

**UNIVERSIDADE FEDERAL DE PELOTAS**  
**Faculdade de Odontologia**  
**Programa de Pós-Graduação em Odontologia**



Dissertação

**Percepções e experiências de pais e crianças sobre intervenções  
odontológicas: uma revisão sistemática de estudos qualitativos**

**Luciana Dalsochio**

Pelotas, 2023

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**Percepções e experiências de pais e crianças sobre intervenções  
odontológicas: uma revisão sistemática de estudos qualitativos**

Dissertação apresentada ao Programa de Pós-Graduação em Odontologia da Faculdade de Odontologia da Universidade Federal de Pelotas, como requisito parcial à obtenção do título de Mestre em Clínica Odontológica, com Ênfase em Odontopediatria.

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## **Notas preliminares**

A presente dissertação foi redigida segundo o Manual de Normas para Dissertações, Teses e Trabalhos Científicos da Universidade Federal de Pelotas de 2013, adotando o Nível de Descrição 4 – estrutura em Artigos, descrita no Apêndice D do referido manual. O projeto de pesquisa contido nesta dissertação é apresentado em sua forma final após qualificação realizada em 18 de outubro de 2021, e aprovado pela Banca Examinadora composta pelas professoras Doutoras Marília Leão Goettems, Luciane Ribeiro de Rezende Sucasas da Costa e Marília da Cunha Maroneze.

## Resumo

DALSOCHIO, Luciana. **Percepções e experiências de pais e crianças sobre intervenções odontológicas: uma revisão sistemática de estudos qualitativos.** Orientadora: Françoise Hélène van de Sande Leite. 2023. 88f. Dissertação (Mestrado em Clínica Odontológica) - Programa de Pós-Graduação em Odontologia, Universidade Federal de Pelotas, Pelotas, 2023.

Na Odontologia, a abordagem predominante em pesquisas é positivista, e mensura a importância de desfechos para os pacientes, ou seus pais/responsáveis legais, por meio de métodos quantificáveis. Embora os dados gerados por esse método sejam essenciais para a prática clínica, a utilização de métodos qualitativos pode oferecer uma compreensão mais aprofundada de como os indivíduos percebem, administram e tomam decisões relacionadas a sua saúde, incluindo seus valores pessoais e preferências. O objetivo desse estudo foi investigar, por meio de uma revisão sistemática de estudos qualitativos, as experiências e percepções de crianças que participaram de intervenções odontológicas, e de seus pais que as acompanharam, em diferentes serviços odontológicos. Para isso, uma busca sistematizada foi realizada nas bases de dados MEDLINE (PubMed), Scopus (Elsevier), Web of Science–All Databases (Clarivate Analytics), Embase (Ovid), PsylInfo (APA) e ProQuest (Dissertations and Theses Global) em outubro de 2022. Dois revisores realizaram a seleção dos estudos de forma independente e em duplicata. Foram incluídos estudos qualitativos envolvendo crianças ou pais/responsáveis legais que avaliaram as experiências e percepções durante intervenções odontológicas. A avaliação da qualidade metodológica dos estudos incluídos foi realizada com o *JB/ Critical Appraisal Checklist for Qualitative Research*. Para análise de dados, a abordagem meta-agregativa foi empregada. De 2.195 estudos recuperados para avaliação, 15 estudos foram incluídos na revisão sistemática qualitativa, sendo 11 estudos com pais/responsáveis legais, três com pais/responsáveis legais e crianças, e um estudo apenas com crianças. Entre os 14 estudos com pais/responsáveis legais, 97 resultados classificados como inquestionáveis e credíveis foram agregados em sete categorias e sintetizados em três achados sintetizados. E, entre os 4 estudos com crianças, 13 resultados inquestionáveis foram agregados em três categorias e agrupados em um achado sintetizado. Foram atribuídos níveis de confiança moderado a alto para os achados sintetizados. Com base nos resultados, crianças e pais/responsáveis legais apresentam percepções diferentes em relação às intervenções odontológicas. Suas perspectivas podem ser moduladas por diversos fatores como experiências prévias, renda familiar e acesso a tratamentos odontológicos.

**Palavras-chave:** Odontopediatria. Qualitativo. Preferências. Meta agregação.

## **Abstract**

DALSOCHIO, Luciana. **Children's and parents' experiences and perceptions of dental interventions: a qualitative systematic review**. Advisor: Françoise Hélène van de Sande Leite. 2023. 88f. Dissertation (Masters in Dental Sciences) – Graduate Program in Dentistry, Federal University of Pelotas, Pelotas, 2023.

Dental research commonly adopts a positivist perspective and measures how important outcomes are to patients, or their parents/legal guardians, through quantifiable methods. Although the data generated by this method is extremely important for clinical practice, obtaining data through qualitative methods can be useful to access and understand how individuals perceive, manage, and make decisions related to their health, describing their values and preferences. The aim of this study was to investigate the experiences and perceptions of children who underwent dental interventions and of their parents or legal guardians who accompanied them, in different settings by a systematic review of qualitative studies. For this, a systematized search was conducted on MEDLINE (PubMed), Scopus (Elsevier), Web of Science-All Databases (Clarivate Analytics), Embase (Ovid), PsycInfo (APA), and ProQuest (Dissertations and Theses Global) databases in October 2022. Two reviewers performed the selection of studies independently and in duplicate. Qualitative studies involving children or parents/legal guardians that assessed their experiences and perceptions during dental interventions were included. Methodological quality assessment of the included studies was performed with the JBI Critical Appraisal Checklist for Qualitative Research. For data analysis, the meta-aggregative approach was employed. Of 2,195 studies retrieved for evaluation, 15 studies were included in the qualitative systematic review, with 11 studies with parents/legal guardians, three with parents/legal guardians and children, and one study with children only. Among the 14 studies with parents/legal guardians, 97 results classified as unquestionable and credible were aggregated into seven categories and grouped into three synthesized findings. And among the 4 studies with children, 13 unquestionable results were aggregated into three categories and synthesized into one synthesized finding. Based on the findings, parents/legal guardians and children have different perceptions regarding dental treatments. Their perspectives can be modulated by many factors, such as previous experiences, income, and access to health services.

**Keywords:** Pediatric dentistry. Qualitative. Preferences. Meta-aggregation.

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## 1 Introdução

O conceito de Saúde Baseada em Evidências agrega diferentes perspectivas frente a tomada de decisão nas intervenções, e reforça a importância de se obter a melhor evidência científica aplicada à prática clínica considerando os valores do paciente (BARGHAVA; BARGHAVA, 2007). Assim, além gerar evidências para responder questões clínicas específicas, espera-se que os estudos científicos forneçam resultados com aplicabilidade e aceitabilidade para todas as partes interessadas: pacientes, profissionais da saúde, formuladores de políticas e financiadores (PANUTTI et al., 2020).

A satisfação do paciente pode ser considerada um fator importante para o sucesso de intervenções odontológicas. Para atender às expectativas dos pacientes, é essencial conhecê-las. Isso requer uma abordagem centrada no paciente que envolva sua participação ativa no autocuidado e a personalização dos cuidados de saúde bucal (DOUGLASS; SHEETS, 2000).

A fim de compreender o que é importante para os pacientes, diferentes métodos podem ser empregados. Em estudos de metodologia quantitativa, as medidas de desfecho relatadas pelos pacientes (PROMs) ou as medidas relatadas pelos pais/responsáveis legais (utilizadas em estudos com crianças) são comumente utilizadas, tendo como principal método de coleta de dados os questionários (GILCHRIST et al., 2020). Essas medidas são subjetivas e podem mensurar diferentes desfechos, como qualidade de vida relacionada a saúde bucal, diminuição da intensidade de dor e aceitabilidade de um tratamento, sendo passíveis de quantificação (MENDES et al., 2020).

