020. Registered DTs and OHTs were invited to complete an anonymous online survey. Ethics approval was gained from the Auckland University of Technology Ethics Committee (Reference 20/39) (Appendix A.1).

4.3.2. Study samples and recruitment

Approximately 1100 DTs and OHTs are registered in New Zealand with a valid annual practising certificate (2019–2020). The sample frame for the current study included the 580 DTs and OHTs who are members of the New Zealand Dental and Oral Health Therapists Association (currently dis-established and reformed into New Zealand Oral Health Association - Te Ohu Pūniho Ora O Aotearoa), a national organisation representing and advocating for DTs and OHTs in New Zealand. The association distributed emails in June 2020 to 580 their members (DTs and OHTs) containing the study information and the link to the anonymous online survey to their members.

4.3.3. Data collection survey

Structured, self-administered survey data were collected using the online survey platform QualtricsXM (Qualtrics, USA). The survey was adapted from the self-administered postal questionnaire used by Tilvawala et al. (2014), with approval from the primary author. The survey introduction reiterated the purpose of the study, consent process, and researchers' contacts, and given the sensitive nature of the survey, details of a national free mental health counselling service.

The survey comprised 23 questions in four sections. The first section collected participant characteristics to ensure inclusion criteria (registered DTs and OHTs who hold current annual practising certificates and are treating children and/or adolescents on a regular basis) were met and to assess the representativeness of the OHT and DT participants. Variables included age, gender, professional group, current annual practising certificate retention, and working experience. The second section had four questions assessing participants' knowledge and attitudes towards detecting the signs and symptoms of CAN and reporting suspected cases. Questions included: 'Child abuse and neglect is an important social issue in New Zealand', 'I can easily recognise the signs and symptoms of child abuse and neglect', 'I am confident in recognising the signs and symptoms of child abuse and neglect' and 'I am familiar with the reporting process and protocol for

potential child abuse and neglect cases. Participants were asked to select a response from a seven-point Likert scale from strongly agree (1) to strongly disagree (7), with a neutral 'neither agree nor disagree' (4) option.

The third survey section addressed the experiences of CAN within their practice. Firstly, they were asked to estimate the number of suspected and reported CAN cases they had encountered in the past year and during their careers. They were then asked to describe common features from suspected cases and barriers and facilitators to detecting and reporting suspected CAN. Open text fields were provided to describe common features and facilitators to detect and report CAN. Regarding barriers, 11 potential barriers were listed based on common barriers cited in the literature (Tilvawala et al., 2014; Uldum et al., 2010), and participants could select multiple options that apply to them. An open text box was provided to describe any additional barriers. Two questions about any postgraduate course or training attendance related to CAN were asked.

The fourth section contained four questions to investigate the impact of the Act, along with personal opinions about mandatory reporting of suspected cases by health professionals. The last question provided a free text box for any final comments on the survey topic.

4.3.4. Data management and analysis

Responses were exported to the online statistical software IBM Statistical Package for the Social Sciences (SPSS, version 26.0) (IBM, USA). Data were first inspected for completeness, followed by a review of participant characteristics to confirm meeting inclusion criteria. Of the 580 survey invitations emailed, 112 responses were received. Twenty responses were excluded from the analysis as they did not fit the inclusion criteria: no date (eight), a professional other than OHT or DT (four), no valid APC or not practising in New Zealand (three), not enough data to assess inclusion criteria (three), and no interaction with children or adolescents (one). Subsequently, 92 responses (16%) were included in the final dataset.

For the final dataset, participant characteristics, including the profession, age, working experience, employment status, and the number of appointments with children and adolescents, were presented alongside DCNZ Workforce analysis 2018–2019 data (2021a). Descriptive analysis was conducted for all closed-ended questions. For questions where participants reported case numbers, any answers in a range were converted into mean numbers to enable further analysis. Open-ended responses were condensed into a summary format using a general inductive approach, identifying categories and providing examples for transparency (Thomas, 2006).

4.4. Result

4.4.1. Participant demographics

Among the 92 respondents, 27 were DTs, and 65 were OHTs. They typically had fewer than five years of working experience (66%), were working in the public dental sector (55%), and

routinely saw more than 25 children or adolescents each week (67%). Compared to the DTs and OHTs included in the New Zealand Dental Workforce 2018–19 analysis data (2021a), respondents were younger, and OHTs were over-represented (Table 3).

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Table 3. Participant Demographics Compared with DCNZ Workforce Analysis 2018-2019 Data

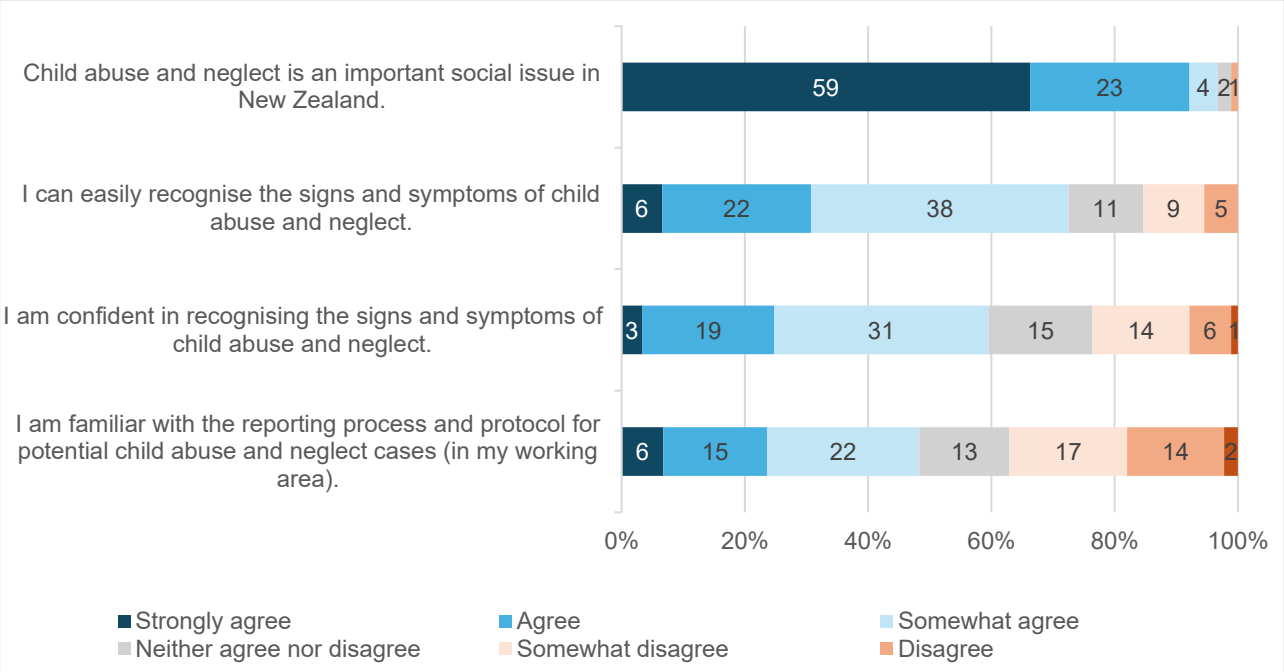
Variable	Participants demographics (n = 92)		OHTs and DTs workforce demographics (N = 962)	
	n	%	N	%
Profession				
OHTs	65	70.7	550	57.2
DTs	27	29.3	412	42.8
Gender				
Male	10	10.9	62	6.4
Female	82	89.1	896	93.1
Gender diverse/unspecified	0	0.0	4	4.2
Age (years)				
< 25	27	29.3	131	13.6
25 - 34	34	37.0	322	33.5
35 - 44	11	12.0	118	12.3
≥ 45	20	21.7	391	40.6
Years of working experience				
< 5	61	66.3		
6 – 10	13	14.1		
11 – 20	7	7.6		
≥ 20	11	12.0		
Employment status				
Public sector	51	55.4		
Private sector	24	26.1		
Tertiary education	1	1.1		
Public and private	15	16.3		
Public and tertiary education	1	1.1		
Number of appointments with children and adolescents per week				
< 5	16	17.4		
6 – 10	6	6.5		
11 – 24	8	8.7		
≥ 25	62	67.4		

Note. Study population (n = 92). Workforce population (N = 962). Workforce data from "Dental Council Workforce Analysis 2018-2019", by DCNZ. (2021), available on https://www.dcnz.org.nz/assets/Uploads/Publications/workforce-analysis/Workforce-Analysis-2018-2019.pdf. DCNZ Workforce Analysis 2018-19 did not report on years of working experience, employment status, and number of appointments with child and adolescent patients. DCNZ = Dental Council of New Zealand; DT = dental therapist; OHT = oral health therapist.

4.4.2. Knowledge and attitudes toward CAN

While CAN was strongly believed to be an important social issue in New Zealand, respondents advised that they are 'somewhat' confident in recognising the signs and symptoms of CAN and 'somewhat' familiar with the CAN reporting process and protocol. Figure 4 illustrates the breakdown of individual questions.

Figure 4. Participants' Opinions towards Child Abuse and Neglect and Self-Perceived Knowledge



Note. Participants' responses to statements regarding their perceptions of child abuse and neglect as a social issue and their self-assessed ability to recognise and respond to cases in their professional context. Responses are represented as percentages (n = 89).

4.4.3. Past experiences in detecting and reporting suspected CAN cases

Among the 84 respondents who answered the third section, 74% identified one or more suspected cases during their careers; however, only 21% had ever reported their concerns to child protection agencies. On average, participants suspected two cases in the past year and seven cases during their careers.

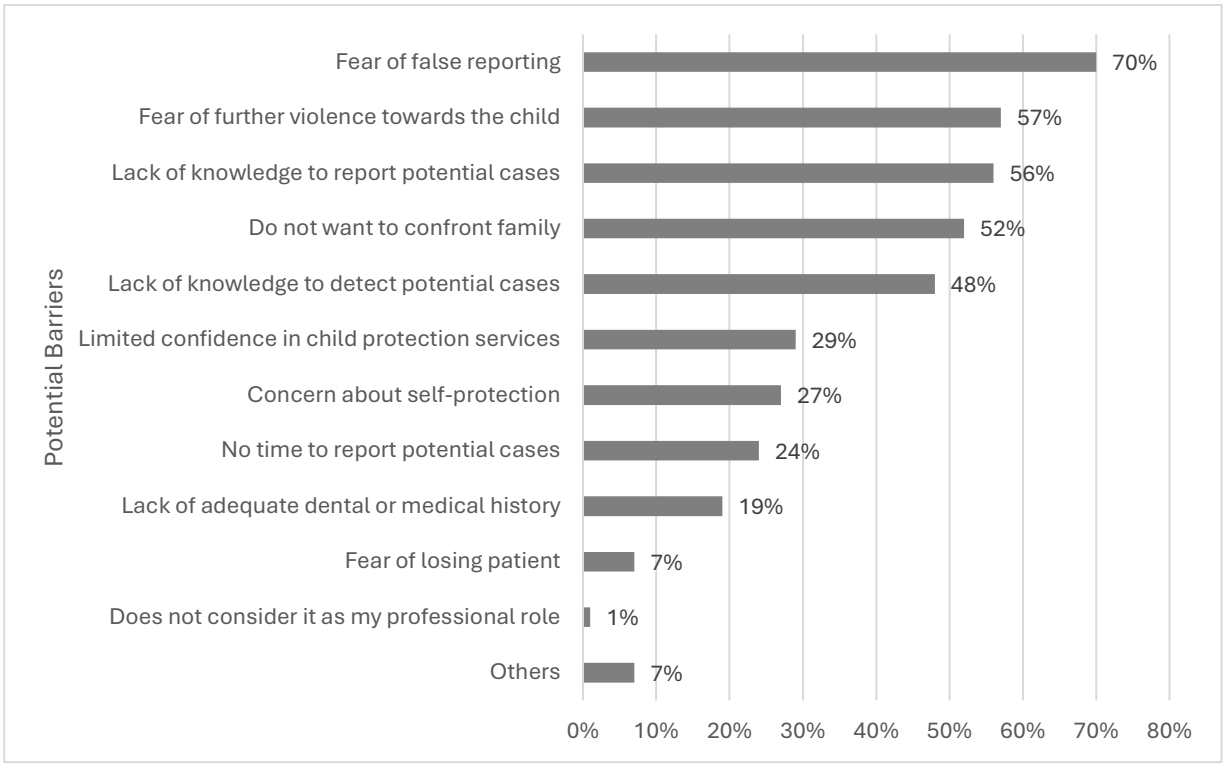
Fifty respondents noted low socioeconomic status (SES) and ethnicity as being common features of suspected cases:

> *I believe there is a link between those in lower socioeconomic groups and of Māori and Pacific Islander ethnic groups with higher cases of suspected child abuse and neglect.*

4.4.4. Potential barriers and facilitators to detect and report suspected CAN cases

Almost all respondents (99%) considered reporting CAN cases as a part of their professional role. However, fear of false reporting (70%) was considered the most significant barrier to reporting CAN cases (Figure 5). In addition, more than half of the respondents endorsed fear of further violence towards the child, lack of knowledge to report cases, and unwillingness to confront the family as barriers. 'Other' responses included having no barrier, inability to obtain a second opinion, and inability to maintain contact with the family.

Figure 5. Barriers Preventing Participants from Reporting Potential Child Abuse and Neglect Cases



Note. Participants identified potential barriers preventing them from reporting suspected child abuse and neglect cases. Percentages represent the proportion of participants (n = 84) selecting each barrier. Multiple responses were permitted.

Fifty responses described facilitators to detect and report potential CAN. Common themes included regular education and training, as well as having clear and up-to-date processes and guidelines. Training on detecting and reporting potential cases and providing interdisciplinary support would help OHPs to respond more effectively:

> *Further courses and talks with speakers of other professions who deal with these types of situations such as social workers and liaising with them frequently.*

The survey indicated that only 36% of participants had attended any course or training related to CAN after completing undergraduate training. Seventy percent of respondents who had taken part in any course or training reported that it was helpful.

4.4.5. Legislation relevance to OHPs

There was a poor understanding of the Act, which provides additional support and protection mechanisms to health practitioners and impacts the respondents and their practices. Sixteen out of 84 respondents have heard about the recent implementation of the Act, whilst only two could roughly describe the impacts on their professional practice.

The majority of respondents (74%) endorsed mandatory reporting. Most respondents considered reporting as a primary duty of health practitioners. Some responses recognised that DTs and OHTs might be the child's only point of contact with a health provider to detect and report potential cases. Yet, some respondents disagreed as it was perceived to limit practitioners' autonomy. Some expressed their concerns about increased inaccurate reporting causing unnecessary trauma for children and caregivers.

4.5. Discussion

4.5.1. Knowledge and attitudes

Most DTs and OHTs participants considered CAN as a significant health and social issue in New Zealand. OHPs can potentially be involved in the prevention and early intervention of CAN. However, it appears that DTs and OHTs may not routinely report suspected cases. During the 2019 financial year, 82.1% of children aged 1–14 had at least one oral health care worker visit (Ministry of Health, 2019). As roughly 10% of New Zealand children and adolescents are substantiated as CAN victims before they turn 18 years old (Rouland & Vaithianathan, 2018), OHPs will likely encounter suspected CAN cases.

Even though the definition of CAN can vary among countries, OHPs' low reporting rates are observed worldwide (Al-Dabaan et al., 2014; Azevedo et al., 2012; Cairns et al., 2005). In Denmark, 38% of dentists and dental hygienists suspected CAN during their careers; among those who had suspected CAN, only one in three (34%) reported their concern for further investigation (Uldum et al., 2010). The current study's findings are also consistent with the previous New Zealand study of DTs conducted by Tilvawala et al. (2014), which indicated 46% had identified

suspected physical abuse and 40% for suspected child neglect; however, 29% and 22% reported, respectively.

Low SES was mentioned as the most commonly observed feature for suspected CAN patients. Various studies have noted a relationship between the socioeconomically disadvantaged and CAN (Landers et al., 2019; Lane & Dubowitz, 2021). However, the association must be interpreted with caution, as socioeconomically disadvantaged families experience poverty, housing and food insecurity, and social and health inequalities, which often lead to parental depression and substance abuse. These conditions can contribute to abusive and neglectful behaviours. Apart from parental depression and substance abuse, other factors can diminish caregivers' abilities.

Respondents also identified CAN over-representation for Māori and Pacific Island children. The literature has indicated that identifying with particular ethnic and social groups can increase the likelihood of child protection concerns being detected and reported (Najdowski & Bernstein, 2018). In the New Zealand context, understanding the impact of colonisation and social and institutional racism on health and social inequalities is necessary to respond effectively (Came & Griffith, 2018; Eruera & Dobbs, 2014). Stereotyping can cause over-diagnosis for Indigenous Māori and Pacific Islander children and children from families with low SES (Najdowski & Bernstein, 2018). Providing family violence prevention and early intervention designed to suit Indigenous Māori and Pacific Islander families is most likely to achieve the best outcome for children and families (Eruera & Dobbs, 2014). On the other hand, children from privileged families may receive less attention, with health practitioners missing the signs and symptoms of abuse and neglect and the opportunity to intervene. Further research is critical to understand how the pre-existing perception of DTs and OHTs towards patients with different SES affects their attitudes in the detection and reporting of CAN. Importantly, understanding the close association between intimate partner violence and CAN will be beneficial to understanding the broad picture of family violence. Both intimate partner violence and CAN are different forms of family violence with shared risk factors that occur concurrently in a family (Gracia et al., 2020). Increasing the understanding of intimate partner violence and its impacts on the child's health and the potential harm can enable an integrated and effective response to victims and their families and contribute to a prevention and early intervention approach.

DTs and OHTs reported two dominant barriers to detecting and reporting CAN: (1) fear of causing harm to the patient and (2) a lack of knowledge to detect and report. The barriers indicate a necessity to improve OHPs' knowledge of child protection. Even though identifying oral manifestations of CAN and reporting procedures are part of undergraduate training, knowledge gaps and lack of confidence are evident among DTs and OHTs. These findings are consistent with other international studies. The fear of false reporting and further violence has been reported in many studies, including the New Zealand study by Tilvawala et al. (2014) (69% fear of false reporting), the UK study by Harris et al. (2009) (78% lack of certainty about diagnosis, 53% fear of

family violence), and Scotland study by Cairns et al. (2018) (88% uncertain about the diagnosis, 34% fear of family violence). Similarly, lack of knowledge was commonly reported elsewhere by Harris et al. (2009) (32% lack knowledge of referral procedures) and Cairns et al. (2018) (71% lack knowledge of referral procedures).

More than half (52%) of the current research participants were unwilling to confront families of potential victims. This behaviour may be linked to concerns about self-protection, confidentiality, or time restrictions. This study did not investigate participants' more profound understanding of how those barriers have formed and how they influence current responses to CAN, which needs further attention. An increased understanding of the current low responsiveness toward CAN will help oral health professionals enhancing their knowledge and attitudes.

In the current study, participants provided potential facilitators to help DTs and OHTs in child protection. Seventy percent who attended courses or training found them beneficial. Responses to open-ended questions support the effectiveness and potential benefits of having child protection training to gain up-to-date information on reporting pathways and policies and connect with other health and social professionals to work as an interdisciplinary team. The New Zealand Dental Association (2018) guideline assists OHPs with child protection and guides practitioners' responsibilities. However, the guideline is from a professional dental association rather than a regulatory authority. DTs and OHTs usually do not belong to the New Zealand Dental Association, which focuses on advocating for dentists and dental specialists. Therefore, DTs and OHTs are unlikely to access the guideline. The study findings have implications for developing a comprehensive guideline that can be incorporated into the DCNZ professional standards framework and tertiary training programmes. In a qualitative meta-synthesis, Hegarty et al. (2020) identified collaboration among health and social practitioners and support from the health system as the main themes to improve the readiness of health practitioners to address family violence. Evidence indicates that the multidisciplinary team approach is more effective in improving responses than stand-alone practices. Designing a training programme that guides practitioners to access multidisciplinary support and embedding this in the professional standards framework and tertiary education programmes would be essential. The actual availability and effectiveness of any child protection courses and training were not examined in this study, which might provide a better understanding of the practitioner's training needs. Future studies on the current topic are therefore recommended.

Another issue highlighted was participants' limited awareness of the Family Violence Act 2018 and its impact on their practices. The Act provides support and protection mechanisms, including (1) participants' abilities to request, use, or disclose personal information for purposes related to CAN, (2) what to consider when disclosing personal information, and (3) the necessary protection that participants can access when disclosing information. A majority of the participants were not aware of the Act, indicating a potential communication gap among the government, the

professional and regulatory bodies and the frontline OHPs. Providing accurate information on how the government can provide the necessary support has the potential to act as a facilitator to support both potential victims and practitioners by supporting OHPs in detecting and reporting potential cases more confidently.

Most respondents (74%) agreed with mandatory reporting of suspected cases; however, there is an ongoing debate regarding its effectiveness (Nouman et al., 2020). A mandatory reporting system may create a culture among health practitioners to report frequently within the legal boundaries. However, there are obvious barriers to implementing mandatory reporting, including health practitioners' resistance and having no gold standard to diagnose and identify potential cases. Most importantly, a lack of knowledge to adequately detect and report suspected cases would prevent the implementation of mandatory reporting. The mandatory reporting system would not work if practitioners do not know how to respond to the situation (Pietrantonio et al., 2013). Further investigation to assess the feasibility and efficiency of a mandatory reporting system would be necessary.

4.5.2. Strengths and limitations

A strength of the current study is that it included both dental and oral health therapy professions, which provide most children with oral health care in various community settings. As a result, the participants had a high involvement rate in children and adolescent oral health care. The findings reinforce a strong need to improve the knowledge and attitudes of DTs and OHTs for the future generations of the two professions.

This study's limitations include the relatively low response rate (16%) and a greater representation of OHTs than DTs (Table 3). OHTs are a more recently established profession; therefore, most OHTs had their undergraduate training within the last 10 years, while most DTs would have had more clinical experiences. It is unclear how the two professions would respond differently to CAN in their practice. Additionally, there could be differences between those who responded and those who did not. As the survey was sent out by email, it may have increased the accessibility and responsiveness to younger practitioners who are represented more in the oral health therapy workforce. It may be that non-respondents were either more or less likely to be engaged in child protection practices. The COVID-19 pandemic may have also impacted the response rate, as the survey was sent out soon after New Zealand's first national lockdown, where the profession was focused on adapting to the new COVID regulations and practice standards. Given the low response rate, the outcome cannot necessarily be considered wholly representative of New Zealand dental and oral health therapy professions. The focus of the study is to understand the knowledge and attitudes of DTs and OHTs in detecting and reporting CAN; however, to fully understand the whole oral health profession, dentists and paediatric dentists could have been invited as some adolescents are also examined and treated by them.

In terms of the questionnaire, even though the study adopted a previously developed questionnaire and was further piloted by 2 DTs and 2 OHTs, it was not fully validated to evaluate the structure of the survey. Some questions in the second part of the survey generated skewed results, as it is hard to disagree that child protection is an important social issue. Also, several questions included both child abuse and child neglect; however, the signs and symptoms of the two issues are different (Costacurta et al., 2015). Asking specific questions on each issue would have provided further understanding of participants' knowledge and attitudes. Another limitation was that competence in recognition of CAN was self-reported. Participants may have under- or over-recognised CAN cases; however, due to the limitations of the survey research, it was not possible to assess the accuracy of their reporting. Furthermore, some participants provided ranges for case numbers rather than a specific number, which were converted into means. Using means increased the risks of losing outliers and underestimating the variance of responses.

4.5.3. Implications for public health and future research

A CAN identification process relies highly on health practitioners' judgment and a clear understanding of their roles and responsibilities (Erisman et al., 2020). This emphasises the need to improve OHPs' understanding of detecting CAN cases in their early stages, providing the necessary support to children and their families, and reporting to child protection agencies to provide safer environments to children and adolescents in need. Despite challenges to measuring the impact of early intervention approaches on child protection, McCarry et al. (2021) identified a perceived need and positive impact of the early intervention approach by children, mothers, and service providers to safeguard children from family violence effectively. Emphasising the need for an evidence-based early intervention approach to prevent further harm to the child is equally crucial to detecting and reporting potentially imminent harm. The participants' desire to improve their knowledge and attitudes toward child protection is promising. The consensus statement on future directions for the behavioural and social sciences in oral health research (McNeil et al., 2022) emphasises the need to address social and environmental determinants. Further study will be required to explore how proximal determinants affect OHPs' responsiveness to CAN, and how those factors can be addressed to improve practitioners' responses. Understanding those determinants can enhance children's safety and wellbeing by improving the responsiveness of OHPs and facilitating early-intervention approaches to child protection.

Further research will be necessary to include other OHPs such as paediatric dentists, community dentists, other relevant stakeholders, and community members to share their perspectives on CAN and the role of OHPs in child protection. Investigating the impediments and associated impacts on the responsiveness of OHPs to children's safety and wellbeing needs would be required. Key findings can be translated into OHPs' early intervention approaches to child protection to achieve child safety and wellbeing.

Given the complexity of family violence, it is unlikely that a single guideline will suffice (Erisman et al., 2020). Even so, having practical guidance from the regulatory authority can increase OHPs' confidence to take action. The guidelines should be easily accessible by practitioners and regularly updated to ensure current and relevant information. As oral health services are often provided in a school setting, information should incorporate an interprofessional approach to communicate with other health, education, and social professionals and share knowledge with each other. The guideline should provide information on how DTs and OHTs can support the family and the community, not just detecting and reporting potential CAN cases. Providing necessary support helps as a part of holistic care to the family and the community across the continuum of needs that can protect children and adolescents from further harm from CAN (McCarry et al., 2021). The government recently introduced Te Aorerekura (the New Zealand national strategy to eliminate family violence and sexual violence) (2021), which includes a reformation of New Zealand healthcare to make it more equitable and better suited to meet the needs of all people. This will be crucial to reviewing OHPs' roles in child protection practices. Further consultations with DTs and OHTs will be required to provide ideal support.

Carefully designed courses to educate DTs and OHTs to improve understanding, knowledge, and attitude are required to improve responsiveness to child protection to detect suspected CAN cases and provide adequate support to affected children and families. Even for health professionals with extensive experience in dealing with CAN cases, consistent engagement with continuing developments and training is beneficial to maintain the capability to detect and report suspected cases. The course should train practitioners to access necessary resources when needed, seek professional advice from other health or social practitioners, and approach multidisciplinary team support. The training should focus on the needs of OHPs, stakeholders, communities, and service users. Additionally, this should be a valuable opportunity to engage with Māori and Pacific communities to understand structural racism in health and child protection practices and address those inequity issues in oral health practices in New Zealand.

Further investigation is required to understand the reasons for the under-reporting of child protection concerns by DTs and OHTs and should be addressed at both individual and professional levels. Currently, insufficient courses related to CAN are available for OHPs in New Zealand. Stakeholders should work collaboratively to design appropriate courses that can be delivered regularly, ensuring the educational material is readily accessible to all OHPs.

4.6. Conclusion

This exploratory research showed an insufficient understanding of participating DTs and OHTs in responding to CAN. While practitioners perceived their ability to detect and report suspected cases positively, the actual detection and reporting rates were considerably low. Insufficient knowledge needed to detect and report suspected cases and fear of false reporting

were identified as major barriers. The outcome of the study indicates the importance of improving the knowledge and attitudes of DTs and OHTs to protect children and adolescents from CAN. OHPs should consider participating in ongoing training to enhance competency in preventing and responding to CAN. The formation of a comprehensive national guideline and an interdisciplinary approach can be considered to assist OHPs.

4.7. Postlude

As a part of my preparation for this doctoral research, I recognised the necessity to deepen my knowledge of research methodologies, the complexities of CAN, and the role of OHPs within broader interdisciplinary child protection efforts. I actively engaged in diverse learning opportunities, from talking to social and health practitioners experienced in child protection and attending relevant conferences and webinars to having a two-week placement at Te Puaruruhau[7] (the multi-disciplinary child protection team which forms part of Starship Child Health, Te Toka Tumai health service for children and young people 0-18 years). My time at Te Puaruruhau helped me to gain a firsthand understanding of the multidisciplinary approach among health, social, and justice (police) professionals in handling child protection cases. This experience provided me with the opportunity to witness real-time collaborations among professionals, significantly enhancing my understanding of the processes and strategies implemented when serious CAN cases are referred to a broader child protection team. Observing these interactions deepened my appreciation of the intricate network of communication and decision-making that supports effective child protection. It also highlighted the critical role of timely and coordinated responses in ensuring the safety and wellbeing of children and their families, demonstrating how various sectors come together to form a cohesive unit in the face of complex child welfare challenges. Additionally, it highlighted the unique position and potential contributions of OHPs in prevention and early intervention, reinforcing the need for further understanding of how OHPs can contribute to interdisciplinary child protection responses.

As outlined in the study design chapter (Chapter 3), I was in the process of analysing data from the survey when I developed my research proposal for the doctoral project. Subsequently, the manuscript was prepared and submitted to the journal for peer review and publication. This process further deepened my academic knowledge of research methodologies and the dissemination process, enriching my understanding and skills in effectively sharing scholarly findings. The findings of the survey research were presented in several forums:

1. *Community Oral Health Big Day In* (Hamilton, New Zealand) on 23 January 2020 - organised by the Waikato District Health Board (audience: OHTs and DTs).

[7] **Te Puaruruhau (Child Protection Team)** - https://starship.org.nz/directory-of-services/te-puaruruhau-(child-protection)/

2. *AUT Postgraduate Research Symposium* (Auckland, New Zealand) on 26 November 2021 (audience: postgraduate students, researchers, and academics).
3. *Australian Dental and Oral Health Therapy Association (ADOHTA) Annual Conference* (Melbourne, Australia) on 28 July 2023 (audience: OHTs and DTs).

Presentation abstracts were published in:

1. *Rangahau Aranga: AUT Graduate Review* (2022) (Volume 1 – Issue 1) - available online: https://doi.org/10.24135/rangahau-aranga.v1i1.81 (AUT Postgraduate Research Symposium).
2. *Australian & New Zealand Journal of Dental and Oral Health Therapy* (2024a) (Volume 11 – Special Edition, p. 11), - available online: https://nla.gov.au/nla.obj-3217737097/view (ADOHTA Annual Conference).

These presentation opportunities confirmed that OHPs and the wider health communities are keenly interested in the topic of child protection and agree that further efforts are essential to enhance the responsiveness of OHPs and to better support children and families. At the same time, it became clear that OHPs are facing challenges in navigating the appropriate approaches to safely support children and families while protecting their own safety in open community settings. It was evident that varying organisational policies and limited workforce development opportunities were causing confusion among OHPs regarding their role in child protection and their ability to engage in these critical responsibilities.

Recognising gaps in my master's research highlighted in the prelude (Chapter 4.1) and activities to enhance my understanding of child protection responses enabled me to refine my research approach significantly. This refinement and deepened engagement with the subject have laid a solid foundation for a more comprehensive and insightful doctoral project, aimed to make practical and meaningful contributions to oral health professions. In the next chapter, I present the scoping review protocol conducted to map strategies used to support OHPs in international dental settings.

5. Scoping Review Protocol

5.1. Prelude

The findings from the survey study (Chapter 4) sparked my motivation to generate practical answers for OHPs to become more responsive to child protection concerns. I was somewhat surprised that the role of OHPs in child protection has not been fully recognised, and I wanted to contribute to the profession to support our children and families so that our children can grow in safe and healthy environments.

The initial plan was to carry out a scoping review focusing on the role of OHPs in child protection. The initial review aimed to map out how the role of OHPs is defined across various contexts and to assess the current attitudes and knowledge as documented in the international literature. The protocol preprint, titled *Oral health professionals and child abuse and neglect: A scoping review protocol*, was published on *medRxiv* on 21 March 2022 and is available online: https://doi.org/10.1101/2022.03.18.22272542. However, upon further literature exploration, multiple reviews, such as scoping reviews by Bradbury-Jones et al. (2021) and Rodrigues et al. (2016), provided a comprehensive analysis of the role of OHPs in child protection. Literature (Bradbury-Jones et al., 2021; Jameson, 2016; Lourenço et al., 2013; Rodrigues et al., 2016) clearly documents OHPs' roles in identifying potential signs of CAN, documenting any observation, supporting children and their families, referring to multidisciplinary support mechanisms, and reporting to child protection agencies. Insufficient knowledge and reduced responses from OHPs were also noted globally (Al-Dabaan et al., 2014; Bradbury-Jones et al., 2021; Cukovic-Bagic et al., 2015; Fox et al., 2022; Han et al., 2022).

Instead of repeating a review, which still holds some value, I decided to map current approaches, such as education programmes, clinical protocols, and professional collaboration pathways aimed at strengthening the role of OHPs in safeguarding child welfare. Identifying and understanding these strategies would provide an opportunity to tailor specific approaches to be effectively implemented within the unique context of New Zealand. This approach draws on international studies and leverages global best practices to support and strengthen OHPs' contributions to child protection in New Zealand.

A scoping review was selected rather than a systematic or narrative review because the objective was to map the breadth, nature, and sources of heterogeneous evidence rather than to examine the effectiveness of defined interventions. This approach also allowed the inclusion of diverse study designs and grey literature that would be excluded in a systematic review. At the same time, it was preferred to a narrative review for its explicit, reproducible procedure and transparent reporting. Prior to conducting the scoping review, I engaged in extensive preparatory work, including studying various review frameworks and participating in research workshops to gain a deeper understanding of scoping review methodologies. The scoping review was selected

over other narrative or systematic reviews as it offers a systematic literature search and analysis and provides room for a broad search of the literature, without being restricted to its source types, and descriptive summaries of findings (Peters et al., 2022). This methodology is particularly effective in addressing broader questions compared to a traditional systematic review (Peters et al., 2022). The Joanna Briggs Institute (JBI) methodology for scoping review guideline (Peters et al., 2020), which is the most common methodology framework for a scoping review, has been adopted for the review. It is well-regarded for its clear scope definition, rigorous and transparent processes, and ability to incorporate diverse evidence types.

As a review protocol, it is written in the future tense to outline planned procedures; accordingly, the main body of this chapter preserves that tense to ensure consistency with the published text. The review protocol, titled *Current approaches addressing oral health practitioners' responsiveness to child abuse and neglect: A scoping review protocol*, was published in *PLOS One* (Public Library of Science) on 8 February 2024 and is available online: https://doi.org/10.1371/journal.pone.0296650.

5.2. Introduction

CAN severely impact children's social development, academic achievements, and both their short-term and long-term physical and mental wellbeing (Afifi et al., 2016; Lalor & McElvaney, 2010; Leeb et al., 2011; Sarkar et al., 2021; WHO, 1999).

Injuries resulting from CAN range from fractures and lacerations to central nervous system damage and may also heighten the risk of emotional developmental impairments, sexual dysfunction, and depression (Afifi et al., 2016; Hughes et al., 2017; Lalor & McElvaney, 2010; Leeb et al., 2011; Petruccelli et al., 2019; Singh & Lehl, 2020; Spiller, 2024). OHPs play a crucial role in protecting children from CAN (Han et al., 2022; Jameson, 2016; Lourenço et al., 2013; Singh & Lehl, 2020). They are skilled in identifying orofacial manifestations of CAN (Boyd et al., 2020; Costacurta et al., 2015; Sarkar et al., 2021) and can offer support to affected children and their families and refer suspected cases to child protection agencies when necessary (Nuzzolese et al., 2009).

Despite the critical role that OHPs can play in protecting children from abuse and neglect, there is a significant global issue of under-reporting suspected cases. A survey of 510 Croatian dentists revealed that while 26.27% had suspected CAN cases during their careers, only 42.9% of those who suspected reported their concerns (Cukovic-Bagic et al., 2015). Furthermore, only 11.4% of these respondents were aware of the proper reporting procedure, and approximately 70% indicated a need for additional training (Cukovic-Bagic et al., 2015). A similar pattern was observed in New Zealand, where a study of 92 DTs and OHTs found that 62% had encountered at least one suspected case during their careers. However, only 21% reported concerns (Han et al., 2022).

Although 74% of the respondents believed they could easily recognise signs and symptoms of CAN, only 48% were familiar with the reporting process (Han et al., 2022).

Recent reviews have investigated how OHPs respond to CAN concerns and the barriers they face in these situations (Bradbury-Jones et al., 2021; Rodrigues et al., 2016). However, these reviews did not focus on the approaches to enhance OHP's responsiveness. One study highlighted the uncertainty and hesitation OHPs often experience when identifying and reporting suspected cases (Bradbury-Jones et al., 2021). Common barriers identified include fear of parental reprisal towards the child, potential violence towards the practitioner, uncertainty in diagnosis, and lack of knowledge about reporting processes (Bradbury-Jones et al., 2021; Fox et al., 2022). These findings underscore concerns regarding current interdisciplinary practices, such as strained relationships with social services and inconsistent policies and guidelines (Bradbury-Jones et al., 2021).

Developing and implementing early intervention and prevention strategies is essential to enhance OHPs' responsiveness to CAN. Integrating such strategies into clinical practices would promote a proactive and collaborative approach, enhancing the ability to identify and address potential cases of CAN. While specific strategies, such as multidisciplinary team approaches, exist (Herbert & Bromfield, 2019), they need to be tailored to the unique context of OHPs, who often operate in isolation. This isolation can hinder collaborative efforts with other healthcare professionals, emphasising the need for a deeper understanding of existing strategies.

Considering the lack of detailed studies on strategies for improving OHPs' responsiveness towards child protection, a scoping review is an appropriate method to comprehensively map evidence across the topic (Munn et al., 2018; Munn et al., 2022). This type of review is particularly suited for this purpose as it has not been extensively explored in the current literature. This scoping review aims to systematically map the literature on the approaches utilised by OHPs to enhance the responsiveness of OHPs in child protection. This will include exploring various approaches, such as education programmes, clinical protocols, and professional collaboration pathways aimed at strengthening the role of OHPs in safeguarding child welfare.

5.3. Materials and methods

The planned scoping review will adhere to the JBI methodology for scoping reviews guideline (Peters et al., 2020) and reported using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guideline (Chapter 5.5) (Tricco et al., 2018). The JBI methodology for scoping review guideline (Peters et al., 2020) is highly regarded for its clear scope definition, rigorous and transparent processes, and ability to incorporate diverse evidence types. Structured data extraction and synthesis processes, outlined in the JBI guideline (Peters et al., 2020), facilitate the derivation of impactful conclusions relevant to practice and policy.

The PCC (Population, Concept, Context) framework (Peters et al., 2020) was used to develop search strategies and inclusion and exclusion criteria. This framework ensures a precise and transparent definition of eligibility criteria, facilitating a clear understanding of the study's scope and promoting replicability in future research (Peters et al., 2022; Peters et al., 2020). Any changes made to the protocol will be reported along with the scoping review findings.

5.3.1. Inclusion and exclusion criteria

This scoping review is guided by the following question: What are the current approaches to address the responsiveness of OHPs in child protection? The JBI PCC (Population, Concept, Context) framework (Peters et al., 2020) was used to establish inclusion and exclusion criteria (Table 4).

The 'population' was defined as registered OHPs or students in undergraduate and postgraduate programmes training to become OHPs. Registered OHPs and undergraduate and postgraduate students will be considered as the review will focus on the broad application of child protection strategies in oral health, applicable universally across the profession. The review is planned for the entire oral health community, with the understanding that the strategies for enhancing responsiveness do not vary between the professional statuses of the individuals. The population includes general dentists, paediatric dentists, pedodontists, other dental specialists, OHTs, DTs, dental hygienists, dental nurses, orthodontic auxiliaries, or any equivalent profession.

The 'concept' is the current approach used to improve the responsiveness of OHPs in child protection. This encompasses any efforts and strategies for preventing and responding to CAN, including the identification, reporting, and appropriate handling of cases. Current approaches include but are not limited to policy statements on implementing the interdisciplinary practice, an in-service professional education programme to train OHPs on identifying and reporting suspected CAN cases, or guidelines to help OHPs to identify and report suspected CAN cases. Studies will not be included if they solely describe the current state of detection or reporting without discussing strategies or interventions. Additionally, studies that offer future recommendations without basing them on existing methods will not be included. An individual up to the age of 18 will be considered a child for this review.

The 'context' will include all settings, such as private and public dental clinics, school-based dental clinics, or university training clinics.

Articles published only in English will be considered due to expertise and financial resource limitations. The search date range will be from January 2000 to April 2023 to ensure the findings are contemporary to current OHPs. Literature, including OHPs as part of broader health practitioners, will be excluded from this scoping review unless data is segregated by discipline.

Table 4. Inclusion and Exclusion Criteria from the Protocol Publication

Criteria	Inclusion	Exclusion
Population	• Oral health practitioners who are registered with national regulatory bodies (general dentists, paediatric dental specialists, pedodontists, other dental specialists, oral health therapists, dental therapists, dental hygienists, and orthodontic auxiliaries) • Undergraduate and postgraduate students for dental-related programmes	• Non-registered oral health providers • Oral health practitioners as a part of broader health practitioners (unless data is segregated by discipline)
Concept	• Child abuse and neglect response strategies • Child protection response strategies • Current approaches include but are not limited to implementing interdisciplinary practice policies or introducing pre-service or in-service professional education	• Only reporting the current detecting and reporting status • Only reporting barriers to responding to child abuse and neglect concerns • Future recommendations only rather than current practice
Context	• All international dental-related settings, including private and public dental services • Dental services provided in community settings such as schools	
Type of sources	• Primary studies, including quantitative, qualitative, and mixed-methods study designs • Systematic reviews and meta-analysis • Discussion papers, editorials, and government and international health organisations' policy documents • English, full-text • Publication year: January 2000 to March 2023	• Book reviews, book chapters, news articles, commentaries, letters, legal judgments

Note. This table was published as Supporting Information 1 (S1 Table) in the original journal article - available on https://doi.org/10.1371/journal.pone.0296650.s001.

5.3.2. Search strategy

This scoping review will include primary studies with quantitative, qualitative, and mixed-methods designs, as well as systematic reviews and meta-analyses that will be used to identify primary sources. Discussion papers, editorials, and government and international health organisations' policy documents will also be considered. Discussion papers and editorials offer valuable insights into current practices, trends, and debates in oral health and child protection, enhancing the review's contextual depth. Policy documents from government and international health organisations are crucial for understanding the regulatory frameworks and best practices guiding practitioners in child protection. A three-step search method recommended by the JBI scoping review guideline (Munn et al., 2022) will be implemented across five databases to identify relevant literature.

An initial exploratory search was conducted in MEDLINE (via EBSCO) and CINAHL (via EBSCO) to identify key articles and understand the potential scope of the review. Key terms contained in the titles, abstracts, keywords, and subject headings of relevant literature were used to develop a comprehensive search strategy (see search strategy for MEDLINE, CINAHL, Dentistry & Oral Sciences Source via EBSCO in Table 5). A second search will be conducted across five databases (MEDLINE via EBSCO, CINAHL via EBSCO, and Dentistry & Oral Science Source via EBSCO, Cochrane Library, and Scopus). All identified keywords will be adapted for each included database. A third search will involve exploring the reference list of identified sources. Authors of primary sources or reviews will be contacted if further information is required. Additionally, the first 100 items from Google Scholar and Google will be explored with the search terms for any grey literature not indexed in the stated databases, including relevant government and international health organisations' policy documents.

Continued on the next page

Table 5. Combined Search Strategy for EBSCO Health Databases for the Protocol Publication

Number	Query (Limit Year = January 2000 to March 2023)
1	"dental professional*" or "dental practitioner*" or "oral health practitioner*" or dentist* or "dental specialist*" or pedodontist* or "oral health therapist*" or "dental therapist*" or "dental hygienist*" or "orthodontic auxiliar*"
2	child* or adolescen* or youth or teen* or "young people" or "young person*" or kid* or paediatric* or pediatric*
3	abus* or neglect* or maltreat* or safeguard*
4	report* or respond* or respons* or detect* or act* or react* or approach* or alert* or deal*
5	strateg* or intervention* or policies or policy or framework* or guideline* or training* or education or program* or approach*
6	1 AND 2 AND 3 AND 4 AND 5

Note. Keyword search: all fields using EBSCO Health Databases; this table is available on https://doi.org/10.1371/journal.pone.0296650.t001.

5.3.3. Source of evidence selection

Following the search, all identified citations will be collated and uploaded into the reference management software EndNote v.X9 (Clarivate Analytics, USA), and duplicates will be removed. Subsequently, the records will be uploaded into the web-based review software tool Covidence (Veritas Health Innovation, Australia). Titles and abstracts will be independently screened by two reviewers for assessment against the inclusion and exclusion criteria of the review. Two independent reviewers will then assess the full texts of selected citations in detail against the inclusion and exclusion criteria. Both the title and abstract screening and the full-text screening will be piloted by independent researchers, and the inclusion and exclusion criteria will be improved collectively before the complete review of all literature. Reasons for excluding sources of evidence at the full-text screening stage will be recorded and reported in the scoping review. Any disagreements between two reviewers at each stage of the selection process will be resolved through discussion with the research team. The search results and the study inclusion process will be reported in full in the final scoping review and presented in a PRISMA-ScR flow diagram (Tricco et al., 2018).

5.3.4. Data extraction

Data will be extracted from selected reports independently by two reviewers using the data extraction table, and then the research team will combine the two data sets. Data extracted will include details about the population, concept, context, study methods and key findings relevant to current approaches to improve the responsiveness of OHPs to child protection concerns. The data extraction table (Table 6) is adapted from the JBI methodology for scoping review guideline (Peters

et al., 2020) and modified to meet the specific requirements of this study, ensuring a more targeted and relevant analysis of the selected sources. The research team will pilot the form with three sample sources to ensure consistency and accuracy. The research team will discuss any differences encountered, and the form will be modified as necessary. Any modifications made will be detailed when reporting the scoping review findings. In applying the modified data extraction form, disagreements between reviewers will be resolved through discussion with the research team.

Continued on the next page

Table 6. Data Extraction Form for the Protocol Publication

Source information – Citation No.	
Title	
Primary author	
Year of publication	
Citation (APA 7th)	
Primary author location	
Industry funding (Y/N/NS) – If Y, specify the role of funders in the study	
Type of literature (article, policy document, editorial, etc.)	
General information (complete any part that is applicable)	
Aim and objectives	
Study design	
Methods	
Population (complete any part that is applicable)	
Study population or target population	
Sample size and response rate	
Context (complete any part that is applicable)	
Setting (country, public dental sector, private dental sector, hospital, etc.)	
Concept (complete any part that is applicable)	
Current approaches to address the responsiveness	
Findings or results	
Identified barriers	
Identified facilitators	
Identified needs or OHPs	
Any interdisciplinary collaboration (Y/N) – If Y, describe collaboration, including disciplines and how	
Any address to equity and culture (Y/N) – If Y, describe efforts or strategies to address equity and culture	
Other Findings	
Any further recommendation	
Reported strength or limitations	
Other comments	

Note. This table was published as Supporting Information 2 (S2 Table) in the original journal article - available on https://doi.org/10.1371/journal.pone.0296650.s002. Y = yes; N = No; NS = not specified; OHP = Oral health practitioner.

5.3.5. Data analysis and presentation

Qualitative content analysis (Sandelowski, 2000) will be implemented to summarise the informational content of the data, which will be presented in both narrative summaries and tables. The current approaches will initially be categorised into various groups based on their concepts, such as pre-service and in-service professional education, implementation of interdisciplinary practice policies, and coordination of multidisciplinary approaches. The identified approaches will not be segregated by professional status (professionals or students) but will be presented as uniformly applicable practices for enhancing child protection responsiveness in oral health.

These categories will be updated as the data is analysed. The initial set of categories will then be revised, merging smaller categories and splitting larger ones to align with the review question. A final table, based on refined categories, will map out the diverse efforts and strategies employed to improve the responsiveness of OHPs to child protection concerns. The data table will be complemented by narrative summaries (Peters et al., 2020). A final report will be reported following the PRISMA-ScR guideline, and the potential implications of the findings for further research, practice, and policy development will be discussed (Levac et al., 2010).

5.4. Acknowledgements

The authors thank Andrew South, Liaison Librarian for Health at the Auckland University of Technology, for their assistance in developing the search strategy for this study.

5.5. Supporting information

Supporting Information 1 (S1 Table). Inclusion and exclusion criteria.

The table is added to the body of the chapter (Chapter 5.3.1). This supporting material is available at: https://doi.org/10.1371/journal.pone.0296650.s001.

Supporting Information 2 (S2 Table). Data extraction form.

The table is added to the body of the chapter (Chapter 5.3.4). This supporting material is available at: https://doi.org/10.1371/journal.pone.0296650.s002.

Continued on the next page

Supporting Information 3 (S3 Table). Preferred reporting items for systematic reviews and meta-analyses extension for scoping reviews checklist.

This supporting material is available at: https://doi.org/10.1371/journal.pone.0296650.s003.

Page 1 – Corresponds to the published article

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	1
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	2-3
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	3-5
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	5
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	N/A
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	5-6
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	6-7
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	7
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	8
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	8-9
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	N/A
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	N/A
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	N/A

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SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	N/A
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	N/A
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	N/A
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	N/A
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	N/A
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	N/A
Limitations	20	Discuss the limitations of the scoping review process.	N/A
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	N/A
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	N/A

JBI = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.
* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.
† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).
‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.
§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMAScR): Checklist and Explanation. Ann Intern Med. 2018;169:467–473. doi: 10.7326/M18-0850.

5.6. Postlude

This protocol publication helped me to systematically outline my scoping review methods, enabling adherence to a structured approach to map the strategies aimed at strengthening the role of OHPs in safeguarding child wellbeing. Engaging with systematic scoping review frameworks such as those provided by JBI and PRISMA deepened my understanding of structured research processes and highlighted the importance of adhering to established guidelines to maintain research integrity and utility. In the next chapter, I present the findings of the scoping review conducted following this protocol, drawing findings from international literature.

6. Scoping Review

6.1. Prelude

In this chapter, I present the published scoping review conducted following the protocol introduced in Chapter 5. The aim of the review was to identify and map current approaches that support OHPs in responding to CAN. A significant challenge was to identify actual implemented approaches and discuss their nature, implementation, benefits, and limitations, rather than just proposing future recommendations without a basis in existing practices. Additionally, many approaches addressed the broader topic of family violence rather than specifically focusing on CAN or targeted wider health practitioners instead of exclusively OHPs. This scope limitation excluded some literature and approaches that may have been useful for OHPs in broader contexts. Nevertheless, the review was conducted following the steps outlined by Peters et al. (2020) to address the research aim and ensure the methodological rigour of the scoping review. By adhering to these guidelines, the review was systematically structured to identify relevant studies, ensuring that the analysis was comprehensive and transparent.

The review identified three primary strategies: (1) dental-specific education programmes, (2) practical guidelines on child protection, and (3) legal and professional frameworks. To my knowledge, this is the first review to map and synthesise approaches to enhance responsiveness in child protection utilised by the international dental community. These approaches can be explored further to suit New Zealand dental contexts. In the discussion section, I have documented the importance of considering global cultural contexts, as different cultures have varying definitions of parenting and disciplinary practices (Lansford et al., 2015; Nadan et al., 2015). Furthermore, acknowledging our limitations in expertise on CAN, I advocated for robust collaboration with other health and social practitioners. This multidisciplinary and interdisciplinary approach was echoed across different themes in the review, highlighting its significance in enhancing the responsiveness of OHPs and other professionals involved in child protection.

The journal article, titled *Enhancing child protection responses in oral health practice: A scoping review of evidence-based approaches*, was published in *Child Abuse Review* (John Wiley and Sons Ltd.) on 31 October 2024 and is available online: https://doi.org/10.1002/car.2904.

6.2. Introduction

UNCRC, which is the most widely ratified human rights treaty in history, states that all children have the right to necessary protection from abuse, neglect and exploitation (United Nations Human Rights, 1989). The immediate and long-lasting detrimental effects of CAN are widely recognised. These effects can range from permanent physical and psychological health issues (Mehta et al., 2021) to a heightened susceptibility to a range of health, emotional and social challenges in later life, such as depression and anxiety (Berber Çelik & Odacı, 2020; Leeb et al.,

2011). Globally, it is estimated that up to one billion children aged two to 17 years are subjected to physical, sexual and emotional violence or neglect every year (Hillis et al., 2016). WHO (2019) has called for global health practitioners to be more attentive to the best interests of children and adolescents by promoting and protecting safety and non-discrimination in providing care and demonstrating respect towards children and caregivers. Their report provides recommendations for the health sector's response to CAN, including regular early detection and intervention training, interdisciplinary collaboration, and the creation of supportive and enabling service environments (WHO, 2019).

OHPs, as frontline professionals in the provision of oral health care to children and adolescents, have a responsibility to be vigilant and act to promote and protect children's safety (Singh & Lehl, 2020). Children and adolescents often interact with OHPs across various dental care environments, including general dental offices, specialist practices, community dental clinics and school-based dental services. For some children and adolescents, regular dental visits may represent their only engagement with healthcare providers, especially where routine medical examinations are not standard. OHPs are positioned to identify signs of CAN at its various stages and respond to protect children from further or potential harm (Bradbury-Jones et al., 2021) (Håkstad et al., 2024). Early interventions and prevention strategies can avert severe health and social outcomes (Colizzi et al., 2020; Tabone et al., 2020; Van der Put et al., 2018). The interventions can include making referrals to child welfare organisations or family support services and employing cooperative and interdisciplinary methods to help families obtain necessary assistance. Despite OHPs holding a vital position in protecting children against abuse and neglect, there exists a substantial worldwide challenge with insufficient reporting of potential cases and responding to those concerns. A recent Australian study revealed that OHPs were uncertain about identifying abuse and unsure of proper reporting protocol (Kugananthan et al., 2021); Croatian (Cukovic-Bagic et al., 2015) and New Zealand (Han et al., 2022) studies confirmed that less than half of CAN concerns were reported by OHPs to child protection agencies.

Improving the responsiveness of OHPs to CAN necessitates developing and implementing early intervention and prevention strategies. Incorporating these strategies within clinical settings encourages a proactive and integrated approach to improve responsiveness. This scoping review was guided by the following question: What are the current approaches to address the responsiveness of OHPs in child protection? The review aimed to systematically map the literature and identify gaps in the approaches utilised by OHPs to enhance responsiveness in child protection. Approaches include, but are not limited to, educational programmes, practical guidelines and interdisciplinary collaboration training modules.

6.3. Method

Given the limited research on approaches to enhance the responsiveness of OHPs in child protection, a scoping review is an appropriate method to systematically and comprehensively map and summarise evidence on this subject. This review was conducted following JBI methodology for scoping review guideline (Peters et al., 2020) and reported using PRISMA-ScR (Tricco et al., 2018). The JBI guideline supports a clear scope definition, rigorous and transparent processes and the ability to incorporate diverse evidence types (Peters et al., 2020). The PCC (Population, Concept, Context) framework (Peters et al., 2020) was used to develop inclusion and exclusion criteria (discussed below) and a comprehensive search strategy.

The protocol for this review (doi:10.1371/journal.pone.0296650) was published to ensure transparency, provide a methodology for conducting the review, and allow for reproducibility and scrutiny by other researchers in the field (Han, Koziol-McLain, Morse, et al., 2024). Minor amendments include changing the search end date from March 2023 to May 2023.

6.3.1. Inclusion and exclusion criteria

The PCC framework (Peters et al., 2020) was used to determine inclusion and exclusion criteria (Table 7) with the additional consideration of source type. The population of interest included registered OHPs and students in both undergraduate and postgraduate programmes, such as general dentists and paediatric dentists, dental specialists, OHTs, dental hygienists, DTs, dental nurses and orthodontic auxiliaries. The intent was to review and assess the broad application of child protection strategies in oral health, underlining the universal relevance of these strategies across different professional roles within the field. This scoping review included all members of the oral health community, emphasising that the responsibility to enhance child protection responsiveness is shared by all professionals in the field, regardless of their specific roles or positions. However, sources that included OHPs along with other health professionals were excluded if they did not disaggregate the analysis of OHPs.

Continued on the next page

Table 7. Inclusion and Exclusion Criteria for the Scoping Review Publication

Criteria	Inclusion	Exclusion
Population	• Oral health practitioners who are registered with national regulatory bodies (general dentists, paediatric dental specialists, pedodontists, other dental specialists, oral health therapists, dental therapists, dental hygienists and orthodontic auxiliaries) • Undergraduate and postgraduate students in dental-related programmes	• Non-registered oral health providers • Oral health practitioners as a part of broader health practitioners (unless data is segregated by discipline)
Concept	• Child abuse and neglect response strategies • Child protection response strategies • Current approaches include but are not limited to interdisciplinary practice policies or pre-service or in-service professional education	• Only reporting the current detecting and reporting status • Only reporting barriers to responding to child abuse and neglect concerns • Future recommendations only rather than current practice
Context	• All international dental-related settings, including private and public dental services • Dental services provided in community settings, such as schools	
Type of sources	• Primary studies, including quantitative, qualitative, and mixed-methods study designs • Systematic reviews and meta-analysis • Discussion papers, editorials, and government and international health organisations' policy documents • English, full-text • Publication year: January 2000 to May 2023	• Book reviews, book chapters, news articles, commentaries, letters, legal judgments

The concept central to this review was the examination of current strategies employed to enhance the responsiveness of OHPs in preventing and responding to CAN worldwide. This included identifying, reporting, and managing such cases appropriately, with a focus on interventions such as policy implementation, interdisciplinary practices, and professional education programmes aimed at training OHPs. Sources that only proposed and recommended possible approaches were excluded from the review. Also, sources that focused on reporting the current prevalence of CAN, response rates of OHPs or identifying barriers to responding were excluded, as they did not address the research question. The context for this review encompassed various dental settings where OHPs practice, including private and public dental clinics, as well as school-based and university training clinics. Only sources published in English from January 2000 to May 2023 were considered to ensure the relevance of the findings.

To pilot the inclusion and exclusion criteria, the titles and abstracts of 30 randomly selected sources were screened by two independent reviewers based on the inclusion and exclusion criteria, followed by full-text screening. Future recommendations, rather than current practices, were added to the exclusion criteria to clarify the aim of exploring current practices and approaches rather than future recommendations.

6.3.2. Search process

This scoping review included a search of multiple databases and a grey literature search to identify any relevant sources. An initial exploratory search was conducted of MEDLINE (via EBSCO) and CINAHL (via EBSCO) to understand the potential scope of the review. Key terms from the initial search were used to develop a comprehensive search strategy (Table 8). A full search was conducted across five databases (MEDLINE-EBSCO, CINAHL-EBSCO, Dentistry & Oral Science Source-EBSCO, Cochrane Library and Scopus). Search keywords were adapted for each database to suit the requirements. To identify any grey literature not indexed in a search database, key terms were searched using Google Scholar. The first 100 sources were reviewed to identify relevant literature.

Continued on the next page

Table 8. Search Strategy for MEDLINE, CINAHL, and Dentistry & Oral Sciences Sources via EBSCO for the Scoping Review Publication

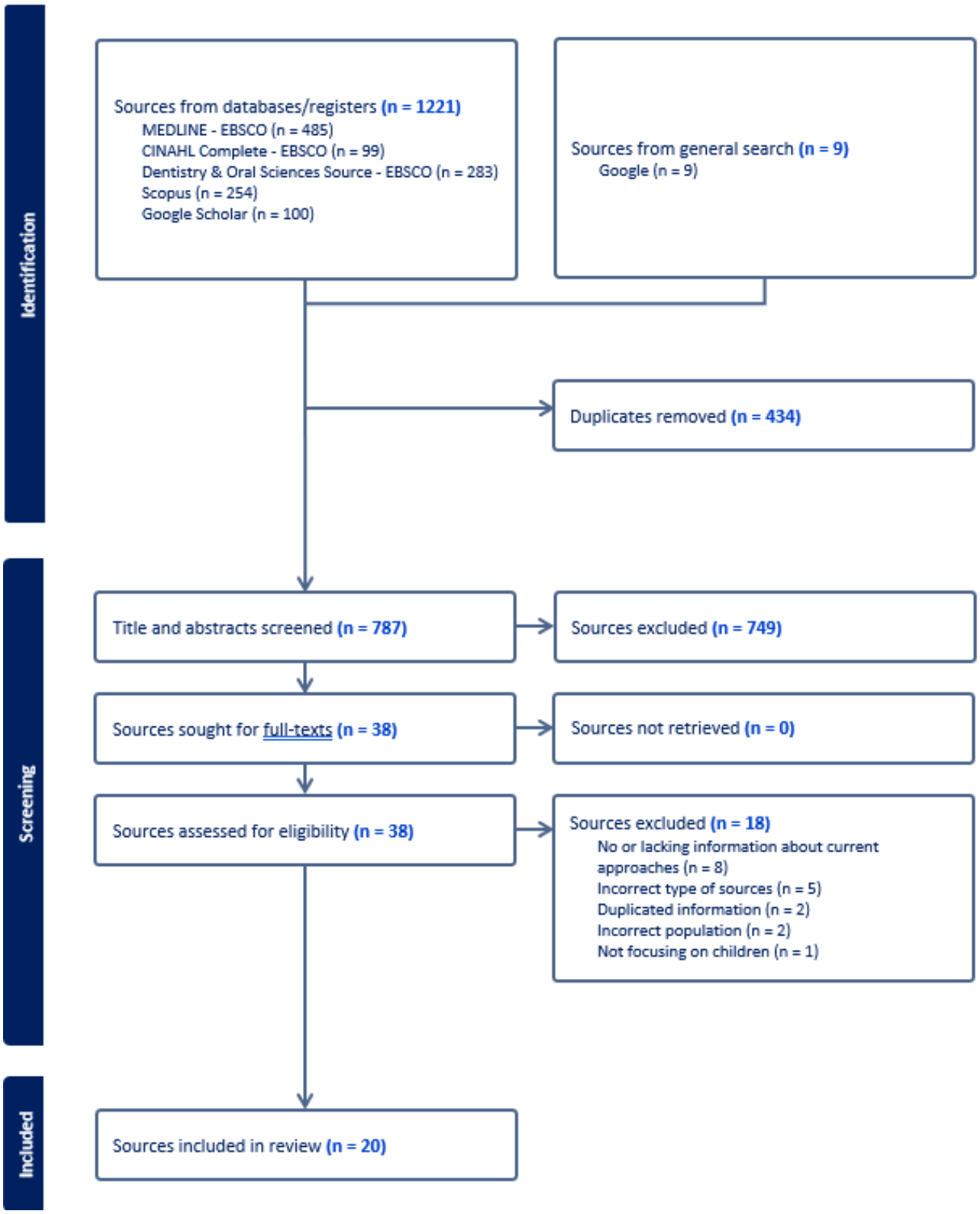
Number	Query
1	“dental professional*” or “dental practitioner*” or “oral health practitioner*” or dentist* or “dental specialist*” or pedodontist* or “oral health therapist*” or “dental therapist*” or “dental hygienist*” or “orthodontic auxilliar*”
2	child* or adolescen* or youth or teen* or “young people” or “young person*” or kid* or paediatric* or pediatric*
3	abus* or neglect* or maltreat* or safeguard*
4	report* or respond* or respons* or detect* or act* or react* or approach* or alert* or deal*
5	strateg* or intervention* or policies or policy or framework* or guideline* or training* or education or program* or approach*
6	Limit Year = January 2000 to May 2023

Note. Keyword search: all fields using EBSCO Health Databases. This table is available on https://onlinelibrary.wiley.com/action/downloadSupplement?doi=10.1002%2Fcar.2904&file=car2904-sup-0001-Supplementary_Material1.docx.

6.3.3. Screening

Following the search, a two-step screening was conducted to identify relevant sources. All identified records (n = 1230) were collated and uploaded to the web-based review software tool Covidence (Veritas Health Innovation, Australia) and duplicates (n = 434) were removed. Two reviewers independently screened the titles and abstracts of 787 identified records using the inclusion and exclusion criteria (Table 7). The research team discussed any disagreements between the two reviewers. The record advanced to full-text review if there was insufficient information in the title and abstract to achieve consensus. Full texts of 38 reports were read and screened by two independent reviewers, and the research team discussed any disagreements to achieve consensus. Twenty reports were included in the review (Figure 6). References from the 20 reports were screened to identify any relevant sources that were not identified during the previous search. Some relevant sources were identified but not included in the review, as those articles were multiple publications for the same training programmes.

Figure 6. PRISMA Flow Chart for Source Identification



Note. PRISMA = Preferred Reporting Items for Systematic Reviews and Meta-Analyses.