Além de PROMs, métodos de pesquisa qualitativos podem ser empregados para acessar e compreender com mais detalhes como os indivíduos percebem, administram e tomam decisões relacionadas a sua saúde. O termo qualitativo se refere a várias metodologias de pesquisa e inclui diferentes métodos de coleta de dados, como entrevistas em grupo ou individuais e a observação (LOCKWOOD et al., 2020).

Embora a pesquisa em odontologia adote majoritariamente uma perspectiva positivista, é essencial explorar novas formas de obtenção de dados centrados no paciente para embasar recomendações para a prática clínica. Para o desenvolvimento de Diretrizes para a Prática Clínica, a importância dos desfechos e a aceitabilidade

das diferentes intervenções sob o ponto de vista do paciente é um aspecto fundamental a ser considerado na elaboração das recomendações. Assim, a preferência do paciente a favor ou contra uma intervenção é equivalente à importância atribuída por ele aos resultados obtidos a partir da decisão de se submeter a uma intervenção ou não (ZHANG et al., 2017).

Para obtenção dessas informações, revisões sistemáticas relevantes sobre a temática devem ser conduzidas ou identificadas na literatura (SCHÜNEMANN et al., 2013). Nessa perspectiva, as revisões sistemáticas qualitativas são um método útil para sintetizar os resultados de múltiplos estudos qualitativos primários, identificar padrões nos dados, explorar semelhanças e diferenças em diferentes contextos e conduzir os dados a uma nova interpretação, contribuindo para o campo de investigação (DOWNE et al., 2019).

## 2 Projeto de pesquisa

*Projeto apresentado para qualificação e aprovado no dia 18 de outubro de 2021.*

### 2.1 Antecedentes e justificativa

A busca por atendimento odontológico para crianças é motivada, principalmente, pela necessidade de tratamento e presença de dor (MARTENS et al., 2018; MIKA et al., 2018). Essas condições são relatadas a partir da percepção negativa dos pais/responsáveis legais sobre a saúde bucal das crianças quando lesões de cárie, consequências de traumatismo dental e má oclusões encontram-se em estágios avançados (BARASUOL et al., 2021; BEKES et al., 2021).

Em 2020, dada a necessidade de cumprir protocolos para o enfrentamento da pandemia da COVID-19, a procura por atendimento odontológico para crianças na Atenção Básica à Saúde no Brasil teve declínio de 89% quando comparado ao mesmo período em 2019 (CHISINI et al., 2021). Na Índia, de 120 pais entrevistados, 60,8% relataram a necessidade de tratamento odontológico para seu filho durante a pandemia, mas apenas 50,8% procuraram o dentista e, destes, 73,81% procuraram por razões de dor (GOSWAMI; GREWAL; GARG, 2021).

Como consequência, condições bucais não tratadas impactam no desenvolvimento de crianças, afetando o cotidiano e prejudicando o crescimento, aprendizagem e socialização (SANTOS et al., 2019). Limitações funcionais, como dificuldade para comer e falar, efeitos psicológicos causados pela dor, como tristeza e ansiedade (GOMES et al., 2019), absenteísmo escolar (OPYDO-SZYMACZEK et al., 2021) e afastamento de atividades recreativas (SANTOS et al., 2019) são alguns exemplos.

Logo, entende-se a preocupação dos estudos em investigar o impacto dessas condições não tratadas e das reações emocionais, como ansiedade, presença de dor e medo, na percepção de crianças frente ao atendimento odontológico. O entendimento de que a presença de ansiedade e dor pré-operatória desencadeiam mais dor durante o atendimento (MATHIAS et al., 2019), a primeira consulta odontológica gera medo (CADEMARTORI et al., 2020) e que aspectos relacionados ao dentista e ao ambiente odontológico interferem na experiência da criança (OLIVEIRA et al. 2020), faz com que o profissional consiga empregar estratégias

eficientes que minimizem comportamentos negativos de acordo com a idade dos pacientes (OLIVEIRA et al., 2020).

Para obtenção dessas informações, questionários e escalas podem ser utilizados. Além de propiciar dados quantitativos, esses instrumentos são úteis para obter uma visão geral de como uma condição pode afetar aspectos da Qualidade de Vida relacionada à saúde bucal. Porém, em algumas situações, são insuficientemente sensíveis para captar mudanças sutis que ocorrem como resultado de uma condição ou intervenção específica (GILCHRIST et al., 2021).

Nestes casos, métodos de pesquisa qualitativos podem ser utilizados, justamente para explorar o significado dos dados quantitativos com mais detalhes (STEWART et al., 2008). O termo qualitativo se refere a várias metodologias de pesquisa e inclui diferentes métodos de coleta de dados, como entrevistas em grupo ou individuais e observação. Ao invés de quantificar ou retratar estatisticamente os dados obtidos, a pesquisa qualitativa busca compreender como os indivíduos percebem, administram e tomam decisões relacionadas a sua saúde (LOCKWOOD et al., 2020).

Em Odontologia, a pesquisa qualitativa pode ser empregada para avaliar diferentes situações. Alguns exemplos de estudos realizados apenas com pais e responsáveis legais buscaram avaliar a percepção sobre barreiras e facilitadores que influenciam os comportamentos de saúde bucal das crianças (DUJISTER et al., 2017) e a adesão ao atendimento odontológico preventivo (BADRI et al., 2017; MOMENI et al., 2018), impacto do tratamento de dentes decíduos anteriores (CUSTÓDIO et al., 2019), influência de padrões alimentares saudáveis na saúde bucal (ARORA 2021), uso da estabilização protetora durante o atendimento odontológico infantil (ILHA et al., 2021) e percepções sobre a primeira consulta odontológica (VISWANATH; ASOKAN; POLLACHI-RAMAKRISHNAN, 2021).

Recentemente, a participação de crianças em entrevistas qualitativas se mostrou evidenciada. No estudo de El-Yousfi et al. (2020), crianças e seus pais/responsáveis legais opinaram sobre a aceitabilidade de três estratégias de tratamento odontológico para manejo de lesões de cárie; de forma semelhante, Seifo et al. (2021) explorou opiniões de pais e filhos sobre a aceitabilidade do Diamino Fluoreto de Prata para o mesmo fim.

A pesquisa qualitativa é de fácil emprego com crianças. É possível adaptar o conteúdo, a duração da entrevista e a linguagem para a respectiva idade dos

participantes (GILCHRIST et al., 2021), superando, inclusive, problemas de alfabetização (STEWART et al., 2008). Embora informações advindas dos responsáveis possam ser mais detalhadas, muitas vezes existem significativas diferenças entre as observações dos pais sobre seus filhos e as próprias percepções dos filhos sobre si mesmos. Portanto, o foco da pesquisa deixa de ser buscar informações sobre a criança para buscar informações diretamente dela (GILL et al., 2008).

Finalmente, a revisão sistemática de estudos qualitativos, também conhecida como síntese de evidências qualitativas, é a abordagem adequada para sintetizar os resultados de vários estudos qualitativos primários. Essa metodologia consegue identificar padrões nos dados, explorando semelhanças e diferenças, e gerar novas interpretações acerca dos dados existentes (DOWNE et al., 2019).