6.3.4. Data extraction, synthesis and presentation

The data extraction table was adapted from the JBI guideline (Peters et al., 2020) and modified to answer the research question. The research team piloted the table with three sample sources to ensure consistency and accuracy. Once reviewers had familiarised themselves with the table and the process, two independent reviewers extracted the data, including the title, authors, year of publication, type of sources, aims, objectives, methods (study design, population/participants and setting), description of approaches, key findings or results and other information (e.g., description of roles of OHPs in child protection, interdisciplinary collaboration, discussion of equity and culture and funding information). Interdisciplinary collaboration included joint actions of multiple disciplines to support children and families. Referring to child protection statutory agencies was not included as an interdisciplinary collaboration. The primary reviewer collated the two independently extracted datasets. The data were then exported to Microsoft Excel (Microsoft Corporation, USA) for analysis. Quality assessment of the included sources was not conducted, as the primary aim was to map the existing literature on a topic rather than assess the quality or strength of the identified sources.

Qualitative content analysis (Sandelowski, 2000) was used to summarise the content of the data. Current approaches, such as training, practice guides and policy documents, were categorised based on their nature. Then, the data for each category were summarised to understand how each category enhances the responsiveness of OHPs in child protection. The findings were then presented in summarised tables and narrative statements.

6.4. Result

6.4.1. Overview

Most of the 20 sources included in this scoping review were published in USA (11 sources) and UK (6 sources). Other sources were from Sweden and Saudi Arabia, and one international source was from four countries (Croatia, UK, Canada, and Italy). Source publication dates ranged from 2001 to 2021, and most sources were published in the 2010s (14 sources). Regarding methodological design, six sources (30%) used quasi-experimental methods surveying pre- and post-training modules to evaluate approaches utilised by OHPs to enhance responsiveness in child protection. Other sources included practical guidelines for child protection response (eight sources), a discussion about educational resources (three sources) and an analysis of legal and professional standards (three sources). Analysis of the included sources identified three themes: (1) dental-specific education programmes, (2) practical guidelines on child protection responses, and (3) analysis of legal and professional obligations.

6.4.2. Dental-specific education programmes

Exploring the impact of dental-specific education programmes was a central theme of the sources (Table 9). The most common strategies identified from the included sources were

educational programmes designed for frontline OHPs and undergraduate students. Several sources found evidence that both online and face-to-face training sessions significantly improved OHPs' awareness of their role in child protection responses and successfully introduced local response protocols or policies (Al-Dabaan, 2014; Harmer-Beem, 2005; Harris et al., 2011). All sources conducted pre- and post-training surveys or tests that indicated improved responses in terms of self-reported awareness and the perceived likelihood of detecting and responding (Al-Dabaan, 2014; Chaffin & Richter, 2002; Harmer-Beem, 2005; Shapiro et al., 2014; Welbury et al., 2001). Chaffin and Richter (2002) reported statistically significant improvements in post-training online scores and student engagements, and Harmer-Beem (2005) reported statistically significant improvements in various knowledge indicators. Al-Dabaan (2014) also found that 27.4% of participants reported suspected cases in the last month since the completion of the training. Interactive and problem-based learning activities were evident in undergraduate training programmes reported (Ivanoff & Hottel, 2013; Shapiro et al., 2014). Those programmes were more structured and comprehensive than other continuing education programmes for registered OHPs. Participants indicated that the interactive training module was more engaging and helpful (Shapiro et al., 2014).

Many training programmes from the 2000s and early 2010s in USA adopted or modified the Prevent Abuse and Neglect through Dental Awareness (PANDA) programme (originated from USA), which originated as an initiative to assist OHPs in recognising and reporting signs of abuse and neglect among their patients (Brown, 2010; Chaffin & Richter, 2002; Goldie, 2011; Harmer-Beem, 2005). The PANDA training programmes focus on improving perceived knowledge related to CAN and improving the likelihood of reporting any suspected cases. Chaffin and Richter (2002) adopted the PANDA programme for their in-person training session, targeting military personnel to create an understanding of the issue, identify the symptoms of CAN, document observations and refer victims according to the army policy. More recent strategies had elements of interdisciplinary collaboration or efforts to address equity and culture (Al-Dabaan, 2014; Ivanoff & Hottel, 2013) . Ivanoff and Hottel (2013) introduced a multidisciplinary hybrid curriculum so that undergraduate students could work with medical and law students, understand their professional and ethical duties and engage in multidisciplinary problem-based learning together. Al-Dabaan (2014) identified community, society, culture and religious characteristics as potentially influencing factors for CAN. The author recognised that perceptions of parenting, as well as what constitutes abusive and neglectful behaviour, can vary significantly across different contexts, highlighting the importance of cultural sensitivity (Al-Dabaan, 2014). Combining online and face-to-face training modules (Shapiro et al., 2014) and regular updates to include additional resources (Harris et al., 2011) were suggested to ensure that training effectively addresses new challenges and insights into CAN and remains current.

Table 9. Summary of the 'Dental-Specific Education Programme' Theme

Source citation	Location	Key approaches	Descriptions of key approaches	Data collection method	Findings	Discussions on interdisciplinary collaboration or efforts to address equity or culture	Recommended improvements on key approaches
Al-Dabaan, 2014	Saudi Arabia and UK	Online continuing education programme	Online training with eight modules on CAN, providing an overview and catering to both countries' systems	Anonymous post-training survey	Increased identification and reporting of dental neglect in UK compared to Saudi Arabia and significant knowledge increase post-training	Discuss community characteristics, society and cultural characteristics as risk factors	Introduction of the programme to undergraduates and comprehensive multi-agency training
Shapiro et al., 2014	USA	Undergraduate online training programme	Interactive online module with text, images and activities on CAN recognition and reporting	Anonymous pre- and post-training survey	Significant knowledge improvement post-training and high engagement and resource usefulness	-	Combining online training with advanced lecture formats and developing new e-learning strategies
Ivanoff & Hottel., 2013	USA	Undergraduate training programme	Multidisciplinary, hybrid curriculum with traditional problem-based, experiential and reflective learning activities (including actor role-plays)	-	-	Emphasise understanding professional and ethical duties through multidisciplinary learning and advocates	Implementation of community framework for prevention and treatment strategies

Source citation	Location	Key approaches	Descriptions of key approaches	Data collection method	Findings	Discussions on interdisciplinary collaboration or efforts to address equity or culture	Recommended improvements on key approaches
						multidisciplinary problem-based learning	
Harris et al., 2011	UK	Continuing education resources	Handbook and website on child protection awareness, responsibilities, mechanisms to respond and strategies to make organisational changes	Anonymous post-training survey	Improved personal, team and group knowledge of child protection and established child protection leaders and policies; positive feedback on educational resources; and proactive arrangement of further training	Focus on identifying local contacts for advice and referral	Regular updates for additional content and increased availability of resources
Goldie, 2011	USA	Continuing education programme	The PANDA education programme (various PANDA. coalitions across 44 states and seven countries) designed to help health and social practitioners recognise and	-	-	-	-

Source citation	Location	Key approaches	Descriptions of key approaches	Data collection method	Findings	Discussions on interdisciplinary collaboration or efforts to address equity or culture	Recommended improvements on key approaches
			respond to signs of abuse and neglect				
Brown, 2010	USA	Continuing education programme	Training PANDA educators in each region on how to identify signs of abuse and report suspicions	Anecdotal narrative	Positive feedback from a PANDA educator on supporting other clinicians	-	Expansion of training programme
Harmer-Beem, 2005	USA	Continuing education programme	Training using the PANDA Coalition of Maine and the University of Minnesota's Family Violence training model: An Intervention and Training Model for Dental Professionals	Anonymous pre- and post-training survey	Increased self-perceived knowledge and likelihood of reporting post-training	-	Reinforcement of the need for adequate training and seek continuing education courses in abuse recognition and reporting
Chaffin & Richter, 2002	USA	Training programme for military personnel	One-hour seminar on the PANDA training module, focusing on recognition, documentation and referral of CAN cases within the Army Dental Care System	Anonymous pre- and post-training survey	Increased awareness of the issue and the Amy regulations post-training	-	Additional training on Army regulations governing abuse and neglect

Source citation	Location	Key approaches	Descriptions of key approaches	Data collection method	Findings	Discussions on interdisciplinary collaboration or efforts to address equity or culture	Recommended improvements on key approaches
Welbury et al., 2001	UK	Online continuing education programme	computer-assisted learning programme with interactive tutorials, multiple-choice questions and feedback focused on physical child abuse signs	Pre- and post-training survey	Significant post-training improvements in knowledge and clinical recognition of non-accidental injury	Includes a ‘Cultural’ tutorial, specifics not detailed	Cost-effectiveness evaluation

Note. CAN = Child abuse and neglect; PANDA = Prevent Abuse and Neglect through Dental Awareness.

6.4.3. Practical guidelines on child protection responses

Dental-specific practical guidelines on child protection responses were a common theme to enhance the responsiveness of OHPs in child protection responses (Table 10). Many sources provide comprehensive definitions of different types of abuse (Balmer et al., 2010; Harris & Welbury, 2013; Nagelberg, 2015; Offen, 2021; Riley & AlQahtani, 2020; Yellen, 2009). Riley and AlQahtani (2020) discussed how cultural and religious differences can influence definitions of CAN, which can result in varying perceptions among caregivers and OHPs regarding what constitutes abusive or neglectful behaviours. Elements of interdisciplinary collaboration to provide integrated support to children and their families were evident in many guidelines (Balmer et al., 2010; Offen, 2021; Park, 2015). Balmer et al. (2010) recommended how to respond when OHPs consider the possibility of neglect (i.e., looking for other alerting features, discussing with other OHPs and collaborating with other agencies or disciplines) and when they suspect it (i.e., refer to children's social care). Furthermore, some authors introduced the concepts of preventive dental team management and preventive multi-agency management. Preventive dental team management involves using the resources of the dental team to overcome difficulties in accessing care. Preventive multi-agency management involves inviting other professionals to collaborate and create a joint plan for the child's wellbeing. These approaches are promoted as supportive interventions, focusing on early prevention and support rather than directly referring cases to child protection statutory agencies (Balmer et al., 2010; Park, 2015). The concept of interdisciplinarity is repeated in different themes, which signifies its importance in CAN responses. Kvist et al. (2012) audited the practical guidelines of public dental services to see how suspected CAN and repeatedly missed dental appointments are managed by surveying public dental clinicians and department heads. Most clinics had guidelines, but some department heads were unaware of them, and 64% of department heads requested additional educational support to develop further awareness of guidelines for implementation and cooperation with social services (Kvist et al., 2012). Multiple sources recommended training and educational activities to increase awareness and implement practical guidelines for daily practices (Kvist et al., 2012; Nagelberg, 2015; Riley & AlQahtani, 2020).

Table 10. Summary of the 'Practical Guideline on Child Protection Responses' Theme

Source citation	Location	Key approaches	Descriptions of key approaches and relevant findings	Discussions on interdisciplinary collaboration or efforts to address equity or culture	Recommended improvements on key approaches
Offen, 2021	UK	Practical guideline	Detailed definition of safeguarding, types of abuse, prevalence statistics, and an overview of the referral process with a supplementary checklist to reduce barriers in practice, such as appointing a safeguard lead, updating policies and enhancing documentation and training	Refer to the Multi-Agency Safeguarding Hub which coordinates referrals for children and adults	Regular training to improve familiarity with the safeguarding procedure
Riley & AlQahtani, 2020	USA	Practical guideline	Different types of abuse with physical and behavioural indications and outlines reporting processes and emergency situations, highlighting the importance of confidentiality when a child discloses abuse	Discuss cultural differences in defining CAN	Training on office protocols, action plans and improving knowledge of relevant laws
Nagelberg, 2015	USA	Educational supplement with practical guideline	Definitions and signs of different types of abuse, factors associated with abuse, legal requirements and practical guidelines on what to do when suspecting CAN and how to file a report with post-educational assessment	Discuss engaging with local Child Welfare Services	Additional support to improve training
Park, 2015	UK	Practical guideline with case studies	Practical guideline with three case studies - witnessed assault, dental neglect and dealing with aggressive patients, emphasising preventive care and preventive multi-agency management and effective communication	Focuses on engaging with other professionals like health visitors and social workers to collaborate on preventive measures and plans	More use of scenarios within the module for training

Source citation	Location	Key approaches	Descriptions of key approaches and relevant findings	Discussions on interdisciplinary collaboration or efforts to address equity or culture	Recommended improvements on key approaches
Harris & Welbury, 2013	USA	Practical guideline	Different types of abuse and observations to note, with questions that practitioners can ask when suspecting child physical abuse. Also refers to the manual “Child Protection and the Dental Team”	Involves seeking advice from Health Boards’ Child Protection Advisors and local Child Protection Teams	-
Kvist et al., 2012	Sweden	Practical guideline analysis	Public dental service guidelines on handling suspected child abuse, neglect or dental neglect and management routines for children with repeated missed dental appointments - variation in management strategies across departments noted	Discuss engaging with social services	Educational activities to further develop awareness of guidelines and cooperation with the social services
(Balmer et al., 2010	UK	Practical guideline with case studies and professional obligation analysis	Analysis of two national guidelines produced by the National Institute for Health and Clinical Excellence and the British Society of Paediatric Dentistry, providing evidence-based recommendations and case studies on preventive and referral strategies for child neglect and emphasising preventive dental team management, preventive multi-agency management and child protection referral	Discuss preventive dental team management - using resources with the dental team to support families to overcome difficulties in accessing care (social inequity), preventive multi-agency management (inviting health and social practitioners to seek help and provide a joint plan to support families)	Interdisciplinary collaboration and tailoring interventions that work for the child and the family
Yellen, 2009	USA	Practical guideline with case studies	Professional obligations to document and report suspected cases; definitions of different types of abuse; information for documentation; differences in mandatory regulations between states	References to the Child Welfare Information Gateway Mandatory Reporters of Child Abuse and Neglect website	-

Note. CAN = Child abuse and neglect.

6.4.4. Analysis of legal and professional obligations

Across the sources, analysing legal and professional obligations was identified as a common theme (Table 11). One source analysed legal and professional standards from four countries: Croatia, UK, Canada and Italy (Cukovic-Bagic et al., 2013). Some countries (Croatia, Canada and Italy) mandate OHPs to report suspected CAN cases, whereas UK does not mandate OHPs to report concerns (Cukovic-Bagic et al., 2013). Each county had specific legal requirements and ethical codes, but all emphasised the responding obligations rather than diagnosing CAN. Different countries had unique supportive networks and resources available to assist OHPs in collaborating and responding adequately to CAN cases (Cukovic-Bagic et al., 2013). Harris et al. (2018) analysed existing evidence and expert consensus from UK. Legal and professional obligations emphasised the importance of putting systems in place to safeguard children. Responses were divided into three levels: preventive dental team management (focusing on relief of pain and other dental symptoms followed by offering adequate social and health support), preventive multi-agency management (seeking parental consent to consult other professionals to provide joint support), and child protection referral (immediate referral to child protection agencies for significant harm or risk) (Harris et al., 2018). Lastly, Katner and Brown (2012) indicated that a failure to report suspected child abuse in USA may result in the imposition of criminal sanctions, highlighting professional obligations to report CAN. They advocated for an interdisciplinary approach that involves collaborating with state child protection agencies and authorities, which could enhance the responsiveness of OHPs (Katner & Brown, 2012).

Table 11. Summary of the 'Analysis of Legal and Professional Obligations' Theme

Source citation	Location	Key approaches	Descriptions of key approaches	Discussions on interdisciplinary collaboration or efforts to address equity or culture	Recommended improvements on key approaches
Harris et al., 2018	UK	Analysis of existing evidence and expert consensus on legal and professional obligations	Definitions of different types of abuse, including dental neglect, with methods to identify and respond and emphasise the need for systems to safeguard children, focusing on preventive dental team management and multi-agency management, including collaboration with other professionals	Highlight the importance of coordination and support between professionals to address child protection concerns (preventive multi-agency management)	Regular training and improved treatment provision strategies incorporating interdisciplinary approaches
Cukovic-Bagic et al., 2013	Croatia, UK, Canada and Italy	Analysis of legal and ethical standards	Review of mandatory reporting obligations and the protection of vulnerable groups across different countries, including each country's specific legal requirements and the ethical codes emphasising responding rather than diagnosing abuse	References additional support available in each country for collaboration	Calls for greater international consensus on CAN-related legislations and additional training at undergraduate and postgraduate levels
Katner & Brown, 2012	USA	Analysis of criminal and civil status	Legal requirements to protect children from CAN, including the implications of failing to report, incorporating the American Dental Association's Principles of Ethics and Code of Professional Conduct and highlighting professional obligations to report CAN	Emphasise the need for collaboration with state child protection agencies and authorities, incorporating interdisciplinary approaches	Increasing dental professionals' awareness and compliance with updated state-specific information on reporting procedures

Note. CAN = Child abuse and neglect.

6.5. Discussion

To our knowledge, this is the first review to map and synthesise approaches to enhance responsiveness in child protection utilised by the international dental community. One of the central findings of this scoping review was the continuous effort to protect children from potential and actual harm. All approaches aim to enhance the responsiveness of OHPs by increasing awareness, educating them on how to detect and/or guide them on how to prevent CAN, and responding to suspected cases. Educational programmes with mixed-delivery modes, such as online courses, face-to-face seminars and training series, were readily used to educate clinicians and undergraduate students. Training significantly increased their knowledge of CAN and/or improved their attitude to be responsive to CAN issues (Al-Dabaan, 2014; Chaffin & Richter, 2002; Harmer-Beem, 2005; Harris et al., 2011; Shapiro et al., 2014; Welbury et al., 2001). However, most training programmes evaluated their impacts immediately after training, with long-term benefits and impacts unknown. Furthermore, training programme evidence often relied on test scores or self-perceived knowledge and awareness (Chaffin & Richter, 2002; Harmer-Beem, 2005; Harris et al., 2011; Shapiro et al., 2014; Welbury et al., 2001). While evidence-based test scores or self-perceived perceptions of knowledge and awareness remain important, comprehensive evaluation of changes in OHPs' practices is limited. In the study of Al-Dabaan (2014), 27.4% indicated that they had reported a suspected case in the last month since the training. The interactivity of training programmes has become a common theme, especially in recent years. Interaction with other learners, facilitators and other disciplines has made it more engaging for some educational programmes (Al-Dabaan, 2014; Shapiro et al., 2014). Moving away from traditional lecture-style delivery can be beneficial in the sense that it allows OHPs to connect with others, share their own experiences of responding to CAN and build a supporting network. Integrating professionals from related fields into interactive training programmes could enhance interdisciplinary understanding and collaboration. This approach would provide a more comprehensive perspective on child protection, allowing OHPs to better understand their role within the broader child protection system.

Multiple practical guidelines tailored to specific local dental environments and incorporating local support mechanisms were available to OHPs at both personal and organisational levels (Balmer et al., 2010; Harris & Welbury, 2013; Offen, 2021). However, rigorous evaluation of these guidelines was lacking, as most sources were discussion papers or descriptive studies. Many of these guidelines served as educational supplements or signposts, aiding OHPs in understanding their roles and the response strategies available within their communities (Balmer et al., 2010; Harris & Welbury, 2013; Nagelberg, 2015; Offen, 2021; Park, 2015). This was also highlighted in international legal and ethical standards (Cukovic-Bagic et al., 2013). Notably, some guidelines have effectively employed case studies to provide relatable scenarios that help contextualise

theoretical knowledge into everyday practice (Balmer et al., 2010; Park, 2015). The lack of rigorous evaluation suggests a need for future research to focus on assessing the effectiveness and impact of these guidelines in actual practice settings.

Another review finding underscores the significance of preventive approaches, highlighting the dental community's proactive shift towards early intervention and comprehensive care. Various strategies, including practical guidelines (Balmer et al., 2010; Park, 2015) and a legal analysis document (Harris et al., 2018), introduced preventive care and preventive multi-agency management approaches to support children and families to receive adequate dental care, overcome any difficulties in accessing oral health care, and provide joint support with other health and social practitioners to prevent CAN or intervene at the earliest instances. An element of the multidisciplinary approach was also embedded in the educational framework designed by Ivanoff and Hottel (2013). OHPs are not experts in responding to CAN, underscoring the importance of closely collaborating with child welfare professionals (Bradbury-Jones et al., 2021). This element of multidisciplinary and interdisciplinary connection and cooperation was a shared idea across different themes, highlighting its significance in enhancing the responsiveness of OHPs and other professionals involved in child protection. Collaborative approaches ensure that OHPs can contribute effectively to multidisciplinary and interdisciplinary approaches and safely address potential concerns with families in a coordinated and coherent way. OHPs can provide specific dental expertise while relying on broader insights and skills of social workers, paediatricians, and other specialists. This mutual exchange of expertise can be further enhanced through joint training programmes and the development of comprehensive, multi-agency response protocols. The combined efforts of these diverse professionals help creating a safety net that can more effectively identify, prevent and intervene in cases of CAN at an early stage. By adopting such interdisciplinary approaches, the strategies outlined in this review become more applicable and valuable to a wider range of professionals involved in child protection, potentially leading to more holistic and effective interventions.

When addressing CAN, it is crucial to consider global cultural contexts, as different cultures have varying definitions of parenting and disciplinary practices (Lansford et al., 2015; Nadan et al., 2015). Recognising the cultural background of each family is essential for OHPs to respond effectively to any suspected case. Unfortunately, the emphasis on cultural influences appears limited in the reviewed sources. Al-Dabaan (2014) noted that community characteristics, society, and cultural traits are potential factors that influence CAN. However, other training programmes either lack a component addressing cultural influences or fail to describe it explicitly within their texts. Furthermore, the association between social and healthcare access inequities and CAN is widely recognised (Featherstone et al., 2019; Hunter & Flores, 2021). However, current approaches do not focus on highlighting the importance of not solely blaming the family but rather attempting to provide adequate support to children and families. Greater emphasis on integrating

cultural and equity elements into current approaches should be placed to enhance OHPs' awareness and ability to deal with CAN in a culturally competent manner, taking into account the broader social and cultural factors that influence child welfare. Additionally, it is important to address the potential for bias in reporting. Cultural misunderstandings or lack of awareness can lead to the misidentification of certain behaviours as neglect or abuse when they may be culturally normative practices. This underscores the need for comprehensive training that includes cultural sensitivity and awareness to mitigate biases and ensure fair and accurate responses to CAN cases.

6.6. Strengths and limitations

This review followed the widely used JBI scoping review guideline process, ensuring that the review was thorough and replicable. The review adopted a comprehensive and methodological search strategy and a data extraction protocol. All search and data extraction steps were piloted by the research team, and the eligibility criteria were updated to clarify the specific inclusion and exclusion parameters and ensure that the sources included were comprehensively addressed. The eligibility criteria were updated to clarify the specific inclusion and exclusion parameters, ensuring that the included sources comprehensively addressed the research question. The search strategy also included multiple databases and a broad grey literature search to identify any sources related to the research topic. Another strength is that data selection and extraction were conducted independently by two reviewers, and any discrepancies were discussed by the research team, ensuring that all citations and sources were correctly accounted for during the process.

One study limitation was the absence of a quality appraisal of the included sources because it aimed to map approaches to enhance responsiveness in child protection. Thus, we were unable to comment on the robustness or rigour of the sources (Brown, 2010; Goldie, 2011; Yellen, 2009). Secondly, some sources with no or limited descriptions of the approaches taken to enhance the responsiveness of OHPs were excluded, as they had limited ability to answer the research questions. The excluded sources may have offered insights into alternative approaches or highlighted areas in need of further investigation. Thirdly, the definitions of the current strategies and the included types of sources were very broad, which widened the scope of this review. Having different types of sources (e.g., discussion papers, quasi-experimental studies, legal analysis) brought diversity in perspectives but also introduced heterogeneity in study designs, methods and outcomes. This variability may have affected the consistency and comparability of the findings. Despite these challenges, the broad scope of this study enabled the identification of three key themes, providing a rich, multifaceted understanding of the strategies used in the field. A focused review of each theme is recommended to explore specific aspects in greater detail, which will enhance our understanding of the nuances and effectiveness of various strategies. Finally, the review only considered sources in English, which primarily identified sources from Western

countries. This language limitation may have excluded relevant research and viewpoints from non-English speaking regions, potentially missing important cultural perspectives.

A limitation of the included sources is that some did not provide comprehensive descriptions of strategies, potentially omitting critical details such as elements of interdisciplinary collaboration or initiatives addressing cultural aspects and health and social equity issues. For example, Welbury et al. (2001) had a chapter on the cultural aspect of their online training programme; however, the details of its contents and the integration with the rest of the programme were absent. This incomplete description may hinder a full understanding of the strategies' scope and impact, underscoring the need for more detailed reporting in future research to capture these essential dimensions.

6.7. Recommendations for future studies

Considering the review's aim of mapping current approaches and identifying the main themes, a targeted exploration of each identified theme would be beneficial, particularly in the context of interdisciplinary collaboration. This would allow for a deeper understanding of specific areas and potentially uncover the details and complexities that a broad review might miss. Detailed investigations of each theme could reveal insights into their practical applications in various dental and educational settings, as well as in other professional contexts involved in child protection, such as healthcare, social services and law enforcement. These applications are essential for developing more effective interdisciplinary strategies in the field. There is a notable need for evaluative studies that assess the effectiveness and long-term impacts of practical guidelines, educational programmes and interdisciplinary service delivery currently in use. It is critical to promote interdisciplinary learning and clarify how OHPs and other professionals can actively contribute to the broader health and social care system for child protection. Prioritising interdisciplinary cooperation and interconnection would be vital to support children and their families when addressing child safety concerns. Future research should explore how collaborative models can enhance child protection efforts. Such studies would provide valuable feedback on the utility and adaptability of these strategies, potentially leading to better approaches that enhance the responsiveness of not only OHPs, but also other relevant professionals involved in child protection. This research could also improve the understanding of diverse cultural and socioeconomic contexts related to CAN to develop more culturally safe and equitable practices across disciplines.

6.8. Conclusion

This scoping review mapped and synthesised various approaches the international oral health community utilises to enhance responsiveness in child protection. It has revealed ongoing efforts to educate and prepare OHPs through diverse educational methods, practical guidelines, professional standards, and obligations tailored to local needs. However, the review also highlights gaps, particularly in the long-term evaluation of these approaches and in integrating cultural and

social factors. The findings highlight the need for rigorous evaluative studies to assess the practical effectiveness and sustainability of the identified strategies. By addressing these gaps, future initiatives can be better designed to provide OHPs with the evidence-based knowledge and tools needed to respond effectively to CAN in a culturally sensitive manner, ultimately enhancing the safety and wellbeing of children worldwide.

6.9. Supporting information

Supporting Material 1 (Data S1). Supplementary Material 1 Search strategy for MEDLINE, CINAHL, & dentistry & oral sciences sources via EBSCO.

The table is added to the body of the chapter (Chapter 6.3.2). This supporting material is available at: https://onlinelibrary.wiley.com/action/downloadSupplement?doi=10.1002%2Fcar.2904&file=car2904-sup-0001-Supplementary_Material1.docx.

Continued on the next page

Supporting Material 2. (Data S2). Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist.

This supporting material is available at: https://onlinelibrary.wiley.com/action/downloadSupplement?doi=10.1002%2Fcar.2904&file=car2904-sup-0002-Supplementary_Material2.docx

Page 1 – Corresponds to the published article

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	1
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	1
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	2-3
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	3
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	3
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	3-5
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	5
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	Suppl 1
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	5-6
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	6
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	6
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	NA

Page 2 – Corresponds to the published article

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	6-7
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	7, Fig 1
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	7
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	NA
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	7-14
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	7-14, Tables
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	15-17
Limitations	20	Discuss the limitations of the scoping review process.	17-18
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	19
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	Title page

JBI = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.
* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.
† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).
‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.
§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMAScR): Checklist and Explanation. Ann Intern Med. 2018;169:467–473. doi: 10.7326/M18-0850.

6.10. Postlude

This scoping review mapped and synthesised various approaches the international oral health community utilises to enhance responsiveness in child protection. It has revealed ongoing efforts to educate and prepare OHPs through diverse educational methods, practical guidelines, professional standards, and obligations tailored to local needs. However, the review also highlights gaps, particularly in the long-term evaluation of these approaches and in integrating cultural and social factors. The findings highlight the need for rigorous evaluative studies to assess the practical effectiveness and sustainability of the identified strategies. By addressing these gaps, future initiatives can be better designed to provide OHPs with the evidence-based knowledge and tools needed to respond effectively to CAN in a culturally sensitive manner, ultimately enhancing the safety and wellbeing of children worldwide.

As this was the first scoping review that I have conducted, the process was enlightening and significantly advanced my research knowledge.

Continuing scholarly efforts to share research findings, the publication was presented in:

1. *AUT Postgraduate Research Symposium* (Auckland, New Zealand) on 8 September 2023 (audience: postgraduate students, researchers, and academics).
2. *New Zealand Oral Health Association* [Webinar] (Online) on 28 February 2024 (audience: OHTs, DTs, and dental hygienists).

Presentation abstractions were published in:

1. *Rangahau Aranga: AUT Graduate Review* (2023) (Volume 2 – Issue 3) - available online: https://doi.org/10.24135/rangahau-aranga.v2i3.190 (AUT Postgraduate Research Symposium).

The online webinar was particularly memorable as the audience was OHPs who had specific interests in the topic of child protection, unlike conference attendees who are generally more diverse and may not have as focused an interest in this specific area. The one-hour webinar was attended by approximately 150 OHPs. I shared findings from the survey study and the scoping review and had interactive discussions at the end. The engagement allowed for an in-depth exploration of the nuances of child protection within the oral health field. Attendees demonstrated their willingness to improve their knowledge and make positive changes to their practices to better support children and families to address poor and inequitable health and social outcomes that are prevalent in communities.

Through the scoping review and presentation processes, it became evident that understanding the local professional and legal requirements for New Zealand OHPs in child protection is crucial. This highlighted the importance of contextual knowledge in effectively tailoring child protection strategies to meet specific regional needs. In the next chapter, I present the

publication of the legal and professional framework review conducted to document the legal and professional requirements of OHPs in child protection.

7. Legal and Professional Frameworks Review

7.1. Prelude

In this chapter, I present a published article examining the professional and legal requirements for OHPs in child protection in New Zealand. As outlined in the previous chapters, I had several opportunities to engage with numerous OHPs and stakeholders in dental and non-dental settings. They provided insights into their experiences and views on child protection. A recurring theme across these discussions was a lack of clarity regarding the legal and professional obligations of OHPs in child protection. While there was a general consensus about their duty to protect children, many expressed uncertainty about specific actions required, the legal implications of sharing patient information for child protection purposes, and the protections available to them legally and civilly. Additionally, many OHPs viewed their responsibilities primarily as detecting and reporting child protection concerns, overlooking their vital role in supporting children and families to prevent CAN or to intervene at an early stage. This perspective limits OHPs' involvement to reactive measures rather than engaging proactively through collaboration with other health and social care practitioners or by making referrals based on family needs. This limited understanding and approach significantly hinder OHPs from taking more comprehensive actions to assist children and their families effectively.

This led me to critically examine the professional and legal requirements for OHPs in child protection responses in New Zealand and the potential roles of OHPs. Primary sources comprised New Zealand statutes and regulations, professional and ethical standards, and guidance issued by regulators and professional associations, supplemented by material from government legal portals and authoritative organisational websites. Given the review's narrative, exploratory orientation and the heterogeneity of source types, a single predefined search strategy was not feasible. Instead, an iterative, exploratory approach, combining handsearching of key websites and targeted browsing of government legal databases, was used.

One of my greatest challenges was accurately understanding the legal statutes and their implications for OHPs. I was concerned about the possibility of documenting inaccurate information or misinterpreting legal statutes, which could mislead practitioners or affect the validity of the research. To deepen our understanding of healthcare law and legal practices related to child protection and to accurately interpret legal statutes that apply to professional situations, Professor Kate Diesfeld, an expert in the field, joined the research team for this research. Her insights have been invaluable, helping to bridge the gap between legal obligations and clinical practice. I endeavoured to focus on the growing understanding of OHPs' roles in child protection and advocate for systemic and collaborative approaches involving all stakeholders (Jameson, 2016; WHO, 2014). Additionally, I have documented the necessity of developing equity-focused

guidelines informed by Te Tiriti o Waitangi for OHPs, which emphasise culturally responsive practices to address significant health and social inequity associated with child protection issues.