Por exemplo, diversos estudos sugerem como solução para redução do impacto negativo de condições não tratadas no atendimento odontológico o emprego de medidas preventivas, diagnóstico e tratamento dentário precoce, planejamento de programas de saúde pública e programas educativos para pais, cuidadores, professores e crianças (MIKA et al., 2018; GOMES et al., 2019; SANTOS et al., 2019; BARASUOL et al., 2021; OPYDO-SZYMACZEK et al., 2021). Na revisão sistemática de estudos qualitativos é possível compreender quais são as barreiras e facilitadores para o acesso a esses cuidados de saúde, ou quais impactos as barreiras e facilitadores têm nas pessoas, em suas experiências e comportamentos (NOYES et al., 2021).

Assim, destaca-se também a importância da pesquisa qualitativa para gestores e formuladores de políticas públicas. Por vezes, provedores de serviços e acadêmicos não são capazes de compreender o que é importante para os pacientes (DOWNE et al., 2019). Com informações relevantes obtidas diretamente dos usuários de serviços de saúde, é possível adaptar estratégias conforme os usuários vivenciam a saúde e a doença, promovendo saúde de forma acessível para os usuários interessados (LOCKWOOD et al., 2020).

## 2.2 Objetivos

### 2.2.1 *Objetivo geral*

Avaliar a percepção de crianças e seus pais/responsáveis legais acerca do atendimento odontológico.

### 2.2.2 *Objetivos específicos*

- a. Revisar sistematicamente a literatura acerca da percepção de crianças e seus pais/responsáveis legais sobre o atendimento odontológico;
- b. Avaliar as razões que motivam a procura por atendimento odontológico, relatadas por crianças e seus pais/responsáveis legais, por meio de uma pesquisa transversal qualitativa;
- c. Avaliar a percepção de crianças e seus pais/responsáveis legais sobre as diferentes abordagens de atendimento odontológico, e os fatores que influenciam a tomada de decisão na escolha do tratamento;
- d. Investigar a importância de desfechos odontológicos para a criança e seus pais/responsáveis legais



## 2.3 Metodologia

### 2.3.1 *Estudo 1: Revisão Sistemática*

#### **2.3.1.1 Delineamento do estudo**

O presente estudo caracteriza-se como uma revisão sistemática de estudos qualitativos, que será conduzida de acordo com o protocolo do Instituto Joanna Briggs para síntese de evidências qualitativas (LOCKWOOD et al., 2020), e posteriormente, reportada de acordo com o guia de relato ENTREQ (Enhancing transparency in reporting the synthesis of qualitative research) (TONG et al., 2012).

Para assegurar transparência, o protocolo do presente projeto será registrado e estará inteiramente disponível na plataforma Open Science Framework – OSF (<https://osf.io/>).

#### **2.3.1.2 Questão de Pesquisa**

A questão de pesquisa “Qual é a percepção de crianças e seus pais/responsáveis legais sobre o atendimento odontológico realizado em diferentes serviços de assistência odontológica?” segue o acrônimo PICo, que representa a População (P – pais ou responsáveis legais e crianças de até 12 anos incompletos), o Fenômeno de Interesse (I – percepção sobre o atendimento odontológico) e o Contexto (Co – serviços de assistência odontológica).

#### **2.3.1.3 Critérios de inclusão e exclusão**

##### **2.3.1.3.1 Participantes**

Serão considerados estudos qualitativos que incluam crianças e/ou seus pais/responsáveis legais. Para fins desta revisão, o termo criança se refere a indivíduos de 0 a 12 anos incompletos, conforme classificação da Organização Mundial da Saúde (OMS). E o termo “responsáveis legais” refere-se a pessoa que detém a responsabilidade pela criação, representação e/ou assistência da criança (pais, guardiões, tutores e curadores) (BRASIL, 1990).

##### **2.3.1.3.2 Fenômeno de interesse**

O fenômeno de interesse é a percepção de pais/responsáveis legais e/ou crianças sobre o atendimento odontológico do paciente infantil.

### **2.3.1.3.3 Contexto**

O contexto da revisão irá considerar serviços de atendimento odontológico, incluindo diferentes níveis de atenção à saúde, em âmbito particular, público ou de ensino (Universidades), com perspectiva internacional.

### **2.3.1.3.4 Tipos de estudos**

Serão considerados estudos qualitativos e componentes qualitativos de estudos com métodos mistos (quantitativo e qualitativo), que incluam somente relato dos pais/responsáveis legais, somente relato de crianças ou ambos, e que explorem experiências/percepções frente ao atendimento odontológico.

### **2.3.1.4 Estratégia de busca**

A estratégia de busca será realizada em três fases e identificará estudos publicados em bases eletrônicas de dados e a literatura cinza, sem restrição de data, idioma e status de publicação.

Na primeira fase, com o objetivo de identificar palavras contidas no título, resumo e palavras-chave dos estudos qualitativos, será realizada uma busca limitada no PubMed utilizando os termos: “qualitative study”, “qualitative research” e “qualitative search”. Após, os termos identificados nos estudos serão pesquisados no Medical Subject Headings Terms (MeSH), Entry Terms (PubMed) e Emtree Terms (Embase) para construção da estratégia de busca.

Na segunda fase, a estratégia de busca será aplicada nas bases de dados Medline (PubMed), Scopus (Elsevier), Web of Science (Clarivate Analytics), Embase (Ovid) e ProQuest para busca de estudos não publicados.

E, na terceira e última fase, as listas de referência dos estudos selecionados para avaliação serão consultadas em busca de referências adicionais.

### **2.3.1.5 Seleção dos estudos**

Após aplicação da estratégia de busca, os estudos recuperados serão importados para o gerenciador de referências Mendeley Desktop (Elsevier, Londres, Reino Unido) para remoção de duplicatas e, posteriormente, exportados para o website Rayyan (Rayyan Systems Inc., Cambridge, Massachusetts). Dois revisores

(LD e FHVS) realizarão a leitura de títulos e resumos de forma independente, em duplicata, e cegos.

Os revisores irão selecionar os estudos de acordo com os critérios de inclusão para a revisão. Havendo discordâncias, os revisores poderão entrar em consenso ou um terceiro revisor (AFM) poderá ser convidado a participar dessa etapa.

Os títulos e resumos selecionados serão recuperados para leitura na íntegra. Quando não atenderem aos critérios de inclusão serão excluídos e os motivos para a exclusão serão fornecidos no relatório final da revisão sistemática em uma tabela. Todo o processo de seleção dos estudos será detalhado no fluxograma PRISMA 2020 para revisões sistemáticas e metanálises (PAGE et al., 2021).

#### **2.3.1.6 Avaliação da qualidade metodológica**

Os estudos incluídos serão avaliados criticamente com o Instrumento de Avaliação Crítica para Pesquisa Qualitativa do Instituto Joanna Briggs.

Esse instrumento contém 10 itens que englobam aspectos relacionados a congruência entre metodologia e aspectos filosóficos, questão de pesquisa e objetivo, coleta de dados, análise de dados e interpretação dos resultados, orientação teórica e cultural do pesquisador, influência do pesquisador na pesquisa (e vice-versa), representação dos participantes e suas falas, aprovação ética do estudo e relação entre as conclusões do estudo com a análise ou interpretação dos dados.

Quatro opções de avaliação estão disponíveis para cada item, sendo: sim (yes), não (no), pouco claro (unclear) ou não se aplica (not applicable).

Dois revisores (LD e FHVS) independentes conduzirão a avaliação. Durante o processo, um revisor não terá conhecimento sobre a avaliação do outro revisor. Após a finalização de cada avaliação, os resultados serão comparados. Quando houver falta de consenso, deve ocorrer discussão entre os revisores e, se necessário, um terceiro revisor (AFM) será convidado a participar.