The journal article, titled *Protecting children in Aotearoa New Zealand: A review on legal and professional frameworks for oral health practitioners*, was published in *the Journal of the Royal Society of New Zealand* (Taylor and Francis Ltd.) on 1 December 2024 and is available online: https://doi.org/10.1080/03036758.2024.2430597.

7.2. Introduction

UNCRC (United Nations Human Rights, 1989), which is the most widely ratified treaty, asserts that all children have the right to safety from harmful influences, abuse, and exploitation. In Aotearoa New Zealand, OHPs often find themselves at the forefront of identifying child maltreatment due to their regular contact with children. This is especially important given the high rates of CAN in the country, with recent reports consistently highlighting the need for proactive interventions (Oranga Tamariki, 2023). OHPs, through their frequent interactions with children and adolescents, have the potential to detect and respond to child protection concerns. However, their professional responsibilities in responding to these cases are uncertain.

WHO (2024) defines child maltreatment, which is often referred to as CAN, as:

> *(t)he abuse and neglect that occurs to children under 18 years of age. It includes all types of physical and/or emotional ill-treatment, sexual abuse, neglect, negligence and commercial or other exploitation, which results in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power.*

The negative immediate and long-term consequences of child maltreatment are well-known (Avdibegović & Brkić, 2020; Berber Çelik & Odacı, 2020; Leeb et al., 2011; Mehta et al., 2021). These consequences range from permanent physical and mental health impairments (Mehta et al., 2021) to increased risks of various health, emotional and social conditions, such as depression and anxiety, in adulthood (Avdibegović & Brkić, 2020; Berber Çelik & Odacı, 2020; Leeb et al., 2011).

Unfortunately, in Aotearoa New Zealand some children and adolescents are not adequately protected from maltreatment, which prevents them from growing up in safe, loving and nurturing environments. In the 12 months to 31 March 2023, there were 51,600 reports of concern to Oranga Tamariki and 37,800 assessments or investigations (Oranga Tamariki, 2023). Considering that there were approximately 1,166,000 children on 31 March 2023 (StatsNZ, 2023), this equates to 4.4% reports of concern and 3.2% assessments or investigations of the total child population (Oranga Tamariki, 2023). In the same period, 6,550 family group conferences were held, leading to 780 new entries to the care and protection custody of the chief executive officer of Oranga Tamariki, which increased the total number of children in care to 4,400 (Oranga Tamariki, 2023).

Colonisation has profoundly affected Māori; this is especially so with regard to child protection laws, in which the Crown's failures have been significant (Cox, 2020). Historically, Aotearoa New Zealand's approach to child welfare did not adequately consider Māori perspectives or incorporate tikanga Māori (Māori custom) (Worrall, 2016). Reports such as Puao-te-Ata-tu (Daybreak) (Department of Social Welfare, 1988) highlighted systemic issues in social services that led to disproportionately high numbers of Māori children in state care, reflecting a lack of culturally appropriate care and a breach of Te Tiriti o Waitangi principles (Department of Social Welfare, 1988; Hyslop, 2021). More recent reviews and investigations, such as those by the Children's Commissioner, continue to reveal that tamariki Māori are over-represented in the child welfare system, underscoring ongoing colonial impacts and the urgent need for reforms that respect Māori governance and enhance partnership models as per Te Tiriti o Waitangi (Keddell & Davie, 2018; Keddell et al., 2022). It is crucial that any future actions and reforms are realigned to better serve Māori communities, fostering environments where tamariki Māori can thrive within the embrace of their culture and heritage (Hyslop, 2021; Worrall, 2021). In accordance with Te Tiriti o Waitangi, health practitioners, including OHPs, have a crucial responsibility to partner with Māori to address health and social disparities, ensuring equitable access to protection and support for all children and their families to uphold their rights and dignity (Child and Youth Wellbeing, 2022). It is critical for OHPs to recognise their unique position to protect children from potential harm.

In Aotearoa New Zealand, free dental care is provided to children and adolescents under 18 years of age (Health New Zealand, 2024a). Children and adolescents have regular contact with OHPs in various dental settings, such as general dental practices, specialists' practices, community clinics, school-based clinics and Māori oral health services. For some children and adolescents, regular dental visits may be their sole interaction with healthcare professionals, given that routine medical check-ups are not common for many. Furthermore, they are often assessed by OHPs at schools without parents or caregivers. OHPs' unique frontline position to identify and respond to concerns of child maltreatment enables them to detect signs and symptoms early and to intervene to avert severe health and social outcomes. The potential responses by OHPs may encompass referring children and families to child welfare agencies or family assistance groups, as well as engaging in collaborative and interdisciplinary approaches with partners, including other health practitioners, social practitioners, and school staff, to assist families in exploring their journey to access adequate support. The response should be equity- focused, underpinned by Te Tiriti o Waitangi and aim to improve outcomes for Māori to reduce health and social inequities (Child and Youth Wellbeing, 2022).

Two Aotearoa New Zealand-based studies have emphasised the key role that OHTs and DTs can play in child protection (Han et al., 2022; Tilvawala et al., 2014). In the most recent survey, 74% of participating OHTs and DTs reported they had encountered one or more suspected cases during their careers (Han et al., 2022). However, only 21% reported concerns to child protection

agencies, such as Oranga Tamariki or the New Zealand Police. Interestingly, while almost all participants (99%) considered responding to child maltreatment concerns as a part of their professional role, fear of false reporting (70%) and lack of knowledge on how to report potential cases (56%) were evident. Although the study did not include all OHPs (such as dentists and dental specialists), and its results cannot be generalised to all OHPs, the findings indicate there is room for improvement in identifying early signs of CAN and responding to support children and their families.

WHO (2020) advocates globally scaling up the collaborative prevention approach to enhance the effectiveness of prevention and implementing training and support services. Some countries, including Australia, mandate that OHPs report suspected CAN (Australian Institute of Family Studies, 2023). In contrast, there is no legal mandate for OHPs in Aotearoa New Zealand to report cases of suspected child maltreatment. Instead, OHPs must apply clinical judgment on a case-by-case basis and be guided by their own ethical principles and professional standards (DCNZ, 2021b, 2021c, n.d.). However, the professional standards for OHPs do not provide detailed protocols on how to fulfil their responsibilities when it comes to suspected or actual CAN. Further, no research to our knowledge has explored the professional requirements by which OHPs in Aotearoa New Zealand are governed. As statutes influence OHP practice, it is critical to understand their relevance to provide collaborative care and facilitate adequate support for children and their families.

This review aims to address two key objectives: (1) to critically examine the professional requirements for OHPs in child protection responses in Aotearoa New Zealand, and (2) to propose the development of equity-focused guidelines informed by Te Tiriti o Waitangi, which emphasise culturally responsive practices. This examination will review relevant legislation such as the Oranga Tamariki Act 1989 and the Family Violence Act 2018, alongside professional standards established by DCNZ and other professional bodies. This paper will analyse these documents to clarify OHPs' professional responsibilities in child protection contexts. The scope of this review only considers Aotearoa New Zealand legislation and professional standards that influenced the practices of OHPs as of July 2024; it does not consider any international legislation or dental standards.

7.3. Materials and methods

The primary sources for this review included comprehensive legal documents and professional guidelines from Aotearoa New Zealand. An extensive examination of government legal databases, publications from professional regulatory bodies and publications from professional associations was undertaken. Iterative handsearching of different databases and public websites was conducted. Key documents selected were based on their relevance to the roles and responsibilities of OHPs in child protection. These sources directly related to the legal

obligations and professional guidelines affecting OHPs' practice, with a particular emphasis on child protection. Priority was given to the most recent documents to reflect up-to-date legal standards and professional expectations, especially if multiple versions or amendments were available. Specific legislation such as the Oranga Tamariki Act 1989 and the Family Violence Act 2018, alongside professional standards issued by DCNZ and guidelines by the New Zealand Dental Association (NZDA) were included in the review.

Information extracted from the selected sources encompassed OHP guidelines on managing cases of child maltreatment, ethical obligations, and procedural directives. The narrative analysis involved a critical evaluation of professional guidelines to determine their implications, and potential gaps in addressing concerns related to CAN. The analysis was conducted by an interdisciplinary research team with expertise in dental professions, Hauora Māori, family violence, health law, health ethics, and interdisciplinary health research. The analysis included interpreting practical implications for OHPs in clinical settings and assessing how sources support the practitioners in identifying and responding to child protection issues.

7.4. Findings

A total of four Aotearoa New Zealand statutes, three government departments' guidelines, two regulations, one dental regulatory authority scope of practice document, and one dental professional association policy statement are included in this review.

7.4.1. OHPs' roles in child protection

While the Oranga Tamariki Act 1989 and the Family Violence Act 2018 do not impose a legal duty on OHPs to report suspected CAN, these statutes underline the important role that OHPs play in recognising and responding to CAN within their professional scope. The Oranga Tamariki Act 1989 aims to promote the wellbeing of children and young people. The Oranga Tamariki Act 1989 emphasises the need for a supportive, safe, and caring environment for children and young people. It establishes the principle that their welfare and best interests are paramount considerations in any action or decision affecting them. Specifically, Section 14 of the Oranga Tamariki Act 1989 (Figure 7) deals with the reporting of children or young people in need of care or protection. While it does not explicitly mandate OHPs to report, it provides a framework for anyone who believes that a child needs care or protection to report their concerns to the appropriate authorities; in most cases, this would be Oranga Tamariki. OHPs, through their professional interactions, may become aware of signs of neglect or abuse and, although not legally mandated under this statute, are ethically encouraged to take appropriate action based on Section 14 of the Oranga Tamariki Act 1989.

Figure 7. Oranga Tamariki Act 1989. Section 14.

14 Definition of child or young person in need of care or protection

(1) A child or young person is **in need of care or protection** if—

(a) the child or young person is suffering, or is likely to suffer, serious harm—

(i) in the circumstances described in section 14AA(1); or

(ii) having regard to the circumstances described in section 14AA(2); or

(b) the parents or guardians or the persons who have the care of the child or young person are unable to care for the child or young person; or

(c) the child is a subsequent child of a parent to whom section 18A applies and the parent has not demonstrated to the satisfaction of the chief executive (under section 18A) or the court (under section 18A(4)(a) or 18C) that the parent meets the requirements of section 18A(3); or

(d) the child or young person has behaved, or is behaving, in a manner that—

(i) is or is likely to be harmful to the physical or mental or emotional well-being of the child or young person or to others; and

(ii) the child's or young person's parents, or the persons having the care of the child or young person, are unable or unwilling to control; or

(e) in the case of a child of or over the age of 10 years and under the age of 14 years, the child has committed an offence or offences of sufficient number, nature, or magnitude to cause serious concern for the well-being of the child.

(2) Subsection (1)(a) must be applied in conjunction with section 14AA (which describes the circumstances in which a child or young person is suffering, or is likely to suffer, serious harm).

In community oral health and paediatric dental practices, the Oranga Tamariki Act 1989 plays a critical role in shaping clinical and safeguarding protocols, with particular emphasis on the child's welfare and wellbeing as the foremost consideration. Section 13 of the Oranga Tamariki Act 1989 underpins this principle, mandating that the welfare and best interests of the child or young person be the primary focus in all decisions and actions concerning them. This principle not only guides OHPs in clinical decisions but also leads them towards vigilant safeguarding practices, ensuring that the child's best interests are always at the forefront. Furthermore, Section 18 of the Oranga Tamariki Act 1989 (Figure 8) advocates for the principle of early intervention, reinforcing the importance of identifying and intervening early upon any signs of neglect or abuse within the dental care setting. This proactive approach is instrumental in preventing more severe complications, highlighting OHPs' role in child protection concerns, thereby facilitating timely support and intervention for the child or young persons in a collaborative manner.

Figure 8. Oranga Tamariki Act 1989. Section 18.

18	**Referral of care or protection cases to care and protection co-ordinator or youth justice co-ordinator**
(1)	If the chief executive or a constable believes, after inquiry, that any child or young person is in need of care or protection (otherwise than on the ground specified in section 14(1)(c) or (e)), they must immediately report the matter to a care and protection co-ordinator, who must convene a family group conference under section 20.
(2)	If the chief executive suspects that any child is in need of care or protection on the ground specified in section 14(1)(e), the chief executive may refer the matter to the appropriate enforcement agency.
(3)	Where any enforcement officer believes, after inquiry, that any child is in need of care or protection on the ground specified in section 14(1)(e), that enforcement officer shall forthwith report the matter to a youth justice co-ordinator, who after consulting with that enforcement officer, and if that enforcement officer believes that the making of an application for a care or protection order in respect of that child is required in the public interest, shall convene a family group conference in accordance with section 247.

Also, the Code of Health and Disability Services' Rights (the Code) may be a source of OHPs' duties in this regard. They are in the schedule of the Health and Disability Commissioner (Code of Health and Disability Services Consumers Rights) Regulations 1996. Skegg (2015) observed that while the Code is expressed in terms of rights, clause 1(2) states that "(e)very provider is subject to the duties in this Code". OHPs are health providers for purposes of the Code. Right 4(2) provides that "(e)very consumer has the right to have services provided that comply with legal, professional, ethical, and other relevant standards". Right 4 (3) states that "(e)very consumer has the right to have services provided in a manner consistent with his or her needs". Right 4(4) states "(e)very consumer has the right to have services provided in a manner that minimises the potential harm to, and optimises the quality of life of, that consumer". Thus, OHPs' patients are entitled to these rights and reporting CAN in appropriate circumstances could minimise the potential harm to their patients.

Although there is no legal mandate for OHPs under the Oranga Tamariki Act 1989 and the Family Violence Act 2018; the Crimes Act 1961 may be relevant. Section 515 refers to the duty to provide necessaries and protect vulnerable adults from injury:

> *Every one who has actual care or charge of a vulnerable adult and who is unable to provide himself with necessaries is under legal duty—*
>
> *(a) to provide that person with necessaries, and*
>
> *(b) to take reasonable steps to protect that person from injury.*

Skegg (2015) argued that Section 151 “should not be interpreted to discriminate against young people, depriving them (in effect) the right to necessaries that is provided for people who are eighteen years of age or older” (p. 661).

Also, the duty of a parent or guardian to provide necessaries and protect from injury is contained in Section 152:

> *Every one who is a parent, or is a person in place of a parent, who has actual charge of a child under the age of 18 years is under a legal duty—*
>
> *(a) to provide that child with necessaries, and*
>
> *(b) to take reasonable steps protect that child from injury.*

Skegg (2015) noted both Section 151 and Section 152 apply to those who have “actual care or charge” of these categories of people and create the duty to “take reasonable steps” to protect the person from injury. When a duty applies and is breached, it could lead to a criminal conviction if the other elements of the relevant offences are present.

Potentially relevant offences are detailed in Sections 195 and 195A of the Crimes Act 1961 (Figure 9). Section 195 applies to ill-treatment or neglect of a child or vulnerable adult and Section 195A refers to the failure to protect a child or vulnerable adult. Of relevance to OHPs, these sections apply to “a person who is a staff member of any hospital, institution, or residence where the victim resides” (Section 195(2)(b), Section 195A(2)(b)). OHPs, including paediatric dentists, oral and maxillofacial surgeons, community dentists and OHTs, are involved in providing specialised care to children and adolescents within hospital settings. If there is a major departure from the standard of care expected of a reasonable person, the duty holder may be liable for imprisonment not exceeding 10 years (Section 195(1), Section 195A(1)). An overview of the offences and advice to nurses and health workers more generally on how to best protect their patients was reported by Barnett-Davidson (2012). In her view:

> *… (I)f a nurse has a suspicion based on evidence that another person poses a risk of serious harm to their patient, s/he should act on such suspicion and err on the side of caution, rather than waiting for clear knowledge … (I)t is essential nurses have good systems in place where they work that facilitate reasonable steps they must take to protect such patients.* (p.31)

Thus, understanding the broader legal context surrounding child protection is essential for OHPs.

Figure 9. Crimes Act 1961. Sections 195 and 195A.

195 Ill-treatment or neglect of child or vulnerable adult

(1) Every one is liable to imprisonment for a term not exceeding 10 years who, being a person described in subsection (2), intentionally engages in conduct that, or omits to discharge or perform any legal duty the omission of which, is likely to cause suffering, injury, adverse effects to health, or any mental disorder or disability to a child or vulnerable adult (the **victim**) if the conduct engaged in, or the omission to perform the legal duty, is a major departure from the standard of care to be expected of a reasonable person.

(2) The persons are—

(a) a person who has actual care or charge of the victim; or

(b) a person who is a staff member of any hospital, institution, or residence where the victim resides.

(3) For the purposes of this section and section 195A, a **child** is a person under the age of 18 years.

195A Failure to protect child or vulnerable adult

(1) Every one is liable to imprisonment for a term not exceeding 10 years who, being a person described in subsection (2), has frequent contact with a child or vulnerable adult (the **victim**) and—

(a) knows that the victim is at risk of death, grievous bodily harm, or sexual assault as the result of—

(i) an unlawful act by another person; or

(ii) an omission by another person to discharge or perform a legal duty if, in the circumstances, that omission is a major departure from the standard of care expected of a reasonable person to whom that legal duty applies; and

(b) fails to take reasonable steps to protect the victim from that risk.

(2) The persons are—

(a) a member of the same household as the victim; or

(b) a person who is a staff member of any hospital, institution, or residence where the victim resides.

(3) A person may not be charged with an offence under this section if he or she was under the age of 18 at the time of the act or omission.

(4) For the purposes of this section,—

(a) a person is to be regarded as a member of a particular household, even if he or she does not live in that household, if that person is so closely connected with the household that it is reasonable, in the circumstances, to regard him or her as a member of the household:

(b) where the victim lives in different households at different times, **the same household** refers to the household in which the victim was living at the time of the act or omission giving rise to the risk of death, grievous bodily harm, or sexual assault.

(5) In determining whether a person is so closely connected with a particular household as to be regarded as a member of that household, regard must be had to the frequency and duration of visits to the household and whether the person has a familial relationship with the victim and any other matters that may be relevant in the circumstances.

7.4.2. Reporting and information sharing

Section 66C of the Oranga Tamariki Act 1989 (Figure 10) and Rule 11 of the Health Information Privacy Code 2020 (issued under the Privacy Act 2020) (Privacy Commissioner, 2020) specify the legal requirements for using and disclosing private and confidential information. Two statutes provide that OHPs can use patients' information for the purpose of preventing or reducing the risk of child maltreatment and can disclose it to child welfare and protection agencies or independent people if disclosing the information is reasonably believed to assist them in acting to protect patients from maltreatment. Both the Privacy Commissioner (2015) and Oranga Tamariki (2019) have practical guidelines to assist professionals, including health practitioners when disclosing the personal information of vulnerable children and their families.

Figure 10. Oranga Tamariki Act 1989. Section 66C.

66C Use and disclosure of personal information relating to child or young person or classes of children or young persons

A child welfare and protection agency or an independent person that holds information relating to a child or young person or any class of children or young persons (including information contained in a dataset) may, irrespective of the purpose for which that information was collected,—

(a) use that information for the purposes of—

(i) preventing or reducing the risk of a child or young person being subject to harm, ill-treatment, abuse, neglect, or deprivation; or

(ii) making or contributing to an assessment of risk or need in relation to a child or young person, or any class of children or young persons; or

(iii) making, contributing to, or monitoring any support plan for a child or young person, where the plan relates to the activities and functions of the department; or

(iv) preparing, implementing, or reviewing any prevention plan or strategy issued by the department; or

(v) arranging, providing, or reviewing services facilitated by the department for a child or young person and their family or whānau; or

(vi) carrying out any function in relation to family group conferences, children or young persons in care, or other functions relating to care or protection under this Part; or

(b) disclose (whether on request or on the agency's or independent person's own initiative) that information to another child welfare and protection agency or an independent person if the agency or independent person disclosing the information reasonably believes that disclosing the information will assist the agency or independent person receiving the information to carry out any of the purposes described in paragraph (a).

The capacity to use and disclose personal information is further reinforced by the Family Violence Act 2018. It aims to stop and prevent family violence from recurring. This involves recognising signs of family violence, interrupting the use of violence and keeping victims safe. Section 19 of the Family Violence Act 2018 includes an OHP as a social services practitioner, which is defined as "an individual who is providing education, health, or other social services" and "registered with an authority as a practitioner of a particular health profession under the Health Practitioners Competence Assurance Act 2003". Section 20(4) of the Family Violence Act 2018 indicates practitioners "may disclose the personal information" on reasonable grounds that the disclosure will or may help other agencies or practitioners to stop and prevent family violence and are allowed to share information or upon request for family violence response purposes. Also, Section 24 of the Family Violence Act 2018 (Figure 11) states that practitioners "must consider disclosing personal information". This indicates the importance of documenting considerations and responses taken for information disclosure. The Ministry of Justice (2019) published a practical guideline on sharing personal information safely under the Family Violence Act 2018. The legislation clearly outlines the responsibilities and supporting documents that guide OHPs when making the decisions to disclose personal information to protect children from CAN. This information is important to OHPs.

Figure 11. Family Violence Act 2018. Sections 24 and 25.

24 Duty to consider information disclosure

A holder agency or practitioner must consider disclosing personal information about a victim or perpetrator of family violence under section 20 to a recipient agency or practitioner if the holder agency or practitioner—

(a) believes on reasonable grounds that disclosure to the recipient agency or practitioner will or may help ensure that a victim is protected from family violence; or

(b) receives from the recipient agency or practitioner a request to disclose personal information of that kind or description to the recipient agency or practitioner for use for all or any of the purposes specified in section 20(1)(a) to (c).

25 Protection of holder agency or practitioner disclosing information

(1) This section applies to the disclosure by a holder agency or a practitioner, and in any manner, of information under section 20.

(2) No civil, criminal, or disciplinary proceedings lie against the holder agency or practitioner in respect of that disclosure, or the manner of that disclosure, by the holder agency or practitioner of that information.

(3) However, subsection (2) does not apply if that information was disclosed in bad faith.

Some organisational child protection policies and guidelines encourage informing the child concerned or their family about the proposed disclosure to child protection agencies. This may have led to increased concerns about the OHPs' own protection and avoidance of confronting family, which were reported in the local study (Han et al., 2022). Section 66K of the Oranga Tamariki Act 1989 (Figure 12) requires consultation to be undertaken with the child concerned or their representative about the proposed disclosure if any information is to be disclosed under Section 66C of the Oranga Tamariki Act 1989. OHPs are required to "inform the child or young person concerned or their representatives about the proposed disclosure, including the purposes and likely recipients of any disclosure". Section 66 K of the Oranga Tamariki Act 1989 also specifies that any reasonable assistance should be provided, and any views expressed about the proposed disclosure should be considered.

Figure 12. Oranga Tamariki Act 1989. Section 66K.

66K Consultation to be undertaken when information is requested or proposed to be disclosed under section 66C or 66H

If a child welfare and protection agency or an independent person proposes to disclose information under section 66C, or an authorised child welfare and protection agency or an authorised independent person proposes to disclose information under section 66H, the agency or person must, if it is practicable and appropriate to do so,—

(a) inform the child or young person concerned, or their representative, about the proposed disclosure, including the purposes and likely recipients of any disclosure; and

(b) provide the child or young person or their representative any reasonable assistance necessary to—

(i) understand the nature of the proposed disclosure; and

(ii) express their views about the proposed disclosure; and

(iii) understand the consequences of the decision that is taken in relation to the disclosure; and

(c) take into account any view expressed about the proposed disclosure before deciding whether to disclose the information.

OHPs are placed on the very frontline of the response, which can be challenging, as they are not necessarily experts in child protection. Considering that many OHPs work in isolation, particularly in rural and remote areas, the lack of opportunities to discuss concerns with colleagues or other social practitioners could hinder effective communication. Also, working in isolation will hinder OHPs from discussing the plan with families to disclose their concerns, which would act as a significant barrier. However, Section 66 K of the Oranga Tamariki Act 1989 states that these actions must be taken "if it is practicable and appropriate to do". OHPs are not expected to and should not put themselves in a situation that compromises their own safety and wellbeing while

responding to CAN. Having an open conversation with families can help identify the necessary support that could lead them to provide safe and nurturing environments for children. The Privacy Commissioner (2015) states that “if informing the person would prejudice the purpose of collection, or would be dangerous to any person, then telling the person concerned may be waived in that instance” (p. 4).

7.4.3. Aotearoa New Zealand professional requirements

DCNZ sets competencies, such as required knowledge, skills, attitudes, and behaviours, to ensure that OHPs practise safely, competently, and professionally in their scope of practice. All registered OHPs are expected to understand all competencies and provide care in accordance with those competencies. In terms of child protection requirements, even though competencies differ for each profession, DCNZ (2021b, 2021c) expects all OHPs to be able to “act to protect the interests of tamariki, mokopuna, rangatahi in cases of suspected neglect or abuse by disclosing information to a relevant authority or person” (p.5 - Standard 1.10) as a part of their professional role. Registered OHPs are required to respond to any child protection concerns. However, DCNZ does not provide a specific policy or guideline on child protection.

In addition to the DCNZ Standard, the NZDA, a professional association representing dentists and dental specialists, published the Code of Practice: Child Protection in 2018, which states that:

> *(d)ental practitioners and their staff have a responsibility to be mindful of, and vigilant for, signs that a child may be being maltreated. They must be familiar with the perioral signs of child abuse and neglect. If a practitioner has concerns about the welfare of a child, they must act.* (p. 5)

Although not all OHPs are guided by this Code due to varied professional backgrounds and not all being members of the NZDA, the Code outlines professional requirements, provides practical guidance and defines dental neglect. Dental neglect is a common form of maltreatment that often challenges OHPs when they encounter untreated advanced carious lesions or untreated dental trauma (Kiatipi et al., 2021). The NZDA Code (2018) states that untreated oral disease and a neglected dentition could suggest a possibility of child maltreatment. However, it is important for OHPs to avoid making automatic assumptions, as neglect is applicable when there is a persistent failure, not as a result of caregivers’ lack of knowledge, awareness, or accessibility (New Zealand Dental Association, 2018). A ‘stepwise’ approach to suspected dental neglect cases is proposed for OHPs to manage dental conditions by first providing necessary preventive and restorative care, followed by assistance from other professionals and agencies if the situation does not improve (New Zealand Dental Association, 2018).

7.5. Discussion

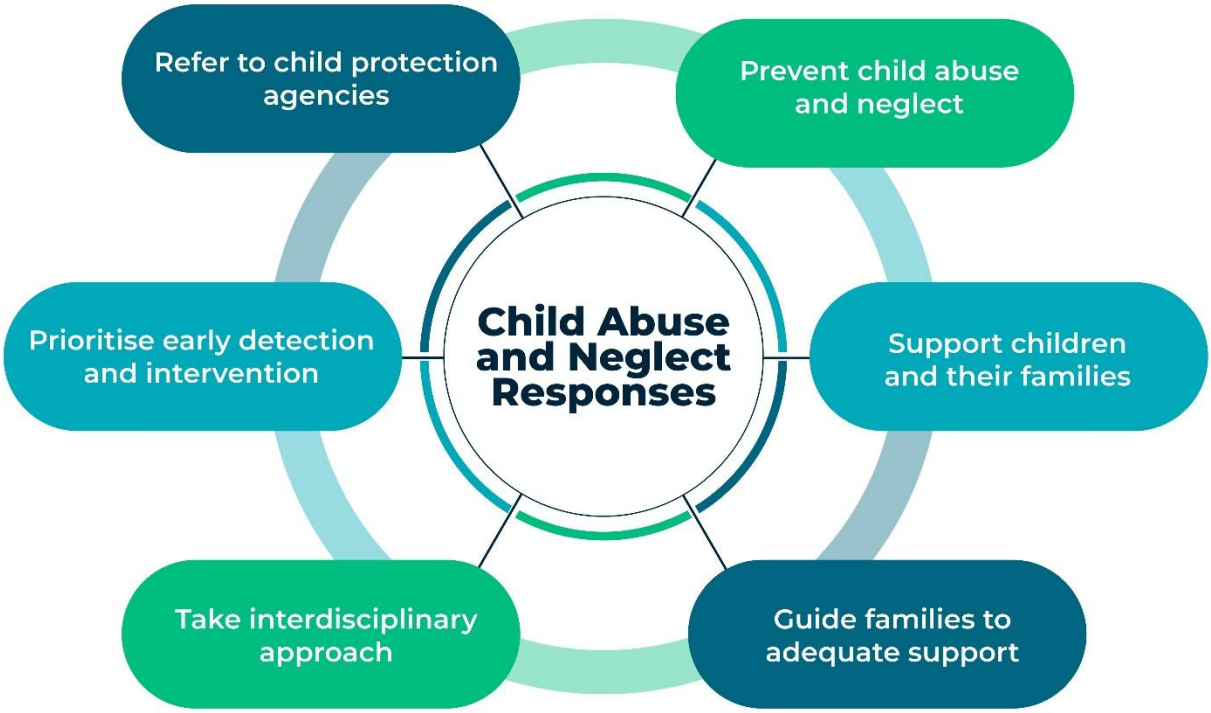
7.5.1. Legal and professional frameworks for child protection

Although there is no explicit duty for mandatory reporting of suspected CAN by OHPs' professional guidelines and legislation provide frameworks for safeguards for child protection. Also, it is crucial to remember children's right to safety under the international treaty UNCRC, which is also supported by the Oranga Tamariki Act 1989. OHPs are required to ensure children's rights are realised and protected. While education regarding child protection responses is included in undergraduate oral health education programmes in Aotearoa New Zealand, more comprehensive training is required and OHPs should develop their knowledge across their careers. Integrating child protection topics into their ongoing professional development plans can significantly enhance their knowledge and responsiveness. Professional associations and public dental services can play a significant role in providing relevant opportunities.

Indeed, employers that are state services, such as Health New Zealand – Te Whatu Ora, are required to have child protection policies that are available to all employees, according to Section 17 of the Children's Act 2014. By extension, employers should routinely train employees regarding the child protection policies.

Most legal and professional frameworks focus on detecting and reporting potential maltreatment cases. By complying with both, OHPs can play a crucial role in preventing child maltreatment and averting severe consequences (Figure 13). Despite the challenges in assessing their effectiveness, early intervention approaches to child protection are viewed by children, mothers, and service providers as essential and beneficial in preventing maltreatment (McCarry et al., 2021). These strategies have potential applications for broader family contexts, addressing the needs of various family members involved in care and support. It is critical to focus on prevention and early intervention before crises escalate. When OHPs believe that children or families need health, financial, or social system support, they can work collaboratively with others, such as public health nurses or social workers, to obtain resources to assist families. For OHPs working in school settings, safeguarding practices should be coordinated with school staff (Ministry of Education, 2024). Therefore, establishing connections with local community support agencies and relevant professionals can be essential for ensuring timely and effective responses.

Figure 13. Roles of Oral Health Practitioners in Child Protection Responses



Note. The image was created using the online visual artificial intelligence tool Napkin AI.

The regulatory body, professional associations, and other relevant stakeholders should collaborate to develop a comprehensive guideline aimed at equipping OHPs with the necessary tools for early detection and intervention in potential child maltreatment cases. This guideline should not only outline the procedures for reporting to child protection agencies such as Oranga Tamariki and the New Zealand Police but also highlight OHPs' potential proactive role in guiding families towards accessing essential government and community resources. Importantly, the document should be informed by Te Tiriti o Waitangi and be culturally sensitive. This approach is crucial in Aotearoa New Zealand, where addressing social and health inequities is a significant public health priority (Ministry of Health, 2023a, 2023b). Equity-focused guidelines should emphasise the importance of culturally responsive practices within oral health care, particularly in child protection contexts. These guidelines must recognise the unique needs of Māori communities, ensuring OHPs engage in culturally safe practices that respect Māori perspectives on health and wellbeing (Keddell & Hyslop, 2019). A key component of these guidelines would involve collaboration with Māori health providers and other community-based services to support

tamariki Māori and their whānau. This approach aligns with the principles of Te Tiriti o Waitangi, which call for partnership, active protection and equity (Came & Griffith, 2018; Durie, 2004). As Came and Griffith (2018) highlighted, culturally responsive care fosters positive health outcomes by building on the strengths and resilience of Māori communities and is especially vital in supporting equitable approaches to child protection. Culturally informed protocols for identifying and reporting CAN should be developed, ensuring OHPs are equipped to address these concerns in ways that promote trust and positive health outcomes for Māori (Hyslop, 2021). The implementation of such guidelines would also involve targeted training for OHPs, focused on improving their cultural competency and ability to engage with Māori in a manner that upholds mana within the healthcare system (Keddell & Davie, 2018).