Ao final, independente do resultado da avaliação de qualidade metodológica, todos os estudos serão incluídos.

#### **2.3.1.7 Extração dos dados**

A extração de dados qualitativos dos estudos selecionados será realizada com auxílio do instrumento padronizado para extração de dados do Instituto Joanna Briggs por dois revisores independentes (LD e FHVS) e em duas fases.

Na primeira fase, serão extraídos detalhes específicos sobre os autores, ano de publicação, desenho do estudo, cenário onde foi realizado (nível de atenção à saúde e local), objetivo, amostra (número de participantes, idade e sexo), detalhes geográficos e culturais (referentes ao país dos participantes, aspectos relacionados a cultura em que estão inseridos e condição econômica), fenômeno de interesse, análise de dados realizada e conclusões dos autores.

A segunda fase envolverá a extração de dados referentes aos achados relacionados aos fenômenos de interesse. Cada artigo será lido várias vezes pelos revisores para obter uma compreensão dos principais resultados, que serão extraídos do texto, seja em forma de temas, metáforas, dados analíticos de documentos, observações do autor ou análise temática, com uma ilustração relevante e literal do texto para apoiar cada descoberta. Define-se como ilustração uma citação direta da voz do participante, observações de trabalho de campo ou outros dados de apoio.

#### **2.3.1.8 Análise dos dados**

Para análise de dados a abordagem meta agregativa será empregada. Uma meta-agregação tem como objetivo ajudar a compreender e apoiar o que ocorre na prática humana, e busca permitir declarações generalizáveis na forma de recomendações para orientar profissionais e formuladores de políticas (HANNES; LOCKWOOD, 2011).

A partir da coleta de achados e ilustrações, categorias são desenvolvidas para agrupar dois ou mais achados semelhantes. A categoria pode ser formada, por exemplo, por meio da identificação de semelhanças conceituais (onde um tema é identificado em vários achados) ou descritiva (onde a terminologia associada a um tema é consistente entre os artigos).

Após, com o intuito de reduzir o número de categorias, são criados grupos de achados sintetizados. Ou seja, categorias são agrupadas (no mínimo duas categorias) e submetidas a uma síntese para produzir um conjunto abrangente de achados. É particularmente nesta fase que sempre haverá algum grau de interpretação dos revisores (LD, FHVS, AFM) envolvidos.

Por fim, as descobertas guiarão a formulação de possíveis linhas de ação, tornando os resultados mais precisos, com aplicabilidade prática e recomendações para políticas ou práticas.

### 2.3.1.9 Avaliação da confiança nas descobertas

Após sintetizados, os achados serão classificados de acordo com a abordagem ConQual (MUNN et al., 2014), para estabelecer a confiança da síntese dos dados, e apresentados em um resumo das descobertas.

O resumo das descobertas inclui os principais elementos da revisão em uma tabela. Nela, são incluídos título, população, fenômenos de interesse e o contexto da revisão específica. Cada achado sintetizado da revisão é então apresentado junto ao desenho de pesquisa que o informa, uma pontuação para confiabilidade, uma pontuação para credibilidade e a pontuação geral ConQual.

Inicialmente, os estudos qualitativos são classificados com alto nível de confiança nas descobertas sintetizadas e os textos e artigos de opinião são classificados com baixo nível de confiança.

Após, atribui-se uma pontuação para confiabilidade. Confiabilidade refere-se a real confiança que uma pessoa pode colocar sobre os achados dos estudos e é baseada em cinco questões específicas contidas no Instrumento de Avaliação Crítica para Pesquisa Qualitativa do Instituto Joanna Briggs, relacionadas a congruência entre a condução da pesquisa com os objetivos traçados e sua finalidade. Se 4 a 5 perguntas obtiverem resposta sim, a classificação do estudo permanece inalterada (remains unchanged), se 2 a 3 respostas forem sim, um nível deverá ser rebaixado e se 0 a 1 resposta for sim, o estudo deve ser rebaixado em dois níveis (Figura 1).

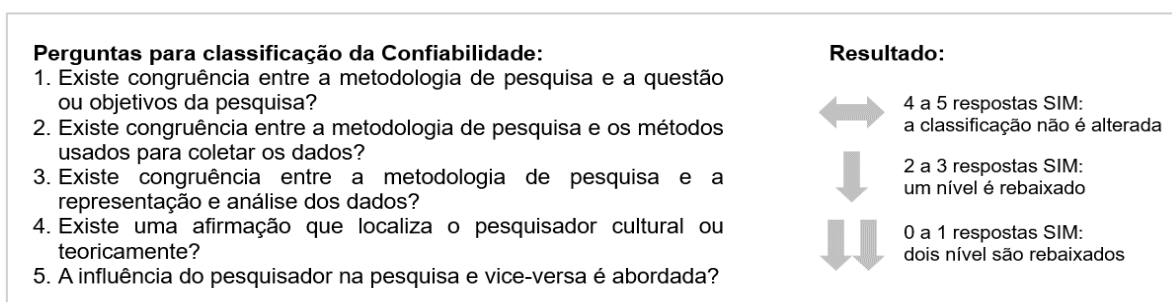


Figura 1 - Classificação da confiabilidade das descobertas. Fonte: Adaptado de Munn et al. (2014).

Por fim, atribui-se um nível de credibilidade à descoberta sintetizada. A credibilidade pode ser associada ao critério de validade interna dos achados na pesquisa quantitativa, referindo-se ao ajuste entre a percepção do autor e os dados originais, e é avaliada com base na seguinte escala de classificação: inequívoco (resultados acompanhados por uma ilustração que está além de qualquer dúvida

razoável e, portanto, não está aberta a questionamentos), equívoco (descobertas acompanhadas de uma ilustração sem associação clara com ela e, portanto, passível de contestação) e não suportado (descobertas não suportadas pelos dados).

O rebaixamento da credibilidade pode ocorrer quando nem todos os achados incluídos em um achado sintetizado são considerados inequívocos. Para uma mistura de resultados inequívocos/equívocos, o resultado sintetizado pode ser rebaixado em um nível. Para resultados duvidosos, o resultado sintetizado pode ser rebaixado em dois níveis, para descobertas duvidosas ou sem suporte, pode ser rebaixado três níveis, e para descobertas não suportadas, pode ser rebaixado quatro níveis (Figura 2).

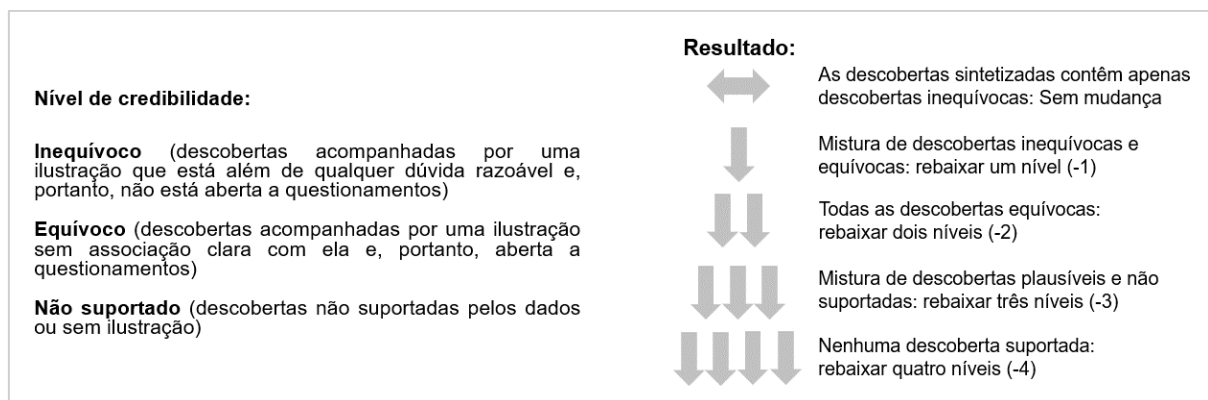


Figura 2. Classificação da credibilidade das descobertas. Fonte: Adaptado de Munn et al. (2014).

A pontuação ConQual é estabelecida para cada descoberta sintetizada, dando a síntese dos achados um nível de confiança que pode variar em alto, moderado, baixo e muito baixo. Após este processo, a tabela de resumo das descobertas será preenchida.

### *2.3.2 Estudo 2: Pesquisa Qualitativa*

#### **2.3.2.1 Delineamento do estudo**

Trata-se de um estudo qualitativo, transversal e fenomenológico, que será realizado em duas fases: observação e entrevista. O estudo será conduzido durante o período de março de 2022 a julho de 2022, com crianças que estejam recebendo atendimento odontológico na Unidade de Clínica Infantil da Faculdade de Odontologia da Universidade Federal de Pelotas, e seus pais/responsáveis legais.

Para redação do artigo científico o guia para reporte de pesquisas qualitativas COREQ (Consolidated Criteria For Reporting Qualitative Research) será consultado (TONG; SAINSBURY; CRAIG, 2007).

#### **2.3.2.7 Aspectos éticos**

Este protocolo de pesquisa foi elaborado de acordo com as Diretrizes e Normas Regulamentares de Pesquisas envolvendo seres humanos (Resolução do Conselho Nacional de Saúde nº 466, 12 de dezembro de 2012) e será enviado ao Comitê de Ética e Pesquisa da Faculdade de Odontologia da Universidade Federal de Pelotas para avaliação e aprovação.

Os participantes da pesquisa (pais/responsáveis legais e crianças) serão previamente elucidados quanto ao objetivo do estudo. Os pais/responsáveis legais que concordarem em participar serão incluídos ao estudo após assinatura do Termo de Consentimento Livre e Esclarecido. Caso os pais/responsáveis legais não aceitem participar da pesquisa, o atendimento das crianças na Faculdade de Odontologia da Universidade Federal de Pelotas não será interrompido, sem qualquer prejuízo. Após, será apresentado às crianças o Termo de Assentimento. Caso a criança não aceite participar do estudo, o Termo de Consentimento Livre e Esclarecido assinado pelos pais/responsáveis legais será anulado.

As pesquisadoras se comprometem a manter sigilo quanto aos dados dos participantes e nenhum pesquisador estará envolvido diretamente com o tratamento odontológico das crianças durante o desenvolvimento do estudo. Os participantes não receberão auxílio de custos nem bonificação por sua participação.

##### **2.3.2.7.1 Riscos e Benefícios**

Os procedimentos odontológicos a serem realizados não são parte da pesquisa, uma vez que esta se destina apenas a avaliar a percepção das crianças e seus pais/responsáveis legais. Desta forma, os riscos da pesquisa são classificados como mínimos, podendo haver cansaço, aborrecimento ou vergonha ao responder a entrevista, ou receio que quebra de sigilo e anonimato ocorram. Para minimizar estes riscos, as entrevistas serão realizadas em uma sala reservada, assegurando a privacidade dos participantes durante seus relatos. Ainda, dados identificatórios não serão coletados, assegurando o anonimato. As gravações em áudio das entrevistas serão realizadas apenas para permitir a análise e transcrição posterior, reduzindo o tempo que seria dispendido caso a redação fosse realizada durante as entrevistas. Apenas um pesquisador terá acesso a estas gravações, que serão utilizadas somente para os objetivos da pesquisa. Além disso, como as perguntas são semiestruturadas, os participantes poderão compartilhar apenas o que desejarem, minimizando riscos de origem emocional.

Como benefícios, embora não haja previsão de benefícios diretos aos participantes da pesquisa, a oportunidade de relatar suas experiências de forma sigilosa sobre o atendimento odontológico poderia ser gratificante para os participantes. Esta percepção também será investigada ao final da entrevista. Como benefícios indiretos espera-se contribuir com a prática clínica em Odontopediatria, substanciando a perspectiva do usuário para auxiliar profissionais e gestores no processo de tomada de decisão.

#### **2.3.2.2 Amostra**

A amostra será de conveniência e o processo de amostragem por saturação teórica.

#### **2.3.2.3 Critérios de elegibilidade**

##### **Inclusão**

- a) Ter idade entre 6 e 12 anos incompletos;
- b) Estar acompanhado por um responsável legal que assinará o Termo de Consentimento Livre e Esclarecido;
- c) Concordar em participar e assinar o Termo de Assentimento;
- d) Realizar procedimento odontológico não invasivo, micro invasivo ou invasivo;
- e) Apresentar bom estado de saúde geral.



**Exclusão**

- a) Pacientes não normorreativos;
- b) Estar realizando a primeira consulta.

**2.3.2.4 Coleta de dados**

Serão coletados dados em dois períodos distintos, o primeiro será em um momento de observação e outro em entrevista semiestruturada.

Inicialmente, o agendamento será consultado para verificar quais são os procedimentos programados para o dia. Deste modo, ao chegarem à Clínica Escola, o responsável e a criança que se adequarem aos critérios de inclusão serão convidados a participar do estudo.

Conforme o procedimento a ser realizado, os participantes serão alocados em dois estratos: a) Procedimentos odontológicos não invasivos/microinvasivos: profilaxia, raspagem, aplicação de flúor (gel e verniz), aplicação de Diamino Fluoreto de Prata e selamento de lesões de cárie.

b) Procedimentos odontológicos invasivos: restauração com remoção de tecido cariado, substituição ou reparo de restaurações, tratamento de dentes traumatizados, pulpotomia, pulpectomia, exodontia, e se os procedimentos foram realizados com ou sem anestesia, e tipo de isolamento do campo operatório.

**2.3.2.4.1 Observação**

A observação sistemática foca em pessoas e eventos para descobrir sobre comportamentos e interações em ambientes. No caso desta pesquisa, a observação será realizada por uma pesquisadora (LD) no ambiente de atendimento odontológico, com o objetivo de coletar informações por meio de notas de campo.

A observação será realizada de forma aberta. Ou seja, o responsável e a criança terão conhecimento sobre o procedimento (STEWART et al., 2008).

**2.3.2.4.2 Dados sociodemográficos**

Inicialmente, a díade responsável-criança responderá um questionário auto administrável acerca de seus aspectos sociodemográficos, incluindo: idade, sexo, parentesco (se mãe, pai ou outro), estado civil, ocupação e nível de escolaridade do

responsável, renda familiar, número de membros da família, se a criança frequenta escola e qual ano, se realizou consulta odontológica anteriormente, motivo que levou a procurar por atendimento odontológico, procedimento realizado no dia e número de dentes presentes em boca por auto contagem. Com o objetivo de preservar o sigilo dos participantes e de suas respostas, os nomes não serão identificados. Conforme ordem das entrevistas, cada díade receberá um número que será acompanhado pela letra identificando o estrato (Exemplo: 1a, 2b).

#### **2.3.2.4.3 Dados qualitativos**

A condução da entrevista se dará a partir de um guia de entrevista semiestruturado com perguntas abertas, elaborado pelas pesquisadoras. Durante a entrevista, todas as respostas serão gravadas com gravador de voz digital e notas de campo serão realizadas. Após, serão transcritas na íntegra por uma pesquisadora (LD).