With appropriate resources, the guideline could be promoted to OHPs through effective channels and accompanied by training opportunities on its implementation. Importantly, the guideline must be revised regularly to ensure the most up-to-date information is delivered to OHPs (Han, Koziol-McLain, et al., 2024). Universities should consider adopting a comprehensive training module to facilitate practical learning, moving beyond conventional lecture-based teaching. It has been suggested that case-based learning with various educational designs, including the use of adult actors, can be instrumental in building critical thinking skills for future OHPs (Ivanoff & Hottel, 2013). Scaffolding learning across different year levels and disciplines can encourage students to learn about complex and realistic problems while developing critical judgment skills (Ivanoff & Hottel, 2013).

7.5.2. Strengths and limitations

This review summarises OHPs' duties regarding child protection in Aotearoa New Zealand by consolidating information from legislation and professional guidelines. It highlights the standards set by DCNZ and the policy guidelines issued by the NZDA, along with various practical guidelines from government departments, including Oranga Tamariki and the Privacy Commissioner.

Despite its comprehensive scope, this review has several limitations. First, the focus is restricted to Aotearoa New Zealand's legislation and professional guidelines without incorporating empirical research or in-depth analysis of international standards. This limitation may restrict the applicability of findings to other jurisdictions and may overlook insights from international practices that could be relevant or more effective. Second, the review adopted a narrative approach rather than a systematic methodology due to the focused scope on OHPs and child protection responses, the need to synthesise diverse sources including legislation and professional guidelines, and the limited availability of empirical research in this specific area. Finally, the review acknowledges the complexity and potential variability in how legal standards and professional guidelines are interpreted and implemented across different settings. This variability can lead to inconsistencies in practice, which might affect the implementation of child protection measures within the dental care setting.

7.5.3. Recommendations for further research

The high prevalence of child maltreatment in Aotearoa New Zealand is well-documented (Oranga Tamariki, 2023) and the critical role of OHPs in child protection is recognised. Yet evidence of OHPs' knowledge, attitudes and experiences regarding child protection is lacking. Although prior studies (Han et al., 2022; Tilvawala et al., 2014) offered valuable insights, their scope was limited to surveys focusing solely on OHTs and DTs. Broadening the research to include a wider range of OHPs, such as dentists and dental specialists, would enrich the understanding of OHPs' current approaches to child protection. Also, directly engaging with practitioners and related stakeholders would help create more tailored and effective OHP training programmes, policies, and practices to safeguard children. Insights from international contexts on how other countries are supporting OHPs may strengthen Aotearoa New Zealand's approach to child protection in oral health care settings (Han, Koziol-McLain, Morse, et al., 2024). Examining these international practices could reveal innovative strategies and practical methodologies. Adopting and adapting successful international models to suit Aotearoa New Zealand contexts could substantially enhance the child protection system in oral health care. To effectively address the high prevalence of child maltreatment in Aotearoa New Zealand, it is crucial to understand the impacts of colonisation and institutional bias on the current inequitable health and social systems (Keddell & Hyslop, 2019). Further research is required on how critical knowledge could be integrated into OHP training programmes and engaging with Māori communities to develop culturally safe and equitable child protection measures in oral health care.

7.6. Conclusion

The engagement of OHPs in child protection within Aotearoa New Zealand is underpinned by legal and professional frameworks. The law and professional standards explored in this article have significant implications for OHPs' roles in child protection and health promotion in Aotearoa New Zealand. This review emphasises the need for robust, equity-focused guidelines for OHPs that integrate principles from Te Tiriti o Waitangi, promoting culturally responsive practices in child protection contexts. Further, strengthening partnerships with Māori health providers and community organisations is essential to ensure these practices are effectively implemented and truly beneficial. To support the health and wellbeing of the nation's youth, it is significant that OHPs receive comprehensive training that equips them to recognise and respond to CAN, demonstrating their collective commitment to protecting Aotearoa New Zealand's younger generation.

7.7. Postlude

In this chapter, I presented a narrative analysis evaluating legal and frameworks for OHPs in relation to child protection responses. The insights drawn from this research have illuminated the complexities and challenges practitioners face when navigating their professional responsibilities and legal obligations. The research findings further highlighted the critical need for clearer, equity-

focused guidelines that OHPs can practically adapt it to their clinical practices. Enhanced interdisciplinary collaborations will be pivotal in promoting proactive, culturally safe, and comprehensive child protection practices within oral health settings. Ultimately, enhancing the role of oral health practitioners in child protection will significantly contribute to the broader societal goal of safeguarding the wellbeing and rights of children in Aotearoa New Zealand. In the next chapter, I present qualitative research exploring the experiences and perspectives of OHPs on child protection, further informing strategies to enhance their effectiveness in child welfare.

8. Qualitative Research

8.1. Prelude

In this chapter, I present a published article detailing findings from a qualitative study. This study aimed to explore the experiences and perspectives of OHPs on CAN prevention, identification, and responses and identify actionable strategies to enhance their responsiveness within various dental settings. Insights from the previous chapters informed the data collection and analysis by focusing on understanding the nuanced perceptions of OHPs regarding their roles, which may have been influenced by social constructs and by identifying underlying issues that OHPs encounter when addressing CAN concerns and engaging in interdisciplinary responses in various dental settings. This helped me to better capture the complexities of their experiences and the contextual factors that impact OHPs' response to CAN. Ethical approval for this qualitative study was obtained in December 2022 (AUTEC 22/172) (Appendix A.2). Research tools, the interviews and focus group protocol, participant information sheets for each participant group, and indicative questions are available in Appendix C.

To prepare for this qualitative research, I pursued several professional development opportunities that improved my qualitative research capabilities, interviewing techniques, qualitative analysis methods, and familiarity with analysis tools. Given the interactive nature of the research and the topic's focus on social and health inequities in communities, I recognised the critical need to ensure my cultural sensitivity and awareness were sufficiently developed to maintain a safe environment for all participants. Consequently, I actively participated in cultural safety and intelligence workshops, as well as Te Tiriti o Waitangi workshops and seminars. These sessions covered a range of topics, from their broader impacts on New Zealand society to more specific issues like family violence, enhancing my understanding of Ti Tiriti o Waitangi principles and the importance of partnership and equity-focused approaches (Waitangi Tribunal, 2023). Because cultural safety and developing cultural awareness are ongoing journeys, it is not definitive to say that I have fully addressed all concerns. However, this research project has been a vital part of my continuous learning cycle, a process that will extend beyond the completion of this doctoral project. For the research design, focus groups were preferred because shared perspectives, team processes, and service contexts shape OHPs' child protection responsiveness. Group discussion supports the co-construction of meaning and identifies common barriers and enablers through peer interaction. However, consistent with the study's pragmatist orientation to understand practice-relevant insights across settings, one-to-one semi-structured interviews were also offered when group participation was impractical or when a participant preferred a private setting to share their experiences. Individual interviews provided deep, personalised insights into the perspectives of OHPs. Combining the two methods enhanced the richness of the data for knowledge production

and synthesis by capturing both shared norms in group dialogue and more sensitive, personal accounts in private interviews (Lambert & Loiselle, 2008; Patton, 2015).

The multifaceted challenges posed by the COVID-19 pandemic and government responses and restrictions profoundly influenced the execution of my research. New Zealand had several national and regional lockdowns from 2020 to 2022. During this period, all health and social services were impacted. Oral health services were limited to emergency care and contact with patients was significantly restricted. Certain areas, such as Auckland, were under strict and prolonged lockdown measures. As restrictions gradually lifted, OHPs could resume providing care. However, they faced a significant backlog, which put significant pressure on service delivery. This high demand for dental services meant that practitioners were often overwhelmed and had limited time and availability to participate in research activities. Consequently, it became challenging to engage with OHPs and relevant stakeholders, such as COHS and dental professional associations. Recruiting participants, conducting interviews, and organising focus groups were particularly difficult due to these scheduling constraints and the ongoing effort to clear the patient backlog.

Despite the challenges, I was able to find opportunities to interact with OHPs and present my research to recruit potential participants. The relationships and stakeholder engagements that were fostered throughout this doctoral project were crucial in navigating these hurdles. As part of the recruitment strategy, I presented findings from previous phases (Chapters 4 to 7) at the 2024 New Zealand Society of Hospital and Community Dentistry Conference, held on 26 July 2024 in Wellington, New Zealand. This conference was a pivotal platform for engaging directly with dentists and dental specialists working in hospital and community settings, who serve a diverse patient base, including children and adolescents.

I successfully completed data collection from participants with diverse backgrounds and analysis using reflective thematic analysis (RTA) (Braun & Clarke, 2019, 2022). Guided by Creswell & Creswell (2023), sampling was guided by the information power principle. Given the study's focused aim and a small population group, the information-rich dialogues and the use of RTA for in-depth analysis achieved sufficient information power with a relatively modest sample (Malterud et al., 2016). In terms of data analysis, focusing on the patterns across data from three groups, I have analysed them as a single data set. The professional role was retained as a descriptor in the analysis; however, the comparative analysis revealed strong thematic convergence, including a shared call for dental-specific child protection educational opportunities and support for interdisciplinary collaboration. Accordingly, an integrated set of themes was presented, instead of role-based analyses.

In RTA, a researcher's subjectivity and reflexivity are acknowledged as primary research tools and resources in the analysis (Braun & Clarke, 2022; Byrne, 2022). This approach highlights the value of incorporating personal insights into the research framework to ensure a more

comprehensive understanding of the data. To clearly communicate my positioning and analytical perspectives, I shared my research journey background in Chapter 1.2 and included a personal reflection statement in the following section (Chapter 8.2).

The journal article, titled *Exploring child abuse and neglect responses: Qualitative insights from oral health practitioners in Aotearoa New Zealand*, was published in *Child Abuse & Neglect* (Elsevier) on 28 August 2025 and is available online: https://doi.org/10.1016/j.chiabu.2025.107655.

8.2. Personal reflective statement

This personal reflection statement was written during the planning stage of the research and further developed through this qualitative research, reflecting on my personal and professional experiences and perspectives.

As an immigrant from South Korea, my perspective on family relationships and child discipline is shaped by nuances influenced by Eastern cultural norms. Initially, I had a more accepting view of physical discipline, which is more prevalent in Eastern cultures. This perspective began to shift when I moved to New Zealand and was introduced to diverse cultural practices during my secondary education, where I seamlessly adapted to living in a multicultural society. However, training as a health practitioner introduced me to cultural, ethical, and professional dilemmas that challenged these earlier beliefs and prompted a significant shift in my understanding. This was particularly noticeable as I encountered diverse patient backgrounds and learned to navigate the delicate balance between respecting cultural practices and adhering to ethical standards in healthcare, highlighting the complexity of providing culturally safe care. Now, I am financially stable in New Zealand, but my family faced significant hardships upon our migration. We did not know how to access health and social services, which would have been significantly beneficial during our early years in New Zealand. These challenging experiences not only strengthened our family bonds but also profoundly shaped my family-oriented worldview.

Professionally, I am committed to enhancing my responsiveness to protect children from abuse and neglect and contributing to the oral health professions to facilitate collective efforts in child protection. Therefore, my research is driven by a firm belief in our collective responsibility. My role as an academic in the dental and oral health fields could have influenced the dynamics of my interactions with research participants, as they might have sensed my strong interest in the research topic. This awareness could have shaped their responses and the information they chose to share. I tried my best to maintain a neutral stance and used open-ended questions that encouraged participants to express their views freely.

Lastly, I am privileged to engage in community initiatives, working closely with local boards to advocate for ethnic minorities. Through this work, I have witnessed numerous families who lack access to community and social support, as my family experienced when we first moved to New

Zealand. This experience has reinforced my commitment to advocating for improved support structures within our communities.

8.3. Introduction

Most children in Aotearoa New Zealand grow up in safe and nurturing environments. However, some require extra help from child protection agencies to safeguard them from harm. According to the Annual Report 2023/24 from Oranga Tamariki, approximately 60,000 required support services from Oranga Tamariki and its partners, such as New Zealand Police and community-based social service providers, and 4200 were in the care or custody of Oranga Tamariki. The adverse consequences of CAN significantly affect a child's health and quality of life, impacting their psychosocial wellbeing, academic performance, and overall development (Bradbury-Jones et al., 2021). Unfortunately, Māori are disproportionately impacted (Oranga Tamariki, 2024) as colonisation profoundly affects Māori, especially in the early care and protection system (Cox, 2020). Colonisation has had and continues to have devastating and enduring impacts on Māori families. It has led to the loss of land, te reo Māori (language), and traditional knowledge systems, as well as the disruption of Māori structures that traditionally supported child wellbeing (Moewaka Barnes & McCreanor, 2019). Colonial policies dismantled Māori social structure and diminished families' authority to raise children according to tikanga (Cox, 2020).

Upholding the rights of children to safety and protection is a shared responsibility that extends beyond social practitioners. It requires collaborative efforts from all sectors, including health, social services, and education, as well as active involvement from communities and the general public. The orofacial signs and symptoms of CAN, particularly those of physical and sexual abuse, are well-documented (Sarkar et al., 2021; Spiller, 2024). Importantly, a strong link also exists between CAN and poor oral health (Bradbury-Jones et al., 2021; Ford et al., 2020). OHPs are well-positioned to identify suspected dental neglect and recognise clinical indicators such as untreated early childhood caries, poor oral hygiene, and other signs of inadequate care that may indicate broader neglect issues (Bhatia et al., 2014; Bradbury-Jones et al., 2013; Kiatipi et al., 2021). Furthermore, they can provide support to families and refer them to appropriate support networks to address systemic limitations that may elevate the risk of CAN (Han, Koziol-McLain, Diesfeld, et al., 2024).

Systemic structures grounded in traditional Western health paradigms often clash with Te Ao Māori (Māori worldviews) and Pasifika worldviews, creating barriers to service access. Pasifika communities, much like Māori communities, experience the enduring impacts of structural inequities and systemic barriers (Sa'u Lilo et al., 2020). This misalignment has led to significant missed opportunities for delivering equitable and culturally responsive care (Palmer et al., 2019; Sa'u Lilo et al., 2020). Addressing these issues requires implementing partnership models that uphold Te Tiriti o Waitangi (Keddell et al., 2022). The principles of Te Tiriti o Waitangi, as articulated

in Whakamaua: Māori Health Action Plan 2020-2025 (Ministry of Health, 2020), indicate that health practitioners, including OHPs, have responsibilities to uphold tino rangatiratanga, actively partner with Māori, protect Māori health interests, and address inequities to ensure better and more equitable health and social outcomes, supporting all children and families to uphold their rights (Child and Youth Wellbeing, 2022).

In New Zealand, OHPs are one of the key forefront practitioners in the early detection and response to CAN (Han, Koziol-McLain, et al., 2024). The New Zealand government provides free dental care to children and adolescents under 18 years of age (Health New Zealand, 2024c), which offers opportunities for OHPs to have regular contact with children and their families in various dental community settings. New Zealand has numerous registered dental professionals, including OHTs, DTs, dental specialists, and dentists, who provide comprehensive preventive and restorative dental care for children. OHTs and DTs specialise in preventive and clinical dental care (Bhatia et al., 2014; Bradbury-Jones et al., 2013). Generally, children from birth up to approximately 13 years old (school year eight) are eligible for free dental care provided by COHS operated by Health New Zealand – Te Whatu Ora (2024c). This care extends to adolescents from school year nine until they turn 18 years old and is delivered by private dental practices under the government's free dental care scheme (Health New Zealand, 2024c). Hence, dental services for these age groups are provided in various dental settings, including school-based community clinics, mobile dental clinics, and private dental clinics, with or without the presence of caregivers. If specialised care is necessary, such as treatments under general anaesthesia, referrals can be made to the public hospital system, which is equipped with comprehensive dental facilities and specialised expertise. For many children, these funded, regular dental visits may be their sole interaction with a healthcare professional, particularly as routine medical check-ups are not commonly scheduled for many families.

Although OHPs in New Zealand have no explicit duty to report child protection concerns, professional guidelines (DCNZ, 2021b, 2021c, 2021d) provide broad expectations around ethical conduct, patient-centred care, and cultural safety, and legislation, such as the Oranga Tamariki Act 1989 and the Family Violence Act 2018, provide broad frameworks for protecting children from CAN (Han, Koziol-McLain, Diesfeld, et al., 2024). OHPs can play a significant role in child protection through prevention, identification, and response strategies. Children and families requiring social and health support can be referred to child protection agencies, such as Oranga Tamariki, Stand Tū Māia[8], and Women's Refuge, or benefit from interdisciplinary approaches involving collaboration with other health and social practitioners (Han, Koziol-McLain, Diesfeld, et al., 2024). However, this relies on individual practitioners' attitudes and perspectives toward CAN and their understanding of their roles in child protection. Currently, there is no standardised child

[8] A national Aotearoa New Zealand charity that provides therapeutic social services for tamariki and their whānau affected by trauma, neglect, or complex family stress

protection training required for OHPs at the undergraduate level or as part of ongoing professional development, although some may receive workplace-specific training, especially within public health services.

A New Zealand-based survey of OHTs and DTs highlighted that 74% of respondents had one or more suspected CAN cases during their careers; however, only 21% reported their concerns (Han et al., 2022). Respondents identified fear of false reporting (70%) and lack of knowledge of reporting (56%) as potential barriers to being responsive (Han et al., 2022). These findings align with international studies (Al-Dabaan et al., 2014; Kugananthan et al., 2021), which have identified discrepancies between OHPs' knowledge of CAN and their confidence and attitudes towards responding to potential CAN cases.

To support OHPs in responding to child protection concerns, there have been ongoing global efforts to provide profession-specific guidance and training. In the United Kingdom, for instance, the government-issued document, Safeguarding in general dental practice: A toolkit for dental teams (Public Health England, 2019) offers practical resources for recognising and responding to CAN within dental settings. In the United States, the American Academy of Pediatric Dentistry (Tate et al., 2024) publishes and regularly revises a clinical report accompanying practical guidelines outlining the OHP's responsibilities in identifying and managing cases of suspected CAN. Furthermore, since 1996, national-level, dental-specific child protection training programs have been offered in the United States and other countries to strengthen the preparedness and confidence of dental professionals (Stechey, 2001). These international examples highlight the importance of equipping OHPs with clear protocols and training tailored to the dental context.

Although the New Zealand study (Han et al., 2022) provided some insights into the attitudes of New Zealand OHPs toward CAN, the survey design limited the in-depth exploration of individuals' experiences in responding to CAN, as well as their attitudes and perspectives toward their roles in child protection. Furthermore, it remains unclear whether international strategies are suitable for New Zealand, where OHPs often work in isolation in rural and remote communities and serve populations with distinct cultural needs. Strategies must be adapted to reflect New Zealand's diverse cultural landscape, particularly Māori and Pasifika communities. This study aimed to: (1) explore the experiences and perspectives of OHPs who provide regular dental care services in various dental settings in relation to CAN prevention, identification and responses, and (2) identify strategies that could enhance OHPs' responsiveness to CAN.

8.4. Method

This study was approved by the Auckland University of Technology Ethics Committee (AUTEC 22/172) (Appendix A.2). All participants provided their written informed consent.

8.4.1. Study design and recruitment

Adopting a pragmatic approach (Creswell & Creswell, 2023; Gray, 2018), this study aimed to identify practical ways to support OHPs' responsiveness to CAN, recognising the influence of complex social, historical, and professional contexts. Semi-structured focus groups were the primary method, with one-on-one interviews offered for those unable to attend. OHPs' responsiveness to CAN recognises the influence of complex social, historical, and professional contexts. Semi-structured focus groups were the primary method, with one-on-one interviews offered for those unable to attend (Krueger & Casey, 2014; Tausch & Menold, 2016), while interviews provided deep, personalised insights. Combining the two methods enriched data for knowledge production and synthesis (Lambert & Loiselle, 2008).

For the Therapists and Dentists Groups, inclusion criteria required participants to be registered OHPs holding a valid annual practising certificate with DCNZ and to have provided dental care to children and adolescents within the past 12 months in any dental setting. For the Managers Group, inclusion criteria included holding a managerial role within COHS and having operational responsibility for the delivery of children's dental services.

Participants were recruited between April 2023 and August 2024. OHTs and DTs were recruited through professional associations, including New Zealand Oral Health Association - Te Ohu Pūniho Ora O Aotearoa and Te Ao Mārama – Aotearoa Māori Dental Association. Research flyers were shared with members via internal emails and newsletters. Dentists and dental specialists were recruited through the professional association, the New Zealand Society of Hospital and Community Dentistry, where the first author presented at the annual conference in 2024 (Han, 2024b). The association represents practitioners in the public and hospital sectors, and later distributed research flyers to its members via internal channels. For dental managers, a research flyer was shared with all COHS managers during their regular national meetings, where they convene to discuss national and regional community oral health-related agendas. For all three groups, interested participants contacted the primary author, who then provided the research information sheet, consent form, and the ability to ask questions about the study. The recruitment period lasted eight weeks for each group, and all interested individuals were included in the study after their eligibility was confirmed.

8.4.2. Data collection

Upon the return of consent forms and completion of the eligibility check, OHTs and DTs participated in one of two focus groups (90 minutes each) or an individual interview (45-70 minutes). To take a pragmatic approach, individual interviews were conducted with all dentists, dental specialists, and COHS managers due to the inability to find mutually agreeable times for a focus group. Given the national recruitment and the need to promote participant diversity, all data collection was conducted online. The interview questions were informed by the findings of previous quantitative research (Han et al., 2022) and a scoping review (Han, Koziol-McLain, Morse, et al.,

2024; Han, Koziol-McLain, et al., 2024). The questions were carefully worded to minimise assumptions or judgment and were pilot-tested and refined in collaboration with the interdisciplinary research team, including a Māori researcher, to ensure cultural sensitivity and relevance. The questions were designed to gather information about participants' views on their roles in child protection, their experiences in recognising and responding to concerns about child abuse and neglect, the barriers and enablers to being more responsive, strategies to enhance OHPs' responsiveness and ways to address social inequities in child protection. To ensure that the process was culturally safe for all participants, the research protocol emphasised respect for participants' values, identities, and lived realities. Space was created during sessions for relationship-building, supporting a safe environment where participants felt heard and acknowledged. Furthermore, the involvement of a Māori researcher in both protocol development and the interpretation of data from Māori participants helped ensure that the research process upheld cultural integrity.

The primary author conducted all focus groups and individual interviews. All sessions were conducted online, audio-recorded and transcribed. As the study addressed sensitive issues surrounding CAN, ethical measures were implemented to ensure the safety and wellbeing of the participants and researchers. Participants were allowed to withdraw their consent at any stage and were offered counselling services if they desired. The primary author, a registered OHP, made a conscious effort to maintain a moderator role without participating in discussions. The primary author took notes during the sessions to facilitate discussions and maintained a journal to aid in self-reflection on the process, which is a key aspect of reflective qualitative research. Debriefing with the research team occurred between sessions to share experiences and seek contributions on strategies for improvement, ensuring that lessons learned were integrated into future practices.

8.4.3. Data analysis

Qualitative data were transcribed and de-identified using the online transcription tool Otter.ai (Otter.ai, Inc., US). Vocalised pauses, such as ‘um’ and ‘ah’, were removed to enhance the clarity and readability of transcripts. The primary author reviewed and verified all transcripts for accuracy before importing them into NVivo v20 (Lumivero, US) for data management and analysis. To further protect participants' confidentiality and protect data sovereignty, all online transcription data were permanently deleted following upload into NVivo. In the New Zealand context, data sovereignty holds particular significance for Māori, as it affirms their right, guaranteed under Te Tiriti o Waitangi, to control the collection, ownership, storage, and use of their data. This extends beyond privacy; it is about upholding tino rangatiratanga and ensuring Māori retain authority over their stories, knowledge systems, and lived experiences (Lilley et al., 2024). Respecting Māori data sovereignty is essential in reversing colonial patterns of extraction and misrepresentation, and is a critical obligation for all researchers working with Indigenous communities globally (Carroll et al., 2023). A Māori researcher maintained sovereignty over the interpretation of the data from Māori

participants, ensuring that their perspectives were analysed and represented in a culturally appropriate and respectful manner.

The research team followed RTA approach as described by Braun and Clarke (2022) to ensure that participants' subjectivity and their perspectives were respected and to embrace researchers' reflexive interpretations (Braun & Clarke, 2019; Byrne, 2022). RTA acknowledges researcher subjectivity and reflexivity as primary analysis tools, recognising that “knowledge generation is inherently subjective and situated” (Braun & Clarke, 2022, p. 8). Authors have their own understandings of the topic, which could serve as resources in the analysis (Gough & Madill, 2012). In this case, the research team had varying interests in CAN, family violence, oral health, dentistry, culturally safe and responsive practices, interdisciplinary health practices, and oral health education. Researchers' professional and cultural backgrounds, including those with Māori and migrant identities, enriched the analysis by bringing attention to equity, cultural integrity, and the importance of context in understanding OHPs' roles in child protection.

The six-step RTA analytic process designed by Braun and Clarke (2022) was followed: (1) dataset familiarisation, (2) data coding, (3) initial theme generation, (4) theme development and review, (5) theme refining, defining, and naming, and (6) write-up. The primary author conducted the initial coding of all data. Other authors independently analysed selected transcript sections, followed by a research team discussion. This collaborative process involved clarifying the code labels and deepening the understanding of each category. Subsequently, theme development was undertaken collectively, articulating and defining ideas thoroughly to ensure a comprehensive analysis. Candidate themes that addressed the research question were identified, and related codes were collated (Braun & Clarke, 2022). The themes were then further collapsed together and split into new themes to ensure that the central organising concept of each theme was clearly characterised (Braun & Clarke, 2022). When presenting direct quotations from participants, the following format (Group, Participant number), such as (Managers, P4) for the fourth participant from the Managers Group, was used to indicate group affiliation while maintaining confidentiality.

8.5. Results

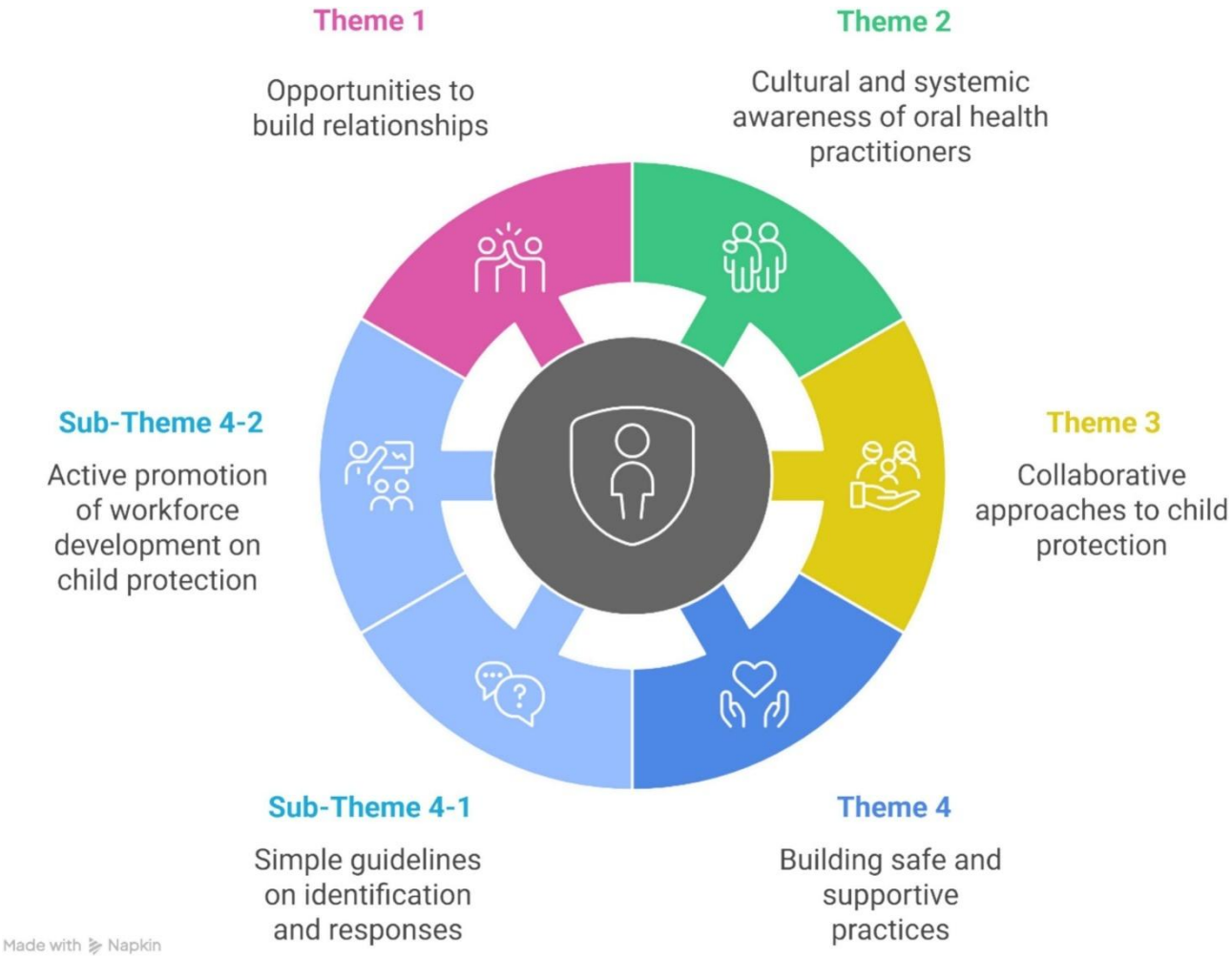
A total of 21 participants were recruited from widespread geographic regions of New Zealand: 15 OHTs and DTs (Therapists Group), four dentists and dental specialists (Dentists Group), and five community oral health service managers (Managers Group). One manager was a non-dental health professional managing regional community oral health services, whereas the others had experience as a registered OHP in their working lives. Table 12 outlines the participants' characteristics, including geographical locations and primary employment sectors. For the Therapists Group, two focus groups were conducted (one with six participants and another with three participants), and three participants were interviewed individually through semi-structured one-on-one interviews.

Table 12. Demographic Distribution of Study Participants

Participant characteristics	Count (n = 21)
Professional background	
Oral health therapist	9
Dental therapist	6
Dentist	3
Dental specialist	2
Non-dental profession	1
Geographic location	
Upper North Island	10
Lower North Island	7
South Island	4
Primary employment	
Public dental sector	15
Private dental sector	5
University dental setting	1

Participants shared their understandings and perspectives on their roles in child protection, as well as their experiences involving child protection responses within the dental team and in collaboration with other healthcare, social, or educational providers. Focus groups and semi-structured one-on-one interviews provided opportunities for reflective practices, transitioning from deficit-oriented responses to strength-based approaches. The three participant groups shared similar themes; hence, data from the three groups were analysed together. Participants highlighted the current strengths of practitioners and the dental sectors in supporting children and families. The analysis identified four overarching themes (Figure 14), (1) opportunities to build relationships, (2) cultural and systemic awareness of OHPs, (3) collaborative approaches to child protection, and (4) building safer and supportive environment, and two sub-themes under the fourth theme, (4-1) simple guidelines on identification and responses and (4-2) active promotion of workforce development on child protection to address the research aim of exploring the experiences and perspectives of OHPs regarding CAN prevention, identification and responses, and identifying strategies to enhance their responsiveness to CAN.

Figure 14. Summary of Themes and Sub-Themes



Note. The image was created using the online visual artificial intelligence tool Napkin AI.