O guia de entrevista será testado em duas díades, que não serão incluídas a amostra final.

#### **2.3.2.5 Análise de dados**

Para os dados coletados pela entrevista semiestruturada será realizada análise de conteúdo temática.

Após, como forma de complementar, adicionar novos elementos e pontos de vista, as estratégias de triangulação metodológica entre métodos e triangulação de dados serão realizadas, a fim de unir os resultados coletados por meio de diferentes métodos e em diferentes momentos (entrevista, questionário sociodemográfico e notas de campo) (ZAPPELINI; FEUERSCHÜTTE, 2015).

##### **2.3.2.5.2 Análise de conteúdo temática**

Os dados obtidos pelas entrevistas serão analisados manualmente pelo método de análise de conteúdo temática indutiva. Embora a análise seja dividida em seis fases (BRAUN; CLARK, 2006), é necessário considerar que o processo é iterativo e reflexivo, pois se desenvolve ao longo do tempo e envolve um movimento constante para frente e para trás entre as fases (NOWELL et al., 2017).

A primeira fase consiste na familiarização das pesquisadoras (LD, FHVS, AFM) com os dados. Para isso, será realizada a leitura das transcrições, de forma repetida e ativa, buscando identificar significados, padrões e potenciais informações de interesse (BRAUN; CLARK, 2006).

A segunda fase consiste na formulação de códigos iniciais. A codificação pode ser guiada pelos dados em si, ou seja, com base nos termos presentes nas ilustrações, ou pela teoria, destacando o contexto. O objetivo é identificar padrões repetidos em todo o conjunto de dados (BRAUN; CLARK, 2006) e oferecer uma palavra ou frase resumida que defina os elementos discutidos na ilustração (BURNARD et al., 2008).

Na terceira fase os códigos serão classificados como temas potenciais. Para isso, todas as ilustrações incluídas dentro de códigos serão comparadas a fim de identificar semelhanças e considerar como poderão ser combinadas para formar um tema abrangente. Ao final, serão obtidos temas candidatos e subtemas, e todos os extratos de dados que foram codificados em relação a eles (BRAUN; CLARK, 2006).

Na quarta fase os temas candidatos serão refinados. Novamente todos os códigos agrupados para cada tema serão lidos em busca de um padrão coerente que justifique a formulação de um tema. Deve-se avaliar se os dados são suficientes para embasar um tema ou são muito diversos, se dois temas podem formar apenas um ou se um tema precisará ser dividido. Caso os temas não se encaixem, será necessário reavaliar o tema em si ou as ilustrações, retrabalhando ou criando um tema. Após, é necessário investigar a validade dos temas individuais em relação ao conjunto de dados (BRAUN; CLARK, 2006).

Após obtenção de um mapa temático satisfatório, a fase cinco iniciará com a definição e nomenclatura dos temas. Ou seja, será identificado o que é interessante em cada tema e por que, determinando quais aspectos dos dados o tema captura. Além de identificar a história que cada tema conta, é importante considerar como ela se encaixa na história geral sobre os dados e em relação a pergunta de pesquisa. Ainda, será identificado se um tema contém subtemas, que podem ser úteis para em temas grandes e complexos. Por fim, os temas deverão receber nomes concisos, incisivos e que darão imediatamente ao leitor uma noção do que representa (BRAUN; CLARK, 2006; NOWELL et al., 2017).

Na sexta e última fase ocorrerá a análise final e descrição dos achados (BRAUN; CLARK, 2006).

## 2.4 Contribuições e divulgações

Espera-se que a partir deste trabalho seja possível produzir recomendações para a prática clínica odontológica a partir da perspectiva do usuário, auxiliando os profissionais e gestores na tomada de decisão. Havendo, conseqüentemente, impacto social para os usuários de serviços de saúde, e acadêmicos, fortalecendo a rede de pesquisa qualitativa na Universidade Federal de Pelotas.

## 2.5 Cronograma

<b>Atividades</b>	<b>2021 2º semestre</b>	<b>2022 1º semestre</b>	<b>2022 2º semestre</b>
Revisão bibliográfica	X	X	X
Elaboração do projeto	X		
Qualificação do projeto	X		
Condução do protocolo da Revisão Sistemática	X	X	
Redação do Artigo 1		X	
Envio ao CEP			X
Apresentação da Dissertação			X
Encaminhamento para publicação			X

Fonte: Do autor (2023).

## 2.7 Orçamento

**Tabela 2.** Orçamento da pesquisa

<b>Material</b>	<b>Quantidade</b>	<b>Valor unitário em reais</b>	<b>Valor total em reais</b>
<b>Materiais de custeio</b>			
Folhas A4	1 pacote	0,10	10,00
Canetas	2 unidades	2,00	4,00
Impressões	100 unidades	0,25	25,00
<b>Subtotal</b>			39,00
<b>Materiais de capital</b>			
Gravador de voz	1 unidade	350,00	350,00
Notebook	1 unidade	3.500,00	3.500,00
<b>Subtotal</b>			3.850,00
<b>Total</b>			<b>3.889,00</b>

Fonte: Do autor (2023).

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### **3 Relatório de campo**

O presente relatório apresenta um breve resumo do desenvolvimento desta dissertação.

#### **3.1 Modificações gerais**

##### **3.1.1 Estudo de revisão sistemática**

Após a qualificação do projeto de pesquisa, ocorrida no dia 18 de outubro de 2021, e a realização de curso sobre pesquisa qualitativa pela Faculdade de Saúde Pública da Universidade de São Paulo em fevereiro de 2022, foram realizadas alterações na metodologia da revisão sistemática. De modo geral, os itens correspondentes à questão de pesquisa foram alterados a fim de torná-los mais compreensíveis e abrangentes. A partir da estratégia de busca inicial, aplicada às bases de dados no dia 7 de junho de 2022, 583 estudos foram identificados. Todavia, em razão da busca por informações e constante atualização do conhecimento metodológico, uma nova estratégia foi desenvolvida e aplicada às bases de dados no dia 14 de outubro de 2022, resultando em 1.266 estudos recuperados, o que desencadeou a necessidade de prorrogar o prazo para defesa da presente dissertação.

O registro do protocolo foi realizado na plataforma PROSPERO. Embora também seja possível realizar o registro na plataforma Open Science Framework (OSF), o Instituto Joanna Briggs preconiza a apresentação do número do registro no artigo final.

Por fim, para reporte do estudo, optou-se por utilizar o guia para reporte PRISMA 2020. Além de ser amplamente utilizado para reporte deste tipo de estudo, o guia é preconizado pela revista em que o artigo será submetido.

##### **3.2.2 Estudo transversal qualitativo**

Em virtude da pandemia, no momento de retorno das atividades clínicas na Faculdade de Odontologia da UFPEL, foram implementados protocolos para evitar a contaminação entre estudantes e pacientes e houve redução do espaço clínico disponível para atendimentos. Consequentemente, pensando na importância das entrevistas serem realizadas após os procedimentos odontológicos, e no tempo disponível para aplicação da entrevista em amostra piloto, análise dos resultados,

realização de ajustes necessários no questionário, nova aplicação e análise de dados, optou-se por remover o estudo transversal qualitativo deste trabalho.