8.5.1. Theme 1: Opportunities to build relationships

Participants recognised their important role in engaging regularly with children and their families across various dental settings, which offered valuable opportunities to build relationships and rapport with children, families, and communities. The government's free dental scheme for children enabled OHPs to provide care in both clinical and community contexts, sometimes without caregivers present. Participants emphasised the frequency and unique nature of interactions:

> *I do really think that, as health professionals, we [OHPs] are probably most exposed to children, other than their teachers.* (Therapists, P5)

> *That closeness and frequency of visits that we [OHPs] get that other health professionals don't get. So, I would like to think that we would pick up a few things if you really know the children, the environment, and their families.* (Therapists, P4)

These opportunities and relationships, primarily focused on achieving better and more equitable oral health outcomes, enabled OHPs to interact regularly with families and provide adequate support for nurturing children in safe environments. This allowed OHPs to engage in preventative approaches, detect any potential physical or behavioural signs of abuse or neglect, and take necessary steps to support children and families, as participants explained:

> *I draw the conclusion by watching how the child behaves around the parent as well… I see if children are quite comfortable with their parents… It seems okay if they don't seem frightened, or they don't seem too quiet and are not saying anything.* (Therapists, P5)

> *People within the community would make approaches to us [OHPs] because we make whānau [family] more comfortable to actually ask for help and are able to talk to people [other professionals] to get the help that they need.* (Therapists, P2)

Although OHPs were in that unique space, a deficit dilemma of limited organisational resources was presented, which hindered the provision of adequate oral health care for children. Participants expressed that the pressures of limited time and the demand of attending to a high volume of patients meant that critical child protection roles could be overlooked. One participant shared that:

> *We [community dental teams] are just trying to develop a level of comfort by doing the best that we can, given what we have.* (Managers, P2)

Participants noted increased challenges for OHPs working in private dental practices and rural areas in fostering meaningful relationships with children and their families due to heavy workloads and challenges in addressing the significant oral health needs of these communities, which, in turn, limited opportunities for relationship building. One participant described the working environment in a rural and low socioeconomic area as:

> *Imagine you're in a rural and low-decile area [communities with lower socioeconomic status] where you're just on your own. It's just you and your dental assistant, and you have an office staff. That's it.* (Dentists, P3)

Participants expressed the need for resources and support to utilise OHPs' opportunities and strengths in building relationships to "help children… to access the care that they need" (Dentists, P2), which can create safe and nurturing environments for children and their families.

8.5.2. Theme 2: Cultural and systemic awareness of OHPs

Participants recognised the complex nature of CAN and the diverse factors associated with children, families, and their communities. Particularly, inequitable access to oral health services and other health and social care services was emphasised as an influencing factor that could inadvertently contribute to the behaviours of caregivers:

> *Often, what we [OHPs] see in the mouth in terms of dental neglect is only the first step; and actually, if dug a bit deeper, there are a whole lot of wider issues going on for some whānau.* (Managers, P1)

Participants also acknowledged deficiencies in health literacy and education for caregivers, which were essential for nurturing children in safe and supportive environments and accessing adequate health and social care:

> *If they [caregivers] see a hole, they see a hole. But they don't actually know the impact of all that [oral diseases] … A lot of health education and literacy are not there, even though we [OHPs] think they are common knowledge. It's actually not for many people.* (Therapists, P1)

Some participants observed that Māori and Pasifika peoples often faced poorer health and social outcomes, including oral health inequities, compared to non-Māori and non-Pasifika peoples. Māori and Pasifika participants, in particular, shared that their communities were frequently misunderstood and encountered culturally insensitive care, which they felt acted as a barrier to accessing oral health services within the current oral health systems:

> *I [Māori Pacific OHP] do find that my people, Māori Pacific people, are often misunderstood (by OHPs), which is a barrier for them not wanting to come into services because of the vibe that you get (from OHPs). It's an attitude that you get. It's a response or non-response that you get.* (Therapists, P12)

Participants emphasised the importance of developing cultural awareness and a professional attitude that acknowledged the challenges faced by families influenced by inequitable systemic structures. They indicated that demonstrating genuine intentions to support children and families in overcoming these challenges was viewed as an integral part of child protection and responses. Furthermore, participants highlighted the importance of providing informed and culturally sensitive care and support that aligns with the needs of children and their families, ensuring that all interventions were appropriately tailored and respectful of cultural and social contexts:

> *There's a lot of generational stuff that happens… We [OHPs] see that [poor oral health] or potentially see that as neglect, but they [caregivers] don't. This is how they have always lived, or this is how it was. So you've got to be quite respectful and mindful of those things [generational norm].* (Therapists, P1)

8.5.3. Theme 3: Collaborative approaches to child protection

Participants recognised the challenges in responding to CAN, citing their limited expertise and confidence in this area. A sense of fear and uneasiness associated with the nature of CAN was noted:

> *I understand that we have to protect children. But I find it almost intimidating if I actually notice something and actually suspect something – how to approach and how to actually respond.* (Therapists, P6)

A degree of uncertainty of their observations and a reluctance to take full responsibility in CAN responses, associated with limited confidence in child protection responses, were noted among OHPs:

> *We [OHPs] are not trained in this [child protection] enough to, and we are not dealing with it every day. Having that intermediary person who you can go to and be like, 'This is what I'm thinking. This is what I want to say. Please do what you will do with that. 'If you feel like this needs further action, great, I'll back you up. If you need me to put this on record or whatever, I'll back that up. But I'm not sure. So can you help me?'.* (Therapists, P2)

To address these challenges, participants reported engaging with a diverse range of practitioners across health, social, and education sectors, and recognised these interdisciplinary connections as essential for supporting children and their families. Strong views emerged that such collaborations enabled OHPs to better understand the families and communities that they served, deliver necessary oral health care, and support children experiencing abuse and neglect:

> *It takes a village to raise a child. I am so strong in collaborative practice because we [OHPs] all have different strengths. Although I think I might have certain qualities that are my strengths, I've got to find somebody else with those that aren't my strengths.* (Therapists, P8)

However, some participants faced challenges in engaging with interdisciplinary approaches due to resource limitations, time constraints, and ineffective and complicated organisational processes.

> *Your 15-minute recall appointment suddenly becomes two hours. By the time you think, 'Oh my God, I've got to do something about this', you need to do all the paperwork [organisational processes]. There was just no way you would get that done in less than two hours.* (Managers, P2)

Limited trust of OHPs towards child protection agencies was also noted, hindering effective interdisciplinary collaboration:

> *There is a lot of stigma around Oranga Tamariki … whatever you hear about them in the news, it's always to do, 'They took this kid off these parents', and 'they shouldn't have'. It's generally negative. And I feel like it is a barrier to us [OHPs] contacting them [Oranga Tamariki] or wanting to get them involved.* (Therapists, P2)

This reluctance was further emphasised by the fear of not knowing what actions were taken after disclosing patient information to other health and social practitioners, including Oranga Tamariki. The referral process was often described as one-way, rather than truly collaborative. Participants suggested that developing more collaborative relationships could help OHPs to understand the process better, engage in shared learning, and build confidence and resilience in taking actions to support children and families:

> *When we [OHPs] are involved with schools and social workers, they can report to us and ask whether we have noticed anything or if there is anything that we have concerns about. Then, we can report back to them. So it's not always us having to make that first move.* (Therapists, P2)

8.5.4. Theme 4: Building safe and supportive environments

Building safe and supportive working environments for OHPs was identified as a critical factor in enhancing their responsiveness in child protection responses. Participants highlighted concerns about limited physical protection and psychosocial support, particularly in situations where organisational policies required them to inform caregivers and families when disclosing information to other parties. These circumstances, coupled with a lack of guidance and support, contributed to feelings of personal vulnerability and fear of potential reprisals from caregivers. One participant described this apprehension:

> *Personally, to have to ring up a family of a child who I think is being neglected, I wouldn't. I just wouldn't because that is putting yourself at so much risk.* (Therapists, P10)

Furthermore, identifying signs of abuse or neglect and responding to concerns required courage and a strong commitment to supporting children and families. However, some indicated limited organisational guidance on how to identify concerns, engage interdisciplinary support, or access wellbeing support during and after their response efforts. One participant described this experience as:

> *Very emotionally difficult to deal with, knowing that I had no idea what was going on for the child.* (Therapists, P12)

8.5.5. Sub-Theme 4-1: Simple guidelines on identification and responses

Participants generally described a lack of guidance on engaging in child protection responses across both public and private sectors. They expressed a need for clear and simple step-by-step guidance on recognising and responding to concerns, as well as on how to facilitate safe and appropriate actions when supporting children and families. While acknowledging their limited expertise in this area, some participants suggested a practical checklist that outlined observable indicators and provided a framework for when and how to seek further support from other health and social practitioners:

> *What is that level of report(ing)? If there was just a generic, and if (a child) meet two or three of these (indicators), you [OHP] might want to consider talking to a social worker first. And then if they say do the report, then do the report or (follow) some sort of pathway.* (Therapists, P2)

However, other participants acknowledged difficulties in creating one simple guide that addresses all potential child protection issues and different familial circumstances that OHPs could encounter in diverse dental settings, as there is “no one way to approach this” (Managers, P5). Participants strongly advocated for the development of a streamlined organisational guidance applicable across both public and private dental sectors. Some recommended that the regulatory body (the Dental Council of New Zealand) and the Ministry of Health take action by issuing supportive documents or practical guides to support OHPs in the prevention, identification and responses to child protection issues, ultimately building safe and supportive practices for OHPs:

> *Where does the responsibility lie regarding protecting and having safe processes in place for practitioners that you, as the dental body service, look after?* (Therapists, P12)

8.5.6. Sub-Theme 4-2: Active promotion of workforce development on child protection

Participants consistently emphasised the importance of active and ongoing workforce development to build confidence and competence among OHPs in recognising and responding to child protection concerns. Education and training were seen not only as ways to enhance knowledge, but also as necessary to normalise child protection practices within the workplace:

> *It feels like we’re overstepping (boundaries with families and child protection experts), but we actually aren’t. But I think it needs to be normalised in our workplaces.* (Therapists, P5)

Participants indicated that undergraduate and in-practice education opportunities to develop OHPs' knowledge and competence in child protection response remained limited. Many emphasised that strengthening education in undergraduate and postgraduate dental curricula could play a crucial role in improving OHPs' ability to actively participate in child protection responses:

> *I think a huge thing would be to actually teach. That can make future dental practitioners, undergraduates, and postgraduates more comfortable in recognising these issues, recognising when to step in, feeling more comfortable about when and where to step in, and being able to have those conversations.* (Dentists, P3)

Generic training as part of a larger healthcare system or hospital network was not considered sufficient due to its limited relevance to daily dental practices. Participants emphasised the importance of regular, practice-specific training to address OHPs' challenges across various settings and building relationships for consultation pathways. Some participants strongly believed in the benefits of having mandatory requirements for child protection training, similar to

resuscitation requirements, to ensure that OHPs are “keeping it at the forefront of our mind” and making it “less scary” (Dentists, P4).

8.6. Discussion

This study explored how OHPs in New Zealand perceive and engage with their roles in responding to CAN. The findings suggest that OHPs are uniquely positioned to contribute to child protection efforts due to their regular contacts with children and families in community-based and clinical settings. This aligns with international research that recognises OHPs as frontline professionals in the early detection and reporting of CAN (Bradbury-Jones et al., 2021; Han, Koziol-McLain, et al., 2024; Kugananthan et al., 2021). A key strength of this study is its focus on the underexplored perspectives of OHPs, highlighting a consistent willingness to support vulnerable children. However, in contrast to a jurisdiction with structured national guidelines (Public Health England, 2019; Tate et al., 2024) and workforce training (Stechey, 2001), the New Zealand context is marked by fragmented policy frameworks, inconsistent access to training and ongoing systemic inequities. These challenges undermine OHPs' confidence and capacity to respond effectively. These findings underscore the importance of systemic investment in child protection infrastructure tailored to oral health. Possible mechanisms for improving OHP engagement include the development of targeted and culturally safe education, clearer interprofessional referral pathways, and national policy guidance that affirms and enables the role of OHPs in safeguarding children.

8.6.1. Genuine intention of OHPs to help children and families

Findings from this study suggest that OHPs working in both public and private sectors experience resource constraints that hinder their ability to meet the oral health needs of communities, thereby impacting their capacity to fulfil their roles in child protection. These constraints, along with limited organisational guidance and training opportunities, often leave OHPs feeling overwhelmed. Despite these challenges, the findings demonstrate that many OHPs leverage their strengths to support children and families to their fullest capacities. They recognise their unique positions to identify when a child or a family may need support, take action safely within their professional scope, and collaborate with experts across diverse disciplines to enhance child protection efforts; an approach that aligns with literature emphasising the value of interdisciplinary engagement by OHPs in child protection responses (Bradbury-Jones et al., 2021; Han, Koziol-McLain, Diesfeld, et al., 2024). Importantly, addressing violence cannot adhere to a standard prescriptive approach; rather, it emphasises the critical importance of fostering strong relationships among care providers and with families and communities to address their diverse needs (Gear et al., 2024).

The Aorerekura: The National Strategy to Eliminate Family Violence and Sexual Violence (New Zealand Government, 2021) identifies six key ‘shifts’ needed to eliminate violence in New

Zealand. Shift three, “towards skills, culturally competent and sustainable workforces”, and shift five, “towards safe, accessible and integrated responses”, are particularly relevant to OHPs (New Zealand Government, 2021). These shifts emphasise the importance of not only being capable of providing safe and coordinated care to children and families but also developing a workforce that is skilled and culturally aware of its roles in child protection. OHPs should understand their roles in identifying and addressing child protection concerns and contributing to the prevention and support of children and families in accessing adequate care and services required (Levin & Bhatti, 2024).

OHPs are not expected to investigate suspect CAN cases or resolve CAN issues, but they should remain vigilant to support children and families (Gear et al., 2024). This approach emphasises the strengths of OHPs in establishing and maintaining relationships with children, families and communities. Through these connections, OHPs can contribute to early intervention and prevention strategies that are essential for preventing the severe health and social consequences of CAN (Colizzi et al., 2020).

8.6.2. Providing culturally safe care

Understanding oral health inequities in New Zealand and the need to provide clinically and culturally responsive and safe care to children and families is critical (Lacey et al., 2021). The findings from this study demonstrate a sound understanding of the impact of systemic inequities and the importance of culturally safe care for children and families from all cultures. Māori and Pasifika communities in New Zealand possess deep knowledge, resilience, and collective strength in advancing the health, social, and educational wellbeing of their families. However, systemic structures that do not align with Māori and Pasifika worldviews have created challenges in service access (Lacey et al., 2021; Smith et al., 2019). Historical impacts of colonisation are compounded by systemic inequities within mainstream child protection services that continue to alienate Māori and obstruct their right to care (Cox, 2020; Hyslop, 2021). Despite this, Māori and Pasifika-led initiatives continue to foster mātauranga (Māori knowledge)-informed health literacy and education, strengthening whānau wellbeing and addressing care gaps (Palmer et al., 2019; Sa'u Lilo et al., 2020). Addressing systemic issues necessitates the adoption of partnership models that align with the principles of Te Tiriti o Waitangi as outlined in Whakamaua: Māori Health Action Plan 2020–2025 (Ministry of Health, 2020). Continuing efforts and attention to support this partnership for the diversity of practices and cultures can lead to better responses to the social needs of families and communities (Kennedy et al., 2022). The findings indicate that OHPs generally understand essential professional characteristics needed for effective practice, including mutual respect, empathy, authenticity, and culturally safe care. However, the application of these traits varies significantly in clinical practice. This variation suggests that practitioners are at different stages of their personal journeys toward cultural awareness and the delivery of culturally safe care to children and families (Wylie et al., 2021).

DCNZ is on its journey of developing frameworks to support OHPs in providing culturally safe care. As of 1 January 2023, the cultural standard of care in the scope of practice documents transitioned from cultural competence (kaiakatanga ahurea) to cultural safety (haumarutanga ahurea) (DCNZ, 2021b, 2021c, 2021d). This change is intended to move beyond checklists, encouraging OHPs to self-reflect, deepen their cultural awareness, and recognise the significance of culturally safe care in achieving equitable health outcomes. This shift in mindset can support OHPs in their professional development journey to become more equipped to address the cultural needs of children and families.

8.6.3. Supporting OHPs in child protection

One of the key strengths of OHPs is their capability to connect with other practitioners in the health, social, and education sectors. Recognising their limited expertise in responding to child protection concerns, participants emphasised both the importance of and their willingness to seek collaboration with experts from other disciplines, particularly in public sector settings, where interdisciplinary structures are more readily available. Enhancing support for OHPs to participate in interdisciplinary approaches not only leverages their capacity to be at the forefront of connecting with families and communities but also strengthens their role in fostering comprehensive care.

As highlighted in the findings, practical guidelines for effective interdisciplinary approaches in preventing and managing CAN, especially in cases of dental neglect, would be beneficial. These guidelines should align with Te Tiriti o Waitangi principles to ensure culturally safe practices. However, they should avoid being overly prescriptive, which could restrict OHP's flexibility to respond to families' unique cultural and wellbeing needs (Gillingham, 2006). For instance, the policy document from the British Society of Paediatric Dentistry clearly outlines factors, such as dental awareness of caregivers and access to dental care, that contribute to poor oral health outcomes and offers recommended management strategies (Ridsdale et al., 2024). This policy document is directly relevant to OHPs without being overly prescriptive. In New Zealand, NZDA (2018) has a code for child protection, that defines CAN, provides orofacial indicators, and suggests management strategies for immediate concerns and dental neglect. However, this document requires updating to incorporate recent legislative changes. Ideally, DCNZ should create a guideline incorporating Te Tiriti o Waitangi principles while encouraging effective interdisciplinary practices. This would ensure that all New Zealand OHPs can benefit from a current and culturally appropriate framework, while it can also assist experts from other disciplines in understanding the roles and strengths of OHPs in child protection responses.

In an interdisciplinary approach, reciprocity is essential for nurturing and fostering collaborative relationships (Brattabø et al., 2018). A notable issue in contemporary child protection practices is the absence of frequent feedback mechanisms following referrals to child protection and social services (Brattabø et al., 2018). The findings indicate a degree of reluctance among practitioners to engage with child protection agencies, as well as a desire to share responsibility

rather than to bear it alone. These complexities may lead to a scenario in which practitioners may opt not to reach out, leaving significant concerns unrecorded and potentially unresolved. The ideal scenario involves consultative relationships in which decisions are made collaboratively, embracing the inherent uncertainties of complex child protection cases. Therefore, guidelines should promote a reciprocal nature and establish robust feedback mechanisms to enhance collaborative relationships. Collaborative processes can create positive experiences that enhance confidence, facilitate learning, promote helpful behaviour patterns among OHPs, and foster relationship-building within the collaborative team. Such an approach will require substantial support from non-dental experts across various disciplines. However, other health and social practitioners can also leverage the unique position of OHPs to access children and their families, providing essential support and further enhancing the efficacy of child protection efforts.

While the findings primarily focus on the provision of care and support for children and families, participants also highlighted the need to strengthen protections for the physical safety and wellbeing of OHPs. Some organisational child protection policies and guidelines were described as inconsistent with the Oranga Tamariki Act 1989, particularly regarding when and how to inform families of disclosures to child protection agencies. This misalignment can lead to confusion and pose potential safety risks for practitioners. Accordingly, participants called for policy updates, system-level support and training that clarify these expectations and ensure OHPs are supported in acting in ways that are both safe and legally compliant to fulfil their responsibilities in child protection.

Lastly, as the findings suggest, implementing regular and relevant education programmes that integrate various dental settings and foster interdisciplinary collaboration would substantially enhance OHPs' abilities and readiness to manage child protection cases in New Zealand. The literature highlights the advantages of having dental-specific education programmes tailored to accommodate diverse learning styles (Al-Dabaan et al., 2016). By developing education programmes specific to undergraduate oral health degrees and in-practice professional development, practitioners will be better equipped for potential encounters with CAN and empowered to be more proactive in CAN prevention and responses. As part of education programmes, it would be beneficial to incorporate cultural safety components to emphasise the vital need for providing culturally safe care and supporting OHPs in addressing health and social issues. However, cultural safety education “should not be treated as a box to be checked on completion and should not take a one-size-fits-all approach” (Wylie et al., 2021, p. 329). Instead, it should recognise the various stages of each practitioner’s personal journey toward culturally safe care and facilitate a long-term commitment to support those journeys (Wylie et al., 2021).

8.6.4. Strengths and limitations

This study explored the experiences and perspectives of a diverse group of OHPs, including OHTs, DTs, dentists, and dental specialists, who regularly interact with children and

adolescents in a variety of dental settings, such as community clinics, private practices, and public hospitals. A key strength of this study lies in its ability to translate these practitioner insights into tangible, practice- and policy-relevant recommendations. These include the development of clear and context-specific child protection guidelines, integration of regular and culturally safe education and training, improved interdisciplinary collaboration, and the alignment of organisational policies with relevant legislation to ensure practitioner safety. Collectively, these findings offer valuable guidance for clinicians, service providers, and the regulatory body to enhance OHPs' responsiveness in child protection and support for families and communities.

Despite the diverse group of OHPs, the perspectives of children, caregivers, and stakeholders from the health, social, and education sectors were not included in the study. Exploring and incorporating external views and perspectives could have provided valuable insights into the broader systemic challenges and opportunities for improving child protection responses within oral health care, ultimately leading to more effective and comprehensive strategies. Furthermore, focus group sessions provide valuable opportunities to observe participants' reflective practices during their interactions, enriching the data collected. However, these sessions were only conducted with OHTs and DTs due to the inability to find a mutually agreeable time for other participant groups. This limitation may have impacted the depth and breadth of insights, particularly in relation to the experiences and challenges faced by dentists, dental specialists, and community oral health service managers.

8.6.5. Future research

Firstly, the perspectives of OHPs practising in New Zealand and the barriers and enablers that influence their responses to CAN are well-documented. Implementing recommendations from the findings, developing a simple guideline and education programmes in partnership with Māori practitioners and researchers, representatives from health, social, and education sectors, and DCNZ would greatly enhance OHPs’ contribution to CAN prevention and responses, ensuring culturally safe practices. Additionally, evaluating the clinical and professional impacts of these initiatives would ensure that the practices are truly beneficial to OHPs and, ultimately, to the children and families they serve.

Secondly, gaining insights into the experiences of children, caregivers, and professionals from the health, social, and education sectors can help identify gaps in current practices, enhance interdisciplinary collaboration, and lead to more integrated and culturally responsive approaches. Future research should incorporate these external perspectives to develop a more comprehensive framework for supporting children and their families.

8.7. Conclusion

This study highlights the critical role of OHPs in child protection in New Zealand and emphasises the need for continuous development in education, policy, and practice to enhance

their effectiveness. By embracing interdisciplinary collaborations and incorporating culturally safe practices, OHPs can better serve the diverse needs of children and families they encounter. These recommendations, aimed at enhancing responsiveness to CAN, are essential for developing more proactive, culturally safe, and effective child protection strategies within the oral health care sector. Future research should expand on these findings by integrating broader perspectives, thus enriching the strategies to support OHPs and ultimately improving outcomes for the children and families they serve.

8.8. Supporting information

Supporting Material 1. COREQ (COnsolidated criteria for REporting Qualitative research) Checklist.

In an effort to enhance transparency, completeness, and reflexivity in the qualitative reporting, the COREQ checklist (Tong et al., 2007) was applied. Although it was not included in the journal publication, the completed checklist is provided to demonstrate adherence to recognised reporting standards and to facilitate critical appraisal of the methods and findings.

Continued on the next page

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COREQ (COnsolidated criteria for REporting Qualitative research) Checklist

A checklist of items that should be included in reports of qualitative research. You must report the page number in your manuscript where you consider each of the items listed in this checklist. If you have not included this information, either revise your manuscript accordingly before submitting or note N/A.

Topic	Item No.	Guide Questions/Description	Reported on Page No.
Domain 1: Research team and reflexivity			
Personal characteristics			
Interviewer/facilitator	1	Which author/s conducted the interview or focus group?	4
Credentials	2	What were the researcher's credentials? E.g. PhD, MD	N/A
Occupation	3	What was their occupation at the time of the study?	4
Gender	4	Was the researcher male or female?	N/A
Experience and training	5	What experience or training did the researcher have?	4
Relationship with participants			
Relationship established	6	Was a relationship established prior to study commencement?	3-4
Participant knowledge of the interviewer	7	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	3
Interviewer characteristics	8	What characteristics were reported about the inter viewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	4
Domain 2: Study design			
Theoretical framework			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	3
Participant selection			
Sampling	10	How were participants selected? e.g. purposive, convenience, consecutive, snowball	3
Method of approach	11	How were participants approached? e.g. face-to-face, telephone, mail, email	3
Sample size	12	How many participants were in the study?	4-5
Non-participation	13	How many people refused to participate or dropped out? Reasons?	N/A
Setting			
Setting of data collection	14	Where was the data collected? e.g. home, clinic, workplace	4
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	N/A
Description of sample	16	What are the important characteristics of the sample? e.g. demographic data, date	4
Data collection			
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	3
Repeat interviews	18	Were repeat inter views carried out? If yes, how many?	N/A
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	4
Field notes	20	Were field notes made during and/or after the inter view or focus group?	4
Duration	21	What was the duration of the inter views or focus group?	3
Data saturation	22	Was data saturation discussed?	N/A
Transcripts returned	23	Were transcripts returned to participants for comment and/or	N/A

Page 2 – Corresponds to the published article

Topic	Item No.	Guide Questions/Description	Reported on Page No.
		correction?	
Domain 3: analysis and findings			
Data analysis			
Number of data coders	24	How many data coders coded the data?	N/A
Description of the coding tree	25	Did authors provide a description of the coding tree?	N/A
Derivation of themes	26	Were themes identified in advance or derived from the data?	4
Software	27	What software, if applicable, was used to manage the data?	4
Participant checking	28	Did participants provide feedback on the findings?	N/A
Reporting			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	5-8
Data and findings consistent	30	Was there consistency between the data presented and the findings?	5-8
Clarity of major themes	31	Were major themes clearly presented in the findings?	5
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	5-8

Developed from: Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

Once you have completed this checklist, please save a copy and upload it as part of your submission. DO NOT include this checklist as part of the main manuscript document. It must be uploaded as a separate file.

8.9. Postlude

This qualitative study explored the experiences and perspectives of OHPs, which identified their strong willingness to support children and families. I engage with OHPs as well as diverse experts from health, social and child protection sectors. This provided an opportunity to recognise both OHPs' motivation to contribute to child protection responses and the readiness of cross-sector experts to support OHPs' role development.

Continuing my effort to disseminate my research findings and to increase the research impacts, I have shared my qualitative research findings along with findings from previous phases to:

1. *AUT Children's right to a good life in Aotearoa Symposium* (Auckland, New Zealand) on 13 February 2025 (audience: diverse health and social practitioners and researchers).
2. *AUT Centre for Interdisciplinary Trauma Research Colloquia Presentation* (Auckland, New Zealand & Online) on 26 March 2025 (audience: diverse health and social academics and researchers).
3. *AUT Postgraduate Research Symposium* (Auckland, New Zealand) on 11 September 2025 (audience: academics, researchers and postgraduate students).
4. *Oral Health Association of Australia Congress* (Gold Coast, Australia) on 18 October 2025 (audience: Australian and international OHPs).

These presentations facilitated cross-disciplinary dialogue, significantly enhancing the research's impact on real-world practices. This not only increased the visibility of my research but also encouraged potential partnerships and initiatives. Through these forums, I was able to foster new collaborations aimed at translating research findings into dental practices. Although these discussions are still in their early stages, they have the potential to lead to meaningful changes in practices. The feedback and insights gained through these engagements were invaluable for refining my discussion and shaping future recommendations, addressed in the following chapter.

9. Discussion

9.1. Introduction to the chapter

In this discussion chapter, I synthesise practical implications for OHPs and organisations, based on the integrated findings from four research phases. The analysis is interpreted through two complementary lenses introduced earlier: children's rights (UNCRC) (Chapter 2.5) and equity grounded in Te Tiriti o Waitangi (Chapter 2.3). These lenses emphasise the need for a network of caring, trustworthy adults and services around every child. A coordinated, village-style response protects children more effectively than any single profession working alone.

The first section of this chapter addresses the research aim of understanding the role of OHPs in child protection, highlighting their professional engagements and responses within diverse dental and multidisciplinary contexts. Additionally, recommendations for OHPs, dental organisations, and the regulatory body are presented as a part of the discussion. Secondly, I present my learning and reflection in engaging with communities and stakeholders, including Māori OHPs and experts in child protection and prevention from diverse disciplines. Lastly, I address study limitations, propose future research opportunities and make my concluding remarks.

9.2. Integration of findings

This doctoral research employed a four-phase sequential mixed-methods design, and integrating the findings from each phase was crucial to form a cohesive understanding of the issues (Creswell & Creswell, 2023). Each phase was deliberately connected to the next in a sequential explanatory manner (Cooper et al., 2024). In practice, the quantitative study informed the focus of the scoping review and professional and legal framework analysis. For example, the survey findings highlighted key gaps, such as OHPs' limited training in CAN and hesitancy in reporting and responding due to uncertainty in their roles and legal frameworks, which directly shaped the objectives of the professional and legal framework analysis. This building approach ensured that the document analysis and literature review addressed areas of concern raised by OHPs. Furthermore, insights from two literature reviews, together with the survey findings, guided the development of the qualitative inquiry, helping to formulate interview questions that explored deeper into those specific issues. Therefore, connecting the phases through purposeful sampling and topic refinement led to a logical, stepwise exploration. (Cooper et al., 2024).

At the interpretation and discussion level, all data strands were merged to develop meta-inferences that are more comprehensive than findings from any single phase alone. Figure 3 illustrates the relationship and intersection of the four phases, showing how each phase's outputs fed into the next and where they converged in the final analysis. Additionally, Table 13 presents interactions across four phases, allowing side-by-side comparison. This visual integration helped to identify where the different data sources confirmed each other, expanded understanding, or offered

divergent perspectives. For instance, both the quantitative and qualitative findings confirmed that OHPs frequently encounter signs of possible CAN, yet often respond with limited actions, largely driven by fear of false reporting and uncertainty about taking interdisciplinary actions. This convergence across methods reinforces the reliability of that insight. Likewise, all phases highlighted the need for culturally safe practices and for interdisciplinary collaborations that respond to child protection concerns. Importantly, the process of integration also revealed points of expansion and discordance (Cooper et al., 2024). An example of expansion is how the qualitative findings elaborated on barriers to action that were hinted at in the survey. The survey identified broad barriers such as a lack of resources or uncertainty about procedure, but qualitative findings expanded on this by uncovering specific nuances, including time constraints in busy clinics, inconsistent organisational protocols, and the absence of clear clinical guidelines. These qualitative insights enriched the quantitative findings, providing a deeper understanding of what OHPs practically need to be more responsive to child protection. A notable example of discordance was the view on mandatory reporting of child abuse. The questionnaire data indicated that a majority of OHPs would support a legal mandate to report suspected child abuse, reflecting an assumption that mandatory reporting could strengthen protections. In contrast, the qualitative findings were more hesitant. While some OHPs agreed with mandatory reporting in principle, others voiced concern that it might deter families from seeking care. Such a divergence does not weaken the findings; instead, it provides a richer, more balanced perspective on a complex issue. Further integration analyses are detailed in the subsequent sections of this chapter.

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Table 13. Integration of Findings Across the Four Phases

Phase	Core outputs	Concrete influence on other phases
Quantitative research	Confirmed limited knowledge and attitudes for detecting/reporting CAN; highlighted the need for deeper explanation via qualitative work and literature engagement.	Framed the aims of the scoping review and the legal and professional analysis (New Zealand obligations and standards). Informed the qualitative study design, indicative questions, and target populations.
Scoping review	Mapped roles/strategies to enhance OHP responsiveness (e.g., dental-specific education, practical guidelines on child protection, implications of legal and professional obligations).	Informed qualitative study questions about education content, practice guidance, and collaboration pathways; helped prioritise inquiries and highlighted structural inequities to explore in interviews and focus groups.
Professional and legal framework analysis	Documented New Zealand obligations and standards guiding OHP practice in child protection (e.g., statutory duties, protection around information-sharing; DCNZ expectations).	Aligned interview guides with current law and guidance; provided professional and legal frameworks for interpreting findings and drafting recommendations.
Qualitative research	Explained patterns behind quantitative findings; integrated diverse perspectives from OHPs across roles and oral health service managers; identified barriers/facilitators and co-developed practical strategies.	Identified themes that were merged with other strands to develop recommendations for OHPs, organisations, and other stakeholders; identified priorities for future research and workforce development.

Note. CAN = child abuse and neglect; OHP = oral health practitioner.

9.3. Complex nature of CAN and OHPs in child protection

CAN is a deeply complex issue that intersects with numerous social, cultural, and legal dimensions, making it a pervasive challenge across different communities. As the quantitative research findings indicated, the majority of participating OHPs (97%) recognised CAN as a significant social issue that requires attention (Chapter 4) (Han et al., 2022). Given the multifaceted nature of CAN, this highlights the need for a culturally sensitive approach from OHPs and other health professionals engaged in child protection (Abdullah & Thattengat, 2025; Lansford et al., 2015). Norms and values vary across cultures, which can influence the shaping of definitions of parenting, priorities in wellbeing, and perceptions of what constitutes abuse or neglect (Abdullah &

Thattengat, 2025). Without culturally sensitive approaches and efforts to understand their cultures and beliefs, OHPs risk wrongly labelling them with ‘child abuse’ and ‘child neglect’.

Social issues such as economic instability, unemployment, and housing insecurity can significantly exacerbate family stress (Chandler et al., 2022; Schuck & Widom, 2021). Structural inequities are often deeply embedded in society, producing systematic disadvantages for certain groups of people, which leads to inequitable experiences of the social determinants of health (Baciu et al., 2017). Participants in the qualitative research acknowledged the challenges faced by families, which lead to inequitable access to health and social services. One participant indicated that: “there are a whole lot of wider issues going on for some whānau” (Chapter 8, Managers, P1 – qualitative research). These public and societal challenges are often beyond the direct control of individuals and caregivers. Influenced largely by social policies and political agendas, these conditions require comprehensive strategies that extend beyond individual action to address effectively.

Historical injustices and ongoing socio-economic disparities heavily affect the current dynamics of CAN (Keddell et al., 2022). Specifically, for Māori communities, the ongoing impacts of colonialism and the failure to uphold the principles of Te Tiriti o Waitangi have profound implications for health and social services, leading to inequitable health and social outcomes (Came et al., 2020; Keddell et al., 2022; Rouland et al., 2019). For example, ethnic disparities in child protection referrals, such as reports of concern, between Māori and non-Māori are less pronounced in areas of higher deprivation but become more pronounced in the least deprived areas. In the least deprived areas, Māori children are referred at disproportionately higher rates than non-Māori children (Keddell, 2020). These disparities highlight potential structural biases in referral practices and decision-making processes, where ethnicity may undeservedly influence reporting, particularly in contexts of lower deprivation (Keddell, 2020). Te Aorerekura: the New Zealand national strategy to eliminate family violence and sexual violence (New Zealand Government, 2021) stated that violence is:

> *Rooted in the marginalisation of tangata whenua and societal changes enforced during the colonisation of Aotearoa. Colonisation resulted in multiple losses: the disconnection from ancestral lands, the erosion of te reo, and the fragmentation of Māori social structures, including the inherent balance and complementarity of tāne (male) and wāhine (female).* (p. 14)

These social and cultural aspects are crucial for OHPs to consider, as they significantly shape the trust and dynamics of interactions between healthcare providers and the communities they serve. One participant in the qualitative research indicated, “I do find that my people, Māori and Pacific people, are often misunderstood, which is a barrier for them not wanting to come into services because of the vibe you get” (Chapter 8, Therapists, P12 – qualitative research). This clearly demonstrates how culturally inadequate care can act as a barrier to communities accessing health

and social services and potentially lead to further harm. Māori and Pasifika children and families emphasise the need for more culturally aligned care and support in all community services to foster trust and reduce misunderstandings (Mana Mokopuna, 2024).

Culturally safe practices require OHPs to go beyond meeting cultural competence standards set by DCNZ (2021b, 2021c, 2021d). A deep understanding of these contexts is essential for OHPs to engage respectfully and effectively with families, preventing the continuation of harm and misunderstanding. All health practitioners must recognise their implicit biases and preconceived notions and engage in ongoing reflexive practice so these biases do not influence their professional judgment, interactions, or care decisions (Sabin, 2022). Furthermore, it is crucial to remain vigilant and consistently remind oneself that implicit and unconscious biases and racism against particular ethnicities, genders, and religions can subtly influence one's behaviours (Greenwald et al., 2022). Therefore, careful consideration is required when identifying behaviours that may be deemed neglectful. Factors such as social and health inequities, poverty, and limited health literacy can hinder caregivers' ability to provide the level of care they aspire to offer their children (Abdullah & Thattengat, 2025; Sa'u Lilo et al., 2020). These systematic differences lead to inequitable opportunities to achieve optimal health (Baciu et al., 2017).

The root cause of inequitable social and health structures should be addressed, rather than placing blame on individuals. Relying on predisposed, biased ideas can result in wrongly blaming caregivers and unfairly labelling them with 'abuse' and 'neglect'. As discussed in Chapter 8.6.2, DCNZ is in the process of updating its cultural safety standards for OHPs. The updated standards aim to move away from being checklists that presume competence in cultural safety. Instead, they will focus on setting clearer expectations that encourage OHPs to actively participate in the delivery of culturally safe care, reflecting the commitment to improvement and adaptation in professional practice, as well as to ensure Te Tiriti o Waitangi principles (Waitangi Tribunal, 2023) are integrated and upheld in all aspects of their work.

While the ability to detect and report suspected cases of CAN is indeed a critical function for OHPs, their roles can and should extend significantly further, particularly in the areas of early intervention and prevention to avert severe health and social outcomes (McCarry et al., 2021; Tabone et al., 2020). As noted in the prelude of the quantitative research chapter (Chapter 4.1), my initial understanding of CAN was somewhat limited to detecting and reporting signs and symptoms of CAN. As noted previously, DCNZ (2021b, 2021c, 2021d) competency documents only mention that OHPs should be able to "act to protect the interests of tamariki, mokopuna, rangatahi in cases of suspected neglect or abuse by disclosing information to a relevant authority or person" (p. 5). However, through comprehensive research and engagement with the community, it became clear that OHPs are uniquely positioned to contribute more proactively to the prevention of CAN (Han, Koziol-McLain, Diesfeld, et al., 2024). Implementing prevention and early intervention strategies

can lead to significant positive outcomes, safeguarding children from the impacts of family violence (Colizzi et al., 2020; McCarry et al., 2021).

Health New Zealand – Te Whatu Ora (2025) already has endorsed resources for health practitioners to use, such as the Family Violence Assessment and Intervention Guideline (Ministry of Health, 2016) and the CAN intervention flowchart (adapted from the Violence Intervention Programme). Additionally, various pamphlets, cue cards, and colourful posters (adopted from the Violence Intervention Programme) are designed to assist health practitioners in handling different family violence situations and to signal to the public that health practitioners can provide support if they are in distress. In the qualitative study by Mana Mokopuna (2024), children expressed a clear need for warm and child-friendly environments where they feel comfortable and supported, creating both physical and emotional safe spaces for them to reach out for help if required. These visual materials can be powerful tools for OHPs and dental practices to initiate proactive responses to the prevention and early intervention of CAN and family violence. Displaying such resources within dental settings not only reinforces the responsibility of OHPs to support child protection alongside oral health care but also sends a clear message to the public that the practice is a safe and supportive environment. These visual cues help normalise conversations about safety and wellbeing, signal openness to disclosure, and contribute to creating a trusted space where children and families feel seen, heard, and supported. Recognising the impact of the social marginalisation of Māori, preventive approaches should uphold whakapapa, promoting and strengthening the family relationship and wellbeing of families (New Zealand Government, 2021).

This research focused on the protection of children against violence. However, as the study progressed, it became apparent that violence occurring within domestic environments, such as child abuse, intimate partner violence and elder abuse, often shares similar characteristics and influencing factors and co-occurs within families (Ministry of Health, 2016). Gracia et al. (2020) indicated that intimate partner violence and child abuse share commonalities and risk factors, such as acceptability in aggressions, and one amplifies the likelihood of the other form of violence to occur within families. Given the interconnected nature of family violence, interventions should be comprehensive and family-centred (Ministry of Health, 2016). The fundamental principles of prevention and response are consistent across various types of family violence; therefore, expanding the scope to encompass family violence more broadly presents additional opportunities for OHPs to participate in addressing this issue. At the end of the day, any form of violence that occurs within a family will eventually impact the growth and development of children in the short and long terms. Children exposed to family violence, including intimate partner violence, may experience mental health issues, declines in educational performance, and reduced social abilities (Doroudchi et al., 2023). In fact, developing interventions for children involved empowering and supporting caregivers in creating safe environments for themselves as well as encouraging them to take responsibility for preventing any form of violence (Ministry of Health, 2016). Addressing family

violence and related risks allows interventions for all potential and current victims of all family members (McTavish et al., 2022). Fanslow, in her interview with Radio New Zealand (MacDuff, 2024, November 26), highlights that “there are evidence-based prevention strategies that have been used elsewhere in the world which have seen dramatic decreases in intimate partner violence - I’m talking a 50 percent decrease in four years”. She further explains that “by supporting people to develop safe, stable and nurturing relationships with their children and giving people the skills and resources for that, it has long term benefits for the kids, and for society” (MacDuff, 2024, November 26).

Through my personal communication with various stakeholders, I learnt that one COHS region recently implemented regular intimate partner violence screening protocols for caregivers who present in community-based dental clinics with their children. To protect the interests of children, caregivers are given a laminated copy of screening questions while their child receives dental care. Caregivers have the option to discreetly indicate to OHPs or dental assistants if they wish to discuss their situation further. Following this, a member of the dental team provides a private space where necessary support can be offered, including referrals to family support networks or community family violence teams with specialised expertise. While this initiative is still navigating challenges, such as ensuring OHPs and dental assistants receive adequate training and managing the logistics of providing timely and private support, the anecdotal feedback has been encouraging. The initiative has been effective in raising awareness among OHPs and has made a positive impact on the families involved. I believe any initiative that enhances the awareness and response capabilities of OHPs in CAN and family violence situations is a step in the right direction for safeguarding the wellbeing of families within our communities.

9.4. Being allies to work collaboratively

Given that CAN is a very complicated and multifaceted issue, national and international evidence strongly advocates for collective and integrated responses to protect children from violence (Ministry of Health, 2016; New Zealand Government, 2021; WHO, 2020). Recognising the unique position to observe early signs of CAN and maintain interactions with children and families, particularly within the New Zealand dental context, research findings highlight the crucial need for OHPs to proactively seek out and establish collaborations with a broad range of professionals in health and social services (Han, Koziol-McLain, Diesfeld, et al., 2024; Han et al., 2022).

A more cohesive network of support can effectively address not only the oral health needs of children and families but also the health and social support they require (Singh & Lehl, 2020). The importance of listening to children’s voices and incorporating their perspectives into decision-making has been emphasised in various national reports (Mana Mokopuna, 2024; Ministry of Social Development, 2018). A qualitative study by Mana Mokopuna (2024), which explored children’s views on child protection services and support, revealed that children desire “a village of

support … that cares for, respects, values, and shows up for them" (p. 24), and that stays with them throughout their journey to ensure consistent and ongoing support. Collaboration across sectors is essential to building this village of support. Collaborating with professionals such as social workers, public health nurses, and school teachers can lead to more comprehensive care strategies. By leveraging their expertise, this interdisciplinary approach allows for tailored support that meets individual children's and their families' specific needs (Bradbury-Jones et al., 2021; Hegarty et al., 2020). Such collaborative efforts ensure that interventions are not just reactive but also proactive, focusing on prevention and early intervention to mitigate risks before they escalate (Colizzi et al., 2020).

Through my interactions with experts from diverse backgrounds, it became clear that practitioners from other disciplines recognise the unique opportunities of OHPs to build relationships with families and communities. Anecdotal feedback from the conference and seminar presentations (introduced in Chapter 8.8) demonstrated their willingness to network with OHPs and support them in ensuring children and families access necessary support before situations deteriorate into violence. Experts offered their support in preparing dental-specific child protection education modules for undergraduate courses and in-service professional development opportunities. Quantitative and qualitative research findings demonstrated that OHPs' emphasis on integrated and inclusive responses to prevent violence and enable safety for children and their families. One participant in the qualitative research reinforced the importance of connections and collaborations:

> *It takes a village to raise a child. I am so strong in collaborative practice because we all have different strengths. Although I think I might have certain qualities that are my strengths, I've got to find somebody else with those that aren't my strengths.* (Chapter 8, A, P8 – qualitative research)

Fostering trusting and respectful relationships between OHPs and other disciplines can lead to strength-based collaborative approaches (New Zealand Government, 2021).

The findings indicated a degree of reluctance among some OHPs to engage with support or collaborate with other disciplines, which is associated with negative connotations regarding child protection agencies, concerns about the uplifting of children from their families, and a limited understanding of the process following referrals to these agencies. Further explored in the qualitative research study (Chapter 8.5), this notion of reluctance extends to a hesitancy among some OHPs to take on responsibilities in CAN responses. This hesitancy often leads them to deflect responsibilities to other health and social practitioners, which is linked to their limited confidence in their own knowledge and limited understanding of response pathways. While the research has not specifically investigated collaborative relationships between OHPs and experts from other disciplines, it highlights the impact of such dynamics on CAN responses and the pursuit of more collaborative and desirable consultation relationships. It raises critical questions: What are

the consequences if practitioners, due to their reluctance and uncertainty, do not reach out? What happens if they choose not to formally record or act upon their concerns? These questions highlight the need for further exploration into how enhanced collaboration and confidence among practitioners can lead to more proactive and effective responses in child protection scenarios.

Despite the reluctance and uncertainties experienced by some OHPs, positive experiences highlighted in the research emphasise the significance of building confidence, facilitating learning, and developing constructive behaviour patterns among OHPs. Interdisciplinary collaboration would be the key, as it allows OHPs to share knowledge and perspectives with professionals from other disciplines. This exchange enriches their understanding and provides a more wrap-around approach to children and families (Herbert & Bromfield, 2019; New Zealand Government, 2021). Building confidence through these collaborations also enables OHPs to feel more secure in their roles as part of an interdisciplinary response pathway, knowing they have the support and input of other professionals. Furthermore, this interdisciplinary collaboration can foster professional curiosity in child protection practices, ensuring that practitioners remain engaged and proactive in exploring new and effective ways to support children and their families (Muirden & Appleton, 2022).

Collaboration can begin with simple initiatives, such as facilitating opportunities for OHPs and experts from other disciplines to come together and share their insights from their daily practice. This can help identify effective communication strategies and enable knowledge sharing. In community settings, as each local area has its distinctive availability of support networks and resources, inviting local social workers or representatives from Oranga Tamariki to team meetings can foster stronger relationships and a more collaborative understanding. Furthermore, embedding interdisciplinary approaches to child protection and family violence response into both graduate and in-service professional development programmes would be ideal. This integration ensures that practitioners are well-equipped with the necessary skills and knowledge to effectively address these critical issues throughout their careers (Al-Dabaan et al., 2016; Shapiro et al., 2014). Ultimately, the engagement of OHPs with key stakeholders from various disciplines can facilitate the collaborative development of policies, guidelines, and educational programmes.

In the development of mature and responsive interdisciplinary collaborations, the key aspect is ensuring reciprocity between OHPs and other experts (Brattabø et al., 2018). Without reciprocity, collaborative relationships cannot be maintained. As noted in the qualitative research findings (Chapter 8), communication is often one-way from OHPs to other experts rather than a true interdisciplinary collaboration. This could be associated with reduced confidence in OHPs or organisational policies and processes that induce one-way communication. This doctoral research indicated the potential influence of OHP’s confidence levels, leading to reluctance and hesitation to engage in CAN responses. However, it did not specifically assess the influence of OHPs’ confidence and the effectiveness of current organisational policies in facilitating genuine interdisciplinary collaboration. Yet, it highlighted the gaps in communication and collaboration.

Many OHPs expressed their interest in knowing what happens when a child gets referred to child protection agencies and what support has been provided to the family. By closing these informational gaps and ensuring OHPs receive feedback, OHPs can affirm their positive impact on the families, reinforcing their role in successful interventions. Moving forward, it is essential to develop strategies and professional development opportunities that promote mutual understanding and seamless information sharing to foster a more integrated and supportive interdisciplinary environment.

9.5. Supporting OHPs and building capacities

Wellbeing support for OHPs is crucial, especially given the emotionally and ethically challenging nature of child protection responses. CAN and family violence are inherently sensitive topics that can be intimidating for anyone involved in the response cycle (Kuruppu et al., 2022). These subjects often evoke strong emotions even for child protection experts and can be challenging to address due to their complex and distressing nature (Kuruppu et al., 2022; Stolper et al., 2021). The quantitative findings indicated that a significant proportion of participants (52%) hesitated to confront family, which acts as a substantial barrier to reporting suspected abuse or referring cases to other agencies (Han et al., 2022). Not only does the nature of CAN inherently produce psychological stress for OHPs, as concerns about children's health and wellbeing, but also OHPs often suffer from actual and anticipated risks to their physical wellbeing. This reluctance and stress were reinforced in the qualitative findings, which indicated OHPs' concerns regarding their physical and psychosocial wellbeing. As discussed in previous chapters (Chapters 7 and 8), many COHS regions impose organisational requirements to consult caregivers and families when disclosing children's information to other parties for child protection purposes. Although these organisational guidelines and policies are adaptable, OHPs frequently find themselves in the position of having to contact caregivers and families directly. This requirement to engage with families about sensitive issues requires careful navigation of complex interpersonal dynamics (Stolper et al., 2021), which can be challenging and stressful for OHPs who are not specialised in child protection responses. In light of these findings, it is clear that more comprehensive support systems are necessary to address these challenges. Service providers, particularly COHS, should establish and clearly document support networks to help OHPs manage the stress and emotional toll associated with child protection cases. Furthermore, organisational policies should be revised to provide clear guidelines on circumstances where OHPs can disclose information without prior consultation, such as in situations with risks of physical repercussion, to ensure both the safety and efficacy of their interventions.

Furthermore, as discussed in the previous chapter (Chapter 8), organisational policies and guidelines should aim to provide streamlined and practical guidance for OHPs, facilitating effective communication within the organisation and engagement with other disciplines. The guidelines should not be too prescriptive, recognising different familial circumstances (Gillingham, 2006). A

good example of achieving this balance is the policy document from the British Society of Paediatric Dentistry (Ridsdale et al., 2024), which integrates essential social factors such as dental awareness among caregivers and issues of access. This approach not only equips OHPs to effectively handle various scenarios by providing clear protocols for standard procedures, such as managing disclosures in child protection cases, but also emphasises the importance of considering the broader social dynamics that influence oral health outcomes. As discussed throughout the thesis, considering OHPs' commitment to uphold Te Tiriti o Waitangi and ensuring culturally safe care (Lacey et al., 2021; Waitangi Tribunal, 2023), it is critical that these guidelines should be designed in partnership with Māori experts and communities and aimed to address the needs of communities to reduce health and social inequity gaps. Taking a pragmatic approach to identify strategies to enhance the responsiveness of OHPs to child protection issues, I hope to see the establishment of streamlined national points of contact, integrated with existing family support networks, such as social workers, Te Whatu Ora personnel, and community services, to ensure accessible, sustainable, and ongoing support. Ideally, each major region would have a designated contact person or team whom OHPs in both public and private sectors can approach for guidance, referrals, or support when managing concerns related to child protection and family wellbeing. Rather than creating dental-specific pathways, which will require specific resources and can lead to sustainability issues, utilising and strengthening current interdisciplinary networks with targeted training for both OHPS and social service workers can help to create an enduring model of supportive care. As a regulatory body, DCNZ holds a crucial role in overseeing the development and implementation of these guidelines to ensure they not only meet clinical standards but also provide streamlined pathways that dental organisations and service providers can adopt to meet their specific organisational and community needs.

Throughout the entire research journey, a recurring theme was the need for enhanced education and training in child protection response for OHPs. Many OHPs reported limited opportunities to learn about preventive and response strategies related to CAN and family violence, both in their undergraduate curricula and within their workplaces or from external providers. Only 36% of survey participants included their experiences of attending courses or training related to CAN after completing undergraduate training (Han et al., 2022). Additionally, some of the mandatory training sessions provided through COHS were found to be only marginally relevant to their daily practice, thereby limiting the practical benefits of such training. To effectively navigate the complexities of CAN, OHPs require continuous, dental-specific education and training that emphasises cultural safety, legal responsibilities, and interdisciplinary collaboration (Han, Koziol-McLain, et al., 2024). This education should extend beyond the clinical aspects of detecting and reporting CAN concerns to include a comprehensive understanding of the psychological, social, and cultural factors that affect child health and welfare. Training programmes should incorporate real-world scenarios and case studies that reflect the diverse experiences and challenges faced by children and families (Al-Dabaan et al., 2016; Shapiro et al., 2014). I believe

that this pragmatic and realistic approach, centred on meaningful educational opportunities, will better prepare OHPs to respond thoughtfully and effectively in their professional roles, strengthening their capacity to make positive and informed contributions to child welfare and protection.

To enhance the accessibility of workforce development opportunities for OHPs, it is important to diversify the modes of delivery. This includes providing training that can be accessed remotely for those who may not be able to attend in-person sessions or who lack access to support through organisational networks. The qualitative research highlighted strong views on implementing mandatory child protection training, similar to the requirements for resuscitation training, which merit consideration for implementation. Implementing these changes would necessitate inputs from DCNZ to reflect these adjustments in regulatory frameworks. Dental organisations and education providers would also need to be prepared to offer these training opportunities. Developing the health and social workforces to have a common understanding among all professionals and provide a consistent approach to children and families is crucial (Ministry of Social Development, 2017). This collaborative effort is crucial to enhancing the profession's capacity to work effectively with other disciplines and to offer streamlined, practical training opportunities that are readily accessible to all OHPs. This approach ensures that OHPs are not only well-prepared to handle child protection cases but are also equipped to engage effectively across various professional boundaries. The joint and collaborative workforce can take collective responsibility to maximise the safety and support of families (Ministry of Social Development, 2017).

9.6. Limitations of the study

The findings from this research offer valuable insights but also come with certain limitations. Firstly, while acknowledging the diversity of dental settings across the country, it's important to note that the findings from this doctoral research may not be fully generalisable across all OHPs and do not reflect the variety of experiences in different regions and community settings. This is particularly true for rural and remote areas or areas characterised by poor and inequitable oral health and social outcomes. The original research design, influenced by my initial limited knowledge and understanding of child protection responses at the beginning of my research journey, led to a focus on a specific subset of professionals. The quantitative component of this study was specifically designed to explore the self-reported knowledge and attitudes of DTs and OHTs. Initially conceived as a master's research project, it aimed specifically to understand the perspectives of these two groups. This early design choice significantly shaped the scope and direction of the research, impacting its generalisability and rigour. However, the findings from the quantitative research were critical in guiding my decisions and planning for the subsequent phases of the study.

Another limitation associated with the research design is the inherent risk of bias when using self-reported surveys (Althubaiti, 2016; Timmons et al., 2021). This is particularly susceptible to social desirability bias, where participants may provide responses they deem more socially acceptable, thus potentially distorting the data away from their true thoughts and behaviours (Timmons et al., 2021). Additionally, relying on participants to evaluate their knowledge and attitudes based on their past memories can introduce further biases (Althubaiti, 2016). This research did not utilise any alternative or supplementary observations to validate the self-reported data, which could have helped mitigate these biases and provided a more comprehensive understanding of the issues at hand. Statements like ‘I am confident in recognising the signs and symptoms of child abuse and neglect’ and ‘I am familiar with the reporting process’ (Appendix B.2) can lead to inconsistencies in how data is understood and interpreted by participants. Some participants might have been very competent in recognising the signs and symptoms, potentially influencing how they responded to the question about their confidence levels. Conversely, some participants might have been transitioning to a new workplace, where they may not have had sufficient time to familiarise themselves with specific protocols or build confidence in their new roles, further complicating the accuracy of their responses. Varying situations and interpretations could have acted as confounding factors, potentially influenced the quantitative findings.

In terms of the qualitative study, while the research included a broader range of OHPs, it did not capture the perspectives of other key professionals who work closely with children and their families, such as school staff and public health nurses, who also work closely with OHPs. These stakeholders could offer critical insights that would deepen the understanding of child protection issues within dental care settings. Given that many community oral health providers are based in or have strong ties with schools and public health providers, the absence of these viewpoints represents a notable gap. Plans are in place to include these groups in a subsequent post-doctorate project to address this limitation. Another limitation was the restricted number of focus groups conducted. Focus groups are crucial for gathering shared perspectives and fostering a deeper collective understanding. I hoped to conduct more focus groups, which could have provided a broader range of shared insights, thereby enriching the data and leading to more robust conclusions. Unfortunately, due to the inability to find mutually agreeable times, the limited number of focus groups restricted the exploration of shared perspectives in answering the research question.

9.7. Future research implications

Building on the findings from the thesis, future research should aim to address the identified gaps, such as incorporating perspectives from a broader array of stakeholders, which will be critical to providing a more streamlined framework for collaboration. Exploring the views of other professionals, such as Oranga Tamariki representatives, social workers, and school staff, can provide valuable insights. Understanding their perspectives on how OHPs can add value to

responses to child protection concerns and preventive strategies could reveal new avenues for collaboration and effectiveness. Additionally, examining the experiences and feedback from children, caregivers and whānau can help assess how OHPs can be more accessible and supportive when children need help or families are struggling. No initiative will be effective unless it is perceived as valuable by the communities it aims to serve (McCarry et al., 2021). As discussed, the voices of children and families must be the priority in the development of legislation and policies affecting children's safety (Chapters 2.5 and 2.8) (Mana Mokopuna, 2024). Therefore, it is essential to conduct further community-led research (Doerksen et al., 2024) to understand community members' perspectives and views on how OHPs can effectively contribute to the prevention and response to CAN. It is also important to understand effective collaborative responses and organisational and political limitations from the perspectives of social workers and other stakeholders that have not previously been explored. A comprehensive understanding of all parties involved is crucial to ensure sustainable mechanisms that support children and families. The research has not specifically investigated the collaborative relationships between OHPs and experts from other disciplines, nor how these relationships impact CAN responses.

The research offered a thorough exploration of the role of OHPs in child protection, highlighting their strengths and potential strategies to enhance their responsiveness. However, the recommendations proposed (Han, Koziol-McLain, Diesfeld, et al., 2024; Han et al., 2022), such as developing dental-specific education programmes and creating streamlined, practical guidelines, will require further evaluation and refinement. Developing and implementing any strategies requires a multi-faceted approach that combines substantial collaborative efforts with rigorous, ongoing evaluation. The aim should be to ensure that these strategies meet their intended outcomes and align closely with the real-world needs of OHPs operating in diverse environments. Specifically, any training and educational programmes designed for OHPs must be subject to inquiry and continuous improvement. This consultative process may include regular feedback loops involving the OHPs and other stakeholders, such as educators and experts from diverse backgrounds, to identify areas where the training may fall short or could be enhanced. Moreover, future research should focus on the longitudinal impacts of these training programmes to assess their effectiveness over time, tracking their impact on OHPs' confidence and competence in handling such cases.

Ultimately, this ongoing research and development effort aims to create robust, practical, and supportive strategies that empower OHPs to fulfil their crucial roles in child protection. By continuously refining these strategies based on real-world feedback and research findings, OHPs can be better supported to significantly impact the health and safety of children in their care. This ongoing commitment to improvement will help to bridge gaps in current practices and lead to more effective, holistic approaches to child protection within the healthcare system.

9.8. Concluding remarks

My interaction with two boys at a mobile dental clinic motivated me to take this doctoral research journey to develop my personal knowledge and strengthen my capacity to safely respond to child protection concerns, and to explore pragmatic ways in which I could contribute to the oral health profession. The research project identified a range of challenges, spanning from broader societal influences and limited organisational resources to individual-level gaps in practitioners' knowledge. At the same time, it highlighted key strengths within the profession, particularly its unique position and opportunities to engage with children, families, and communities, that can be leveraged and built upon. A strength-based approach can focus on enhancing existing professional values and developing cultural awareness, fostering leadership, promoting interdisciplinary collaboration and reflective practice to strengthen their role in child protection.

Although I am still on the journey, I remain committed to creating ripples of change within the profession by building capacity among OHPs to collaborate with health and social practitioners and support children and families, fostering safe and nurturing environments for children. I hope that through my work, I have raised awareness within the profession and provided opportunities for some clinicians to reflect on the potential to help children and families. I remain determined to continue advocating for change, driving professional development, and initiating collaborative actions to achieve the ultimate goal: "ending all forms of violence against children is a priority" (Mana Mokopuna, 2024, p. 9).

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Appendix A: Ethics Approvals

A.1. Quantitative research

Auckland University of Technology Ethics Committee (AUTEC)

Auckland University of Technology
D-88, Private Bag 92006, Auckland 1142, NZ
T: +64 9 921 9999 ext. 8316
E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

11 March 2020

Amanda B Lees
Faculty of Health and Environmental Sciences

Dear Amanda B

Re Ethics Application: **20/39 Child abuse and dentistry: knowledge and attitudes among dental therapists and oral health therapists in New Zealand**

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 11 March 2023.

Standard Conditions of Approval

1. The research is to be undertaken in accordance with the Auckland University of Technology Code of Conduct for Research and as approved by AUTEC in this application.
2. A progress report is due annually on the anniversary of the approval date, using the EA2 form.
3. A final report is due at the expiration of the approval period, or, upon completion of project, using the EA3 form.
4. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form.
5. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
6. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.
7. It is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard.

AUTEC grants ethical approval only. You are responsible for obtaining management approval for access for your research from any institution or organisation at which your research is being conducted. When the research is undertaken outside New Zealand, you need to meet all ethical, legal, and locality obligations or requirements for those jurisdictions.

Please quote the application number and title on all future correspondence related to this project.

For any enquiries please contact ethics@aut.ac.nz. The forms mentioned above are available online through http://www.aut.ac.nz/research/researchethics

(This is a computer-generated letter for which no signature is required)

The AUTEC Secretariat
Auckland University of Technology Ethics Committee

Cc: hwh404@hotmail.com

A.2. Qualitative research

Auckland University of Technology Ethics Committee (AUTEC)

Auckland University of Technology
D-88, Private Bag 92006, Auckland 1142, NZ
T: +64 9 921 9999 ext. 8316
E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

6 December 2022

Jane Koziol-McLain
Faculty of Health and Environmental Sciences

Dear Jane

Re Ethics Application: **22/172 Responsiveness to child abuse and neglect: Roles for oral health practitioners**

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 5 December 2025.

Non-Standard Conditions of Approval

Non-standard conditions must be completed before commencing your study. Non-standard conditions do not need to be submitted to or reviewed by AUTEC before commencing your study.

Standard Conditions of Approval

1. The research is to be undertaken in accordance with the Auckland University of Technology Code of Conduct for Research and as approved by AUTEC in this application.
2. A progress report is due annually on the anniversary of the approval date, using the EA2 form.
3. A final report is due at the expiration of the approval period, or, upon completion of project, using the EA3 form.
4. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form.
5. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
6. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.
7. It is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard and that all the dates on the documents are updated.
8. AUTEC grants ethical approval only. You are responsible for obtaining management approval for access for your research from any institution or organisation at which your research is being conducted and you need to meet all ethical, legal, public health, and locality obligations or requirements for the jurisdictions in which the research is being undertaken.

Please quote the application number and title on all future correspondence related to this project.

For any enquiries please contact ethics@aut.ac.nz. The forms mentioned above are available online through http://www.aut.ac.nz/research/researchethics

(This is a computer-generated letter for which no signature is required)

The AUTEC Secretariat
Auckland University of Technology Ethics Committee

Cc: heuiwon.han@aut.ac.nz; Zac Morse; Amanda B Lees

Appendix B: Quantitative research tools

B.1. Participant information sheet

Participant Information Sheet

Date Information Sheet Produced:

09 January 2020

Project Title

Child abuse and dentistry: knowledge and attitudes among dental therapists and oral health therapists in New Zealand

An Invitation

My name is Chris Han and I am a master's student at Auckland University of Technology. I am also an oral health therapist working closely with children from our community at various dental settings. I would like to invite you to take part in my master's research study exploring knowledge and attitude among New Zealand dental therapists and oral health therapists in a dental setting.

It involves completion of an anonymous online survey and your participation is voluntary. Initiating the survey will indicate that you have given your consent to participate in the research. However, you are free to discontinue your participation by not submitting the survey without any advantage or disadvantage.

What is the purpose of this research?

New Zealand children and adolescents experience one of the highest rates of family violence and child protection concerns. It is well-known that child abuse and neglect bring various oral manifestations which can be detected during regular dental visits. However, international studies indicate a low reporting rate of potential cases by dental practitioners. Current knowledge and attitudes of New Zealand dental practitioners in relation to detecting and reporting potential cases is unknown. The purpose of the research is to understand knowledge and attitudes of New Zealand oral health therapists and dental therapist in detecting and reporting child abuse and neglect in a dental setting. The findings of this research will be used to produce a master thesis and may be used for academic publications and presentations.