## 4 Artigo

**Title:** Children's and parents' experiences and perceptions of dental interventions: a qualitative systematic review<sup>1</sup>

**Running title:** Experiences and perceptions of dental interventions

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### Author contributions

All authors contributed to the study conception and design. L.D., F.H.S.L. and A.F.M. performed the study selection and assessment of methodological quality. L.D. performed the data collection. All authors synthesized and analyzed the data. L.D. wrote the first draft of the article. L.D., A.F.M., T.K.T., T.T.M. and F.H.S.L. commented on previous versions of the manuscript, read, and approved the final manuscript.

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<sup>1</sup> Artigo formatado de acordo com as normas do periódico *International Journal of Paediatric Dentistry* (Qualis CAPES: A1, Fator de Impacto: 3.264).

**Title:** Children's and parents' experiences and perceptions of dental interventions: a qualitative systematic review

### **Abstract**

**Background:** Understanding the perspectives of patients and their parents/legal guardians regarding dental interventions is essential to provide patient-centered care and improve the development of recommendations for clinical practice in pediatric dentistry.

**Aim:** The aim of this systematic review was to investigate the experiences and perceptions of children who underwent dental interventions, as well as their parents or legal guardians who accompanied them, in different settings.

**Design:** A systematic search strategy using PubMed, Embase, Web of Science, Scopus, PsycInfo, and ProQuest databases was performed. Two reviewers performed the selection of studies independently and in duplicate. Qualitative studies involving children or parents/legal guardians that assessed their experiences and perceptions during dental interventions were included, and their methodological quality was performed with the JBI Critical Appraisal Checklist for Qualitative Research. For data analysis, the meta-aggregative approach was employed.

**Results:** Fifteen studies were included, of which 11 involved parents/legal guardians, three involved both parents/legal guardians and children, and one involved only children. The studies were published between 2011 and 2022. The review represents the experiences and perceptions of 320 parents and 76 children. There were four synthesized key findings: i) childcare expectations; ii) dental interventions; iii) service provision; and iv) children's perception.

**Conclusion:** The findings of this review reveal that parents/legal guardians and children have different perceptions regarding dental treatments. Their perspectives can be influenced by several factors, including previous experiences, income, and access to healthcare services. Understanding these differences is crucial for providing patient-centered care in pediatric dentistry and developing targeted interventions to improve the dental experience for both children and their parents/legal guardians.

**Keywords:** Oral health; Dental care; Paediatric Dentistry; Acceptability; Perspectives.

## 1. Introduction

The American Academy of Pediatric Dentistry (AAPD) recommends that a dental home be established for infants, which includes medical history, dental examination, risk assessment, and anticipatory guidance, and should be established no later than 12 months of age. This process should be repeated every six months during infancy, or as determined by the child's individual needs or susceptibility to disease according to risk assessment.<sup>1</sup>

Despite widespread efforts to promote oral health practices and adhere to recommendations, over one-third of the global population suffers from untreated dental caries, with an estimated global average prevalence of 43% of caries in deciduous teeth.<sup>2</sup> In a survey with 1,580 dentists from 32 countries, 22.1% responded that their patients only sought dental care when they had oral or orofacial problems. Consequently, a child's first dental visit may occur due to pain, poor oral function, appearance, or psychosocial impact, which can have lifelong negative consequences.<sup>3</sup>

Parental involvement is critical for a successful dental experience.<sup>4</sup> As the primary caregivers of children, parents should be proactive in seeking dental care for their children. Parents may choose to pursue only conservative treatments or avoid intervening in their child's oral condition, leading to the progression of dental caries, or exacerbation of other oral conditions such as malformations and sequelae following traumatic dental injuries.<sup>5</sup> As a result, more invasive treatments may be required in the future, which could lead to negative experiences for both the parents and children.

Identifying the factors that determine decision-making on dental treatments is crucial in understanding patients' perspectives and the rationale behind their decisions regarding dental interventions.<sup>6</sup> This knowledge can aid clinical practice, as understanding the perception of children and their parents regarding an intervention can help determine the acceptability of a treatment recommendation.<sup>7</sup> Additionally, this information can be valuable in revealing the need for changes in policies and practice, by developing healthcare programs, incentive structures, and planning the provision of dental services that better align with patient preferences.<sup>8</sup>

Given the limited research on summarizing findings on children's and parents' experiences and perceptions of dental interventions, the aim of this qualitative systematic review was to identify, critically appraise, and synthesize qualitative evidence pertaining to the experiences and perceptions of children who underwent dental interventions, as well as those of their parents who accompanied them during the treatments.

## 2. Material and methods

This systematic review was conducted in accordance with Joanna Briggs Institute (JBI) methodology for systematic reviews of qualitative evidence.<sup>9</sup> The study protocol was registered on PROSPERO (reference CRD42022382611), and the reporting was guided by the standards of the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) Statement.<sup>10</sup>

### 2.1 Deviation from protocol

Two changes were made to the study protocol. The first was the substitution of the term "dental procedures" for "dental interventions" in the research question and in the domain being studied. The objective of this change was to provide a more general view regarding what was considered an intervention in dentistry, encompassing not only dental procedures but also prevention programs. The second change referred to the instrument used for data collection.

There was a failure to report in the protocol that data from the primary studies would be extracted using an instrument developed by the reviewers. In fact, the items to be collected were items from the standardized instrument, and only the item "dental interventions performed on children" was added as an extra item.

## *2.2 Research question*

The PICO framework (Participants, Phenomena of Interest, and Context) was used to formulate the research question "What are the experiences and perceptions of children who underwent dental interventions and of their parents who accompanied the treatments in different dental services?"

## *2.3 Inclusion criteria*

### *2.3.1 Participants*

This review included studies with children, of both genders, from the age of 0 to 12 years old. In addition to children, this review included studies conducted with parents or legal guardians who had accompanied or authorized their children to participate in dental interventions.

### *2.3.2 Phenomenon of interest*

The phenomenon of interest was children's and/or their parents' perspective describing their own experiences and perceptions about a dental intervention. The review included a range of interventions, including preventive, non-invasive, micro-invasive, and invasive strategies for treating carious lesions, endodontic and surgical procedures (e.g., frenectomy and extractions).

### *2.3.4 Context*

The context of the review encompasses dental care services provided in both private and public clinics, as well as educational settings such as universities, dental schools, elementary schools, and community centers in both urban and rural areas.

### *2.3.3 Types of study*

For eligibility, this review exclusively considered studies that utilized qualitative data collection methods (individual interviews and/or focus groups), including, but not limited to, qualitative descriptive, phenomenology, grounded theory, ethnography, and action research. Regarding mixed-methods studies, only those with a comprehensive qualitative section that could be evaluated independently were considered.

## *2.4 Exclusion criteria*

Studies were excluded if they presented voices of children and parents combined, or not properly identified; included children with cognitive impairments, syndromes, or rare diseases, who suffered abuses and used alcohol or drugs; used protective stabilization, sedation, and general anesthesia; realized the data collection based on photographs, videos, and drawings; and addressed the perception of the dental professional or the dental room. Quantitative studies, editorials, commentaries, letters, and conference abstracts were excluded.

## 2.5 Search strategy

The search strategy aimed to locate published primary studies and grey literature. A three-step search strategy was used in this review. First, an initial limited search of MEDLINE (PubMed) was conducted in August 2022, followed by an analysis of the text words contained in the title, abstract and index terms used to describe the articles. The search strategy, including identified keywords and index terms, was adapted for each information source, and a second search was performed on MEDLINE (PubMed), Scopus (Elsevier), Web of Science–All Databases (Clarivate Analytics), Embase (Ovid), PsycInfo (APA), and ProQuest (Dissertations and Theses Global) on October 14, 2022. The full search strategies are provided in Appendix 1. The third search involved screening the reference lists of all selected studies manually for further relevant studies that could fulfill the inclusion criteria. No language, publication data, or publication status restrictions were applied.