How was I identified and why am I being invited to participate in this research?

The inclusion criteria is all registered dental therapists and oral health therapists who are registered and hold current an annual practising certificate and who are treating children and/or adolescents on a regular basis. Anyone who is a member of NZDOHTA (New Zealand Dental and Oral Health Association) is invited to take part. Personal details are not collected and the survey link will be sent out by NZDOHTA.

How do I agree to participate in this research?

The research involves completion of an anonymous online survey. Initiating the survey will indicate that you have given your consent to participate in a research. Your participation in this research is voluntary. You are able to withdraw from the survey until submission. However, once your survey responses have been submitted, removal of your data may not be possible.

What will happen in this research?

You will be sent a link to the online survey. Initiating the survey will indicate that you have consented to participate the study. Completing it should take no longer than 15 minutes. = The survey will remain open until sufficient responses have been received. The data will only be used for the purpose for which is has been collected and will not be shared.

What are the discomforts and risks?

The risk of minimal as the survey is anonymous and there is no personal face-to-face interaction between researchers and participants. However, there may be a potential feeling of guilt and/or mental stress of reflecting on not recognising, detecting or reporting potential child abuse or neglect cases.

How will these discomforts and risks be alleviated?

'Need to Talk?' provides free mental health counselling for all New Zealanders who are feeling down, anxious or overwhelmed. The service is private and confidential. To access these services, you will need to:

- Call or text 1737 or Call 08001737 1737

You can find our more information about 'Need to Talk?' on https://1737.org.nz/.

What are the benefits?

Information gained from this research will provide an opportunity to evaluate current knowledge and attitudes of dental therapists and oral health therapists towards child abuse and neglect and identify barriers and potential areas of improvement. Recommendations can be made to relevant professional bodies and/or training institutes to improve our knowledge and attitude to protect New Zealand children and adolescents.

How will my privacy be protected?

A high level of privacy and confidentiality will be achieved as the online survey will be anonymous and will not ask for identifiable details. Electronic data will be securely stored at AUT for six years then permanently deleted.

If you would like to be entered into the prize draw you will be asked to provide an email address so that we can contact you, if you have been drawn for a prize. The email address will be stored separately so that we cannot link your details with your answers. Your email address will not be used for any other purpose and will be deleted after the prize draw has taken place.

What are the costs of participating in this research?

The survey is expected to take around 15 minutes to complete.

What opportunity do I have to consider this invitation?

A link will be sent from NZDOHTA plus a follow-up reminder. It is likely the survey will remain open for one month.

Will I receive feedback on the results of this research?

A summary of the findings will be made available to all registered dental and oral health therapists by NZDOHTA.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor,

Amanda B Less, amlees@aut.ac.nz, (+649) 921 9999 ext 7647

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, *ethics@aut.ac.nz*, (+649) 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet for your future reference. You can also contact the research team as follows:

Researcher Contact Details:

Heuiwon Han, hwh404@hotmail.com

Project Supervisor Contact Details:

Amanda B Less, amlees@aut.ac.nz, (+649) 921 9999 ext 7647

Approved by the Auckland University of Technology Ethics Committee on *type the date final ethics approval was granted*, AUTEC Reference number *type the reference number*.

B.2. Survey questions

Detecting and reporting child abuse and neglect

Start of Block: Introduction

Intro
Thank you for participating in our survey. Your feedback is important.

The purpose of the research is to understand knowledge and attitudes of New Zealand oral health therapists and dental therapist in detecting and reporting child abuse and neglect in a dental setting. The inclusion criteria is all registered dental therapists and oral health therapists who are registered and hold current an annual practising certificate and who are treating children and/or adolescents on a regular basis.

The research involves completion of an anonymous online survey. Initiating the survey will indicate that you have given your consent to participate in a research. Your participation in this research is voluntary. You are able to withdraw from the survey until submission.

If you would like to be in a draw for 3 x $50 fuel vouchers, please follow the link and leave your email address at the end of the survey.

Once again, thank you for your participation.

End of Block: Introduction

Start of Block: Background

Q1 What is your professional group

- ○ Dental Therapist (1)
- ○ Oral Health Therapist (2)
- ○ Tertiary Students (Otago University, AUT) (3)
- ○ Other (please specify) (4) _____

Skip To: End of Survey If What is your professional group = Tertiary Students (Otago University, AUT)

Q2 Are you currently holding a valid annual practising certificate?

- ○ Yes (1)
- ○ No - Under process / Registering (2)
- ○ No - No intention to practice in New Zealand (3)

Skip To: End of Survey If Are you currently holding a valid annual practising certificate? = No - No intention to practice in New Zealand

Q3 Which age group do you belong to?

- ○ Under 25 (1)
- ○ 25 to 34 (2)
- ○ 35 to 44 (3)
- ○ 45 to 54 (4)
- ○ 55 to 64 (5)
- ○ Over 65 (6)

Q4 What is your gender?

- ○ Male (1)
- ○ Female (2)
- ○ Gender diverse (3)

Q5 Can you identify your main geographic area of employment?

▼ Auckland (1) ... West Coast (16)

Q6 How long have you been working as a dental therapist and/or oral health therapist?

- ○ Less than 5 years (1)
- ○ 5 years to 10 years (2)
- ○ 10 years to 20 years (3)
- ○ More than 20 years (4)

Q7 Can you identify your current working situation? (multiple answers possible)

- ☐ Working in a public sector (1)
- ☐ Working in a private sector (2)
- ☐ Working in a tertiary institution (3)
- ☐ Other (please specify) (4) _____

Q8 How often do you interact with children and adolescents in a dental setting? (On average)

- ○ More than 5 different interactions daily (1)
- ○ More than 10 different interactions in one week (2)
- ○ More than 5 different interactions in one week (3)
- ○ Less than 5 different interactions in one week (4)
- ○ No interaction with children and adolescents (5)

Skip To: End of Survey If How often do you interact with children and adolescents in a dental setting? (On average) = No interaction with children and adolescents

End of Block: Background

Start of Block: Self-perception of child abuse and neglect

Q9 Click to write the question text

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
Child abuse and neglect is an important social issue in New Zealand. (1)	○	○	○	○	○	○	○
I can easily recognise the signs and symptoms of child abuse and neglect. (2)	○	○	○	○	○	○	○
I am confident in recognising the signs and symptoms of child abuse and neglect. (3)	○	○	○	○	○	○	○
I am familiar with the reporting process and protocol for potential child abuse and neglect cases (in my working area). (4)	○	○	○	○	○	○	○

End of Block: Self-perception of child abuse and neglect

Start of Block: Past experiences of detecting and reporting child abuse and neglect case

Q10 How many cases of child abuse an neglect cases have you suspected in the past year?
(Please give a rough estimate in number)

_____

Q11 How many cases of child abuse and neglect cases have you suspected in your career?
(Please give a rough estimate in number)

_____

Q12 How many potential cases of child abuse and neglect cases have you reported in the past year?
(Please give a rough estimate in number)

_____

Q13 How many potential cases of child abuse and neglect cases have you reported in your career?
(Please give a rough estimate in number)

_____

Q14 Can you describe any pattern from the suspected child abuse and neglect cases?
(Gender, socioeconomic group, ethnic group, age group, etc)

_____

_____

_____

_____

_____

Q15 International studies have found that dental practitioners do not report as many cases of child abuse and neglect cases. Can you identify any barriers that may apply to you?
(please tick all that apply to you)

- ☐ Lack of adequate dental or medical history (1)
- ☐ Fear of losing patients (2)
- ☐ Lack of knowledge to detect potential cases (3)
- ☐ Lack of knowledge to report potential cases (4)
- ☐ Limited confidence in child protection services (5)
- ☐ Fear of false reporting (6)
- ☐ No time to report potential cases (7)
- ☐ Concern about the self-protection (8)
- ☐ Does not consider it as my professional role (9)
- ☐ Fear of further violence towards the child (10)
- ☐ Do not want to confront family (11)
- ☐ Other (please specify) (12) _____

Q16 In your opinion, what would help dental practitioners to detect and report potential child abuse and neglect?

_____

_____

_____

Q17 Have you ever attended any course or training related to child abuse and neglect detection and/or reporting after the under-graduate study?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If Have you ever attended any course or training related to child abuse and neglect detection and/or... = Yes

Q18 If Yes, do you feel that the course was helpful?

- ○ Yes (1)
- ○ Maybe (2)
- ○ No (3)

End of Block: Past experiences of detecting and reporting child abuse and neglect case

Start of Block: Legislation

Q19 Have you heard about the recent implementation of the Family Violence Act 2018?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If Have you heard about the recent implementation of the Family Violence Act 2018? = Yes

Q20 If Yes, can you state the impact of this legislation on your practice?

_____

_____

_____

Q21 Do you agree with the mandatory reporting of suspected child abuse or neglect?

- Strongly Agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Disagree (5)
- Strongly disagree (6)

Q22 What are your reasons for your answer for the previous question?

_____

_____

_____

Q23 Is there anything else you would like to share with researchers about this topic?

_____

_____

_____

End of Block: Legislation

Appendix C: Qualitative research tools

C.1. Semi-structured interview & focus group protocol

Focus Group Procedure

Before the session

- Great participants
- Encourage conversations among participants

Introduction

- Open with karakia
- Introduce the session
    - Provide research details (aim, method, benefit, risk, etc).
    - Introduce support mechanisms (AUT counselling, nationwide helplines and local mental health services)
- Review the consent forms
- Briefly go over the information sheet and the consent
- Answer questions from participants
- Remind participants to maintain confidentiality when discussing specific cases and respect other participants' views
- Encourage participants to concentrate on enhancing the system as a whole rather than focusing on individual people

Focus group discussion

- Facilitate a focus group using indicative questions
- Record a discussion

After the session

- Remind about the support mechanisms
- Close with karakia

Semi-Structured Interview Procedure

Before the session

- Great a participant
- Ask for a particular way to start and close the session

Introduction

- Open with karakia (or other opening agreed by a participant)
- Introduce the session
    - Provide details of the research (aim, method, benefit, risk, etc).
    - Introduce support mechanisms (AUT counselling, nationwide helplines and local mental health services)
- Review the consent form
- Briefly go over the information sheet and the consent
- Answer questions from a participant
- Remind a participant to maintain confidentiality when discussing specific cases
- Encourage a participant to concentrate on enhancing the system as a whole rather than focusing on individual people

Semi-structured interview

- Facilitate a semi-structured interview using indicative questions
- Record a discussion

After the session

- Remind about the support mechanisms
- Close with karakia (or other closing agreed by a participant)

C.2. Participant information sheets

C.2.1. Oral health therapists and dental therapists

Participant Information Sheet

Date Information Sheet Produced:

15 August 2022

Project Title

Responsiveness to child abuse and neglect: Roles for oral health practitioners

An Invitation

Tēnā koe, I am Chris (Heuiwon) Han, an oral health therapist and the primary researcher for this project. This research will contribute towards my Doctor of Philosophy and is focused on the responsiveness and roles of oral health practitioners to child abuse and neglect. You are warmly invited to participate in a focus group session that will explore your experience and perspectives of child protection in dental settings.

This study will be carried out by myself, with the supervision of Professor Jane Koziol-McLain and Professor Zac Morse and the advice from Amanda B Lees and Samuel Carrington. I will be the facilitator of the focus group sessions and may be joined by support person(s) from the research team.

This information sheet will explain the research study. I appreciate your time reading this material.

What is the purpose of this research?

During routine check-ups, oral health practitioners may detect oral and behavioural manifestations of harm and neglect. This research aims to understand oral health and dental therapists' role in responding to children's safety and wellbeing needs. This involves exploring experiences, perspectives and understandings of practitioners, stakeholders and community members. Findings from focus group sessions will provide insights that may inform further actions to enhance the responsiveness of oral health practitioners to child protection concerns. Furthermore, Māori clinicians and caregivers will provide valuable insights from whānau-centred perspectives to understand what would be beneficial to Māori communities to address inequity in child protection. The findings of this research may be used for academic publications and presentations.

How was I identified and why am I being invited to participate in this research?

You have been identified as a potential participant for this research if you are:

1. A member of the New Zealand Oral Health Association.
2. A member of Te Ao Mārama.
3. Dental therapists or oral health therapists working in ARDS.

We believe your experiences and understandings of oral health and dental therapists' role in child protection will help to inform the future enhancement of the responsiveness to better protect our tamariki and provide a pathway for families in need of support.

How do I agree to participate in this research?

Please find the attached consent form for this research. If you would like to participate in this study, please contact me directly via email (heuiwon.han@aut.ac.nz) with the completed consent form. You can complete the consent form, take a photo or scan it. Alternatively, you can send an email showing your interest to participate and bring the consent form to the focus group or interview session.

Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you or your child. You are able to withdraw from the study at any time. If you choose to withdraw from the study, you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

What will happen in this research?

If you consent to take part in the research, you will be invited to participate in a focus group session with other oral health therapists and dental therapists. Focus group sessions will take around 90 minutes and be held at a time that is convenient for the majority of the participants. The focus group session will be conducted in person, or online in compliance with public health advice at the time. If you are not able to attend the focus group session, there will be an option to participate in an individual interview session.

In the focus group/interview session, several questions will be posed to begin the conversation focusing on participant experiences, perspectives and understanding of child protection in dental settings and the responsiveness of oral health therapists and dental therapists in child protection. There are no right or wrong answers. Questions will include but are not limited to sharing your idea on the role of oral health therapists and dental therapists in child protection and readiness to respond to child abuse and neglect concerns. Focus group/interview discussions will be audio-taped and transcribed for data analysis. Light refreshments will be provided for in-person focus group sessions.

It is anticipated that there would be one focus group/interview session; however, a short follow-up interview may be necessary to clarify any details.

What are the discomforts and risks?

You will be interacting and discussing child trauma and protection related to oral health professions with oral health practitioners. Some participants may feel discomforted after discussing child abuse and neglect as they may realise their acts or omissions to provide adequate support to potential victims. A potential feeling of guilt and/or mental stress of reflecting personal practices can arise. For any participants, adverse childhood experiences or family violence experiences can psychologically and emotionally affect us during and after focus group sessions. You can withdraw your consent at any stage of the research.

How will these discomforts and risks be alleviated?

You can choose not to participate in a specific section of the discussion and can choose to cease involvement in the focus group session at any time.

AUT Student Counselling and Mental Health is able to offer three free sessions of confidential counselling support for participants in this AUT research project. These sessions are only available for issues that have arisen directly as a result of participation in the research and are not for other general counselling needs. To access these services, you will need to:

- drop into our centre at WB203 City Campus, email counselling@aut.ac.nz or call 921 9998.
- let the receptionist know that you are a research participant, and provide the title of my research and my name and contact details as given in this Information Sheet.

You can find out more information about AUT counsellors and counselling on https://www.aut.ac.nz/student-life/student-support/counselling-and-mental-health.

Alternatively, you can find more information about nationwide helplines and local mental health services on https://www.healthed.govt.nz/resource/helplines-and-mental-health-services.

Services include:

- Lifeline **0800 543 354** (0800 LIFELINE) or **free text 4357** (HELP) - for counselling and support
- Samaritans **0800 726 666** – for confidential support for anyone who is lonely or in emotional distress

What are the benefits?

Findings will inform different views on the roles of oral health therapists and dental therapists in child protection and contribute to improving the responsiveness of oral health practitioners to children's safety and wellbeing needs. Public and private dental service providers and tertiary education providers can adopt the findings in the development and delivery of oral health child protection strategies.

Finally, the primary researcher seeks to gain a Doctor of Philosophy through this research.

How will my privacy be protected?

All participants will be required to keep any information about other participants' identities and contents of discussions confidential to protect the privacy of others. All participants will sign the consent form in the agreement to keep all information confidential. A copy of transcribed data will be created and the name will be replaced with numbers for any analysis. Findings will not include any identifiable features. Transcribed data will be only used for the purpose of this research. Electronic copies of consent forms, recordings, and relevant data will be securely stored.

What are the costs of participating in this research?

Ninety minutes of your time and transportation will be required for this research. It is not envisioned that you will incur any other cost due to participating in this research.

What opportunity do I have to consider this invitation?

If you are interested in participating, please return your complete form within four weeks of receiving this information. Feel free to talk over your decision about participating with colleagues, friends or whānau. In addition, if you like further information about this research, please feel free to contact the primary researcher:

Heuiwon (Chris) Han, heuiwon.han@aut.ac.nz, 09 921 9999 ext 5040.

Will I receive feedback on the results of this research?

If you show your willingness to receive a summary of the research findings on the consent form. A one or two page summary of the findings report will be emailed to you upon completion of the thesis.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Professor Jane Koziol-McLain, jane.koziol-mclain@aut.ac.nz, 09 921 9670.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, ethics@aut.ac.nz, (+649) 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Primary researcher: Heuiwon (Chris) Han, heuiwon.han@aut.ac.nz, 09 921 9999 ext 5040.

Please contact me if you are willing to participate in the study.

Project Supervisor Contact Details:

Primary supervisor: Professor Jane Koziol-McLain, jane.koziol-mclain@aut.ac.nz, 09 921 9999 ext 9670.

Secondary supervisor: Professor Zac Morse, zac.morse@aut.ac.nz, 09 921 9999 ext 7524.

Approved by the Auckland University of Technology Ethics Committee on 6 December 2022, AUTEC Reference number 22/172.

C.2.2. Dentists and dental specialists

A Participant Information Sheet

Date Information Sheet Produced:

15 December 2022

Project Title

Responsiveness to child abuse and neglect: Roles for oral health practitioners

An Invitation

Tēnā koe, I am Chris (Heuiwon) Han, an oral health therapist and the primary researcher for this project. This research will contribute towards my Doctor of Philosophy and is focused on the responsiveness and roles of oral health practitioners to child abuse and neglect. You are warmly invited to participate in a focus group session/semi-structured interview that will explore your experience and perspectives of child protection in dental settings.

This study will be carried out by myself, with the supervision of Professor Jane Koziol-McLain and Professor Zac Morse and the advice from Amanda B Lees and Samuel Carrington. I will be the facilitator of the focus group sessions/semi-structured interview and may be joined by support person(s) from the research team.

This information sheet will explain the research study. I appreciate your time reading this material.

What is the purpose of this research?

During routine check-ups, oral health practitioners may detect oral and behavioural manifestations of harm and neglect. This research aims to understand oral health and dental therapists' role in responding to children's safety and wellbeing needs. This involves exploring experiences, perspectives and understandings of practitioners, stakeholders and community members. Findings from focus group/semi-structured interview sessions will provide insights that may inform further actions to enhance the responsiveness of oral health practitioners to child protection concerns. Furthermore, Māori clinicians and caregivers will provide valuable insights from whānau-centred perspectives to understand what would be beneficial to Māori communities to address inequity in child protection. The findings of this research may be used for academic publications and presentations.

How was I identified and why am I being invited to participate in this research?

You have been identified as a potential participant for this research if you are:

1. A member of the New Zealand Society of Hospital & Community Dentistry.
2. An associate of the Oral Health Advisory Network.

We believe your experiences and understandings of oral health and dental therapists' role in child protection will help to inform the future enhancement of the responsiveness to better protect our tamariki and provide a pathway for families in need of support.

How do I agree to participate in this research?

Please find the attached consent form for this research. If you would like to participate in this study, please contact me directly via email (heuiwon.han@aut.ac.nz) with the completed consent form. You can complete the consent form, take a photo or scan it. Alternatively, you can send an email showing your interest to participate and bring the consent form to the focus group or interview session.

Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. You are able to withdraw from the study at any time. If you choose to withdraw from the study, you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

What will happen in this research?

If you consent to take part in the research, you will be invited to participate in a focus group session or semi-structured interview session with oral health practitioners. Focus group sessions will take around 90 minutes and be held at a time that is convenient for the majority of the participants. The focus group session will be conducted in person, or online in compliance with public health advice at the time. If you are not able to attend the focus group session, there will be an option to participate in an 45-minute individual semi-structured interview session.

In the focus group/interview session, several questions will be posed to begin the conversation focusing on participant experiences, perspectives and understanding of child protection in dental settings and the responsiveness of oral health therapists and dental therapists in child protection. There are no right or wrong answers. Questions will include but are not limited to sharing your idea on the role of oral health therapists and dental therapists in child protection and readiness to respond to child abuse and neglect concerns. Focus group/interview discussions will be audio-taped and transcribed for data analysis. Light refreshments will be provided for in-person focus group sessions.

It is anticipated that there would be one focus group/interview session; however, a short follow-up interview may be necessary to clarify any details.

What are the discomforts and risks?

You will be interacting and discussing child trauma and protection related to oral health professions with oral health practitioners. Some participants may feel discomforted after discussing child abuse and neglect as they may realise their acts or omissions to provide adequate support to potential victims. A potential feeling of guilt and/or mental stress of reflecting personal practices can arise. For any participants, adverse childhood experiences or family violence experiences can psychologically and emotionally affect during and after focus group or interview sessions. You can withdraw your consent at any stage of the research.

How will these discomforts and risks be alleviated?

You can choose not to participate in a specific section of the discussion and can choose to cease involvement in the focus group or interview session at any time.

AUT Student Counselling and Mental Health is able to offer three free sessions of confidential counselling support for participants in this AUT research project. These sessions are only available for issues that have arisen directly as a result of participation in the research and are not for other general counselling needs. To access these services, you will need to:

- drop into our centre at WB203 City Campus, email counselling@aut.ac.nz or call 921 9998.
- let the receptionist know that you are a research participant, and provide the title of my research and my name and contact details as given in this Information Sheet.

You can find out more information about AUT counsellors and counselling on https://www.aut.ac.nz/student-life/student-support/counselling-and-mental-health.

Alternatively, you can find more information about nationwide helplines and local mental health services on https://www.healthed.govt.nz/resource/helplines-and-mental-health-services.

Services include:

- Lifeline **0800 543 354** (0800 LIFELINE) or **free text 4357** (HELP) - for counselling and support
- Samaritans **0800 726 666** – for confidential support for anyone who is lonely or in emotional distress

What are the benefits?

Findings will inform different views on the roles of oral health therapists and dental therapists in child protection and contribute to improving the responsiveness of oral health practitioners to children's safety and wellbeing needs. Public and private dental service providers and tertiary education providers can adopt the findings in the development and delivery of oral health child protection strategies. Finally, the primary researcher seeks to gain a Doctor of Philosophy through this research.

How will my privacy be protected?

All participants will be required to keep any information about other participants' identities and contents of discussions confidential to protect the privacy of others. All participants will sign the consent form in the agreement to keep all information confidential. A copy of transcribed data will be created and the name will be replaced with numbers for any analysis. Findings will not include any identifiable features. Transcribed data will be only used for the purpose of this research. Electronic copies of consent forms, recordings, and relevant data will be securely stored.

What are the costs of participating in this research?

Ninety minutes of your time and transportation will be required for this research. It is not envisioned that you will incur any other cost due to participating in this research.

What opportunity do I have to consider this invitation?

If you are interested in participating, please return your complete form within four weeks of receiving this information. Feel free to talk over your decision about participating with colleagues, friends or whānau. In addition, if you like further information about this research, please feel free to contact the primary researcher:

Heuiwon (Chris) Han, heuiwon.han@aut.ac.nz, 09 921 9999 ext 5040.

Will I receive feedback on the results of this research?

If you show your willingness to receive a summary of the research findings on the consent form. A one or two page summary of the findings report will be emailed to you upon completion of the thesis.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Professor Jane Koziol-McLain, jane.koziol-mclain@aut.ac.nz, 09 921 9999 ext 9670.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, ethics@aut.ac.nz, (+649) 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Primary researcher: Heuiwon (Chris) Han, heuiwon.han@aut.ac.nz, 09 921 9999 ext 5040.

Please contact me if you are willing to participate in the study.

Project Supervisor Contact Details:

Primary supervisor: Professor Jane Koziol-McLain, jane.koziol-mclain@aut.ac.nz, 09 921 9999 ext 9670.

Secondary supervisor: Professor Zac Morse, zac.morse@aut.ac.nz, 09 921 9999 ext 7524.

Approved by the Auckland University of Technology Ethics Committee on 6 December 2022, AUTEC Reference number 22/172.

C.2.3. Community oral health service managers

Participant Information Sheet

Date Information Sheet Produced:

15 August 2022

Project Title

Responsiveness to child abuse and neglect: Roles for oral health practitioners

An Invitation

Tēnā koe, I am Chris (Heuiwon) Han, an oral health therapist and the primary researcher for this project. This research will contribute towards my Doctor of Philosophy and is focused on the responsiveness and roles of oral health practitioners to child abuse and neglect. You are warmly invited to participate in a focus group session that will explore your experience and perspectives of child protection in dental settings.

This study will be carried out by myself, with the supervision of Professor Jane Koziol-McLain and Professor Zac Morse and the advice from Amanda B Lees and Samuel Carrington. I will be the facilitator of the focus group sessions and may be joined by support person(s) from the research team.

This information sheet will explain the research study. I appreciate your time reading this material.

What is the purpose of this research?

During routine check-ups, oral health practitioners may detect oral and behavioural manifestations of harm and neglect. This research aims to understand oral health and dental therapists' role in responding to children's safety and wellbeing needs. This involves exploring experiences, perspectives and understandings of practitioners, stakeholders and community members. Findings from focus group/interview sessions will provide insights that may inform further actions to enhance the responsiveness of oral health practitioners to child protection concerns. Furthermore, Māori clinicians and caregivers will provide valuable insights from whānau-centred perspectives to understand what would be beneficial to Māori communities to address inequity in child protection. The findings of this research may be used for academic publications and presentations.

How was I identified and why am I being invited to participate in this research?

You have been identified as a potential participant for this research if you are:

1. A Te Whatu Ora dental and oral health professional leader.

We believe your experiences and understandings of oral health and dental therapists' role in child protection will help to inform the future enhancement of the responsiveness to better protect our tamariki and provide a pathway for families in need of support.

How do I agree to participate in this research?

Please find the attached consent form for this research. If you would like to participate in this study, please contact me directly via email (heuiwon.han@aut.ac.nz) with the completed consent form. You can complete the consent form, take a photo or scan it. Alternatively, you can send an email showing your interest to participate and bring the consent form to the focus group or interview session.

Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. You are able to withdraw from the study at any time. If you choose to withdraw from the study, you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

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What will happen in this research?

If you consent to take part in the research, you will be invited to participate in a focus group session with other dental and oral health professional leaders. Focus group sessions will take around 90 minutes and be held at a time that is convenient for the majority of the participants. The focus group session will be conducted in person, or online in compliance with public health advice at the time. If you are not able to attend the focus group session, there will be an option to participate in an individual interview session.

In the focus group/interview session, several questions will be posed to begin the conversation focusing on participant experiences, perspectives and understanding of child protection in dental settings and the responsiveness of oral health therapists and dental therapists in child protection. There are no right or wrong answers. Questions will include but are not limited to sharing your idea on the role of oral health therapists and dental therapists in child protection and readiness to respond to child abuse and neglect concerns. Focus group/interview discussions will be audio-taped and transcribed for data analysis. Light refreshments will be provided for in-person focus group sessions.

It is anticipated that there would be one focus group/interview session; however, a short follow-up interview may be necessary to clarify any details.

What are the discomforts and risks?

You will be interacting and discussing child trauma and protection related to oral health professions with dental and oral health professional leaders. Some participants may feel discomforted after discussing child abuse and neglect as they may realise their acts or omissions to provide adequate support to potential victims. A potential feeling of guilt and/or mental stress of reflecting personal practices can arise. For any participants, adverse childhood experiences or family violence experiences can psychologically and emotionally affect during and after focus group sessions. You can withdraw your consent at any stage of the research.

How will these discomforts and risks be alleviated?

You can choose not to participate in a specific section of the discussion and can choose to cease involvement in the focus group session at any time.

AUT Student Counselling and Mental Health is able to offer three free sessions of confidential counselling support for participants in this AUT research project. These sessions are only available for issues that have arisen directly as a result of participation in the research and are not for other general counselling needs. To access these services, you will need to:

- drop into our centre at WB203 City Campus, email counselling@aut.ac.nz or call 921 9998.
- let the receptionist know that you are a research participant, and provide the title of my research and my name and contact details as given in this Information Sheet.

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Services include:

- Lifeline **0800 543 354** (0800 LIFELINE) or **free text 4357** (HELP) - for counselling and support
- Samaritans **0800 726 666** – for confidential support for anyone who is lonely or in emotional distress

What are the benefits?

Findings will inform different views on the roles of oral health therapists and dental therapists in child protection and contribute to improving the responsiveness of oral health practitioners to children's safety and wellbeing needs. Public and private dental service providers and tertiary education providers can adopt the findings in the development and delivery of oral health child protection strategies. Finally, the primary researcher seeks to gain a Doctor of Philosophy through this research.

How will my privacy be protected?

All participants will be required to keep any information about other participants' identities and contents of discussions confidential to protect the privacy of others. All participants will sign the consent form in the agreement to keep all information confidential. A copy of transcribed data will be created and the name will be replaced with numbers for any analysis. Findings will not include any identifiable features. Transcribed data will be only used for the purpose of this research. Electronic copies of consent forms, recordings, and relevant data will be securely stored.

What are the costs of participating in this research?

Ninety minutes of your time and transportation will be required for this research. It is not envisioned that you will incur any other cost due to participating in this research.

What opportunity do I have to consider this invitation?

If you are interested in participating, please return your complete form within four weeks of receiving this information. Feel free to talk over your decision about participating with colleagues, friends or whānau. In addition, if you like further information about this research, please feel free to contact the primary researcher:

Heuiwon (Chris) Han, heuiwon.han@aut.ac.nz, 09 921 9999 ext 5040.

Will I receive feedback on the results of this research?

If you show your willingness to receive a summary of the research findings on the consent form. A one or two page summary of the findings report will be emailed to you upon completion of the thesis.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Professor Jane Koziol-McLain, jane.koziol-mclain@aut.ac.nz, 09 921 9999 ext 9670.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, ethics@aut.ac.nz, (+649) 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Primary researcher: Heuiwon (Chris) Han, heuiwon.han@aut.ac.nz, 09 921 9999 ext 5040.

Please contact me if you are willing to participate in the study.

Project Supervisor Contact Details:

Primary supervisor: Professor Jane Koziol-McLain, jane.koziol-mclain@aut.ac.nz, 09 921 9999 ext 9670.

Secondary supervisor: Professor Zac Morse, zac.morse@aut.ac.nz, 09 921 9999 ext 7524.

Approved by the Auckland University of Technology Ethics Committee on 6 December 2022, AUTEC Reference number 22/172.

C.3. Indicative questions

Qualitative Research – Indicative Questions

1. Could you provide a brief overview of your workplace and your role? If you work across multiple locations, please share details about each.

2. In this research, the term "children" refers to anyone from infancy up to their 18th birthday. Could you share your understanding of the roles oral health practitioners play in responding to child abuse and neglect?

3. How do you assess the current responses of dental professionals to child protection issues?

4. If you are comfortable, could you share any experiences you have had addressing concerns of child abuse and neglect within a dental setting?

5. Looking back, what support would have been helpful for you when dealing with child protection concerns?

6. What are some potential barriers for oral health practitioners in detecting or responding to suspected cases of child abuse and neglect?

7. What could facilitate or enable oral health practitioners to respond more effectively to child abuse and neglect concerns?

8. Do you collaborate with other oral health or social practitioners in responding to child abuse and neglect concerns in your professional role?

9. In your view, what is the preventive role of oral health practitioners in child abuse and neglect, and what are your thoughts on current prevention efforts in dental settings?

10. What support structures are available to you when encountering cases of child abuse and neglect? Do you feel adequately supported in your workplace regarding child protection responses?

11. Have you participated in any educational programs related to child abuse and neglect, including undergraduate or professional development training?

12. Considering significant health and social inequities in child protection services, how can dental practitioners help to reduce these disparities?

13. Do you think Māori values such as whanaungatanga (building relationships), manaakitanga (showing respect), and aroha (love) are implemented and demonstrated in your workplace to protect children and their families from abuse and neglect?

14. If you could make one recommendation to practitioners, organisations, or policymakers to better support oral health practitioners in child protection, what would it be?

15. Is there anything else you would like to discuss further?