## 2.6 Study selection

Two reviewers (LD, FHVS) independently and in duplicate participated in all phases of studies' screening and eligibility. The studies identified were managed using Mendeley Desktop (Elsevier, London, UK), and duplicate references were automatically identified and excluded. Following a pilot test, titles and abstracts were screened on Rayyan (Rayyan Systems Inc., Cambridge, USA) to assess the inclusion criteria. All processes were performed in duplicate. Potentially relevant studies were retrieved in full and were assessed in detail. Full-text studies that did not meet the inclusion criteria were excluded, and reasons for their exclusion were provided. Any disagreements between the reviewers at each stage of the selection process were resolved through discussion or by a third reviewer (AFM).

## 2.7 Assessment of methodological quality

Eligible studies were critically appraised by two independent reviewers (LD, FHVS) for methodological quality using the standard JBI Critical Appraisal Checklist for Qualitative Research.<sup>9</sup> The authors of the studies were contacted to request missing or additional data for clarification, when required. Any disagreements between the reviewers were resolved through discussion. All studies, regardless of their methodological quality, were included in data extraction and analysis.

## 2.8 Data extraction

Data were extracted from the studies by an independent reviewer (LD) using the standardized JBI Data Extraction Tool.<sup>9</sup> A Microsoft Excel spreadsheet (2019) was created to organize the tool items (Microsoft Corporation, Redmond, USA). Data extraction included specific details about the populations, context, culture, geographical location, study methods, and the phenomena of interest relevant to the review objective. Information on dental interventions performed on children was also collected.

Findings accompanied by illustrations were extracted using the standardized JBI Data Extraction Tool.<sup>9</sup> A finding is defined as a verbatim extract of the authors' analytic interpretation, accompanied by either a participants' voice, fieldwork observations, or other data. And an illustration may be either a direct quotation of the participants' voice, fieldwork observations, or other supporting data.<sup>9</sup> In this review, findings were considered the themes of the results section reported by the authors, and the authors' analysis identified by repeated



reading of the text. And illustrations were considered as the voices of the participants described in the studies.

For each finding and their illustration, the authors assigned a level of credibility: unequivocal (U) (findings accompanied by an illustration that is beyond reasonable doubt and therefore not open to challenge), credible (C) (findings accompanied by an illustration lacking clear association with it and therefore open to challenge), or not supported (NS) (findings are not supported by the data).<sup>9</sup> This decision was made based on the reviewers' interpretation, and any disagreements between the reviewers were resolved through discussion. The authors of the studies were contacted to request missing or additional data, when required.

## *2.9 Data synthesis and analysis*

Qualitative research findings were pooled using JBI SUMARI with the meta-aggregation approach.<sup>11</sup> This involved aggregation or synthesis of findings to develop categories that were sufficiently similar, with at least two findings per category. And, after, develop one or more synthesized findings of at least two categories that can be used as a basis for evidence-based practice. In this study, the findings evaluated as unequivocal and credible were grouped based on their similarity in meaning. The category descriptions were created by a single reviewer (LD). Finally, all the reviewers discussed the categories and created the synthesized findings and descriptions through a consensus process.

## *2.10 Assessing confidence in the findings*

The final synthesized findings were graded according to the ConQual approach for establishing confidence in the output of qualitative research synthesis and presented in a Summary of Findings.<sup>12</sup> The table included the title and each synthesized finding along with the type of research informing it, scores for dependability and credibility, and the overall ConQual score (Appendix 5).

# **3. Results**

## *3.1 Search results*

The PRISMA flowchart shows the study selection process (Figure 1). The systematic search identified 2,195 potentially relevant publications. After duplicate removal and screening the titles and abstracts, 1,187 studies were considered ineligible for not meeting inclusion criteria. At the full-text review stage, two studies were not retrieved, and 73 studies were assessed and screened by two reviewers (LD, FHVS), among those, 59 were excluded based on the exclusion criteria.

The remaining 15 studies were included in the systematic review. Prior to appraisal, the reference lists of these studies were screened, and one study was identified as meeting the inclusion criteria but was excluded due to the use of photographs to assess parents' perception of a dental intervention. The list of all excluded studies and the reasons for exclusion are shown in Appendix 2.

## *3.2 Methodological quality*

Fifteen studies comprised the final included set of studies for the review. The reviewers (LD, FHVS) discussed each study to resolve any discrepancies. Each study was evaluated

based on 10 questions, and most studies received a score 9 out of 10. Only two studies received a score of 10 (Table 1).

One of the questions from the critical appraisal (JBI-Qualitative Critical Appraisal Checklist), which addresses: “Is there a statement locating the researcher culturally or theoretically?”, showed the lowest score across studies. It reflects unclear evidence of this statement in the authors reports. However, given that nine of the 10 questions scored 100%, the lower score for question six do not reflect an inherent weakness in the methodological rigor of this research.

### *3.3 Study characteristics*

Among the 15 included studies, publication dates ranged from 2011 and 2022. Countries represented by this research were Australia, Brazil, Canada, England, India, Japan, New Zealand, Scotland, Sweden, and Wales.

Thirteen studies employed qualitative methods<sup>13-23</sup>, while four were mixed-methods.<sup>24-27</sup> The qualitative methodologies represented in the studies were descriptive research<sup>13,22,24</sup>, exploratory research<sup>16,19,23</sup>, grounded theory<sup>14,15,17,25,26,27</sup>, and community-based participatory action research<sup>20,21</sup>.

The phenomenon of interest was reasonably homogeneous and varied from perceptions, experiences, perspectives, and acceptability of dental treatments by parents and children.

Of these 15 studies, 11 included only parents or legal guardians, 3 included both parents and children, and 1 study included only children. The total number of parents or legal guardians of children aged 0 to 11 years was 320, pertaining to 14 studies. The four studies with children comprised 76 children aged between 5 and 12 years.

Most studies reported the gender of the participants, with a predominance of female participants (61.7%). However, there was poor description of the cultural, socioeconomic, and geographic characteristics of the participants.

Some characteristics reported among studies including parents were the level of education<sup>7,18,27</sup>, low income families<sup>23,27</sup>, residence in deprived areas<sup>16,24,26</sup>, and living in rural or remote areas<sup>21,27</sup>. Two studies investigated specific populations, one with indigenous participants<sup>20</sup>, and one with Australian Aboriginals<sup>23</sup>. Only in these two studies, the authors declared their cultural or theoretical position (as non-indigenous, and as aboriginal or non-aboriginal).

In relation to dental interventions, six studies investigated the perception regarding preventive interventions, such as parental counseling, parental supervised toothbrushing, first dental visit, and use of pit and fissure sealant and fluoride varnish to prevent dental decay. Four studies investigated the perceptions regarding restorative treatments, such as conventional fillings, Atraumatic Restorative Treatment (ART), and silver crowns placed using the Hall Technique. Three studies evaluated perceptions about the use of Silver Diamine Fluoride (SDF), and two studies about surgical procedures (tooth extraction and frenectomy with laser). Tables 2 and 3 outlines further details of study characteristics.

### *3.4 Review findings*

#### *3.4.1 Studies with parents*

Of the 14 studies included, 118 findings were identified. Eighty-nine findings were rated as unequivocal, 8 findings were rated as credible, and 21 findings were not supported. The 97 findings (U and C) were aggregated into seven categories based on similarity of meaning, concepts, or ideas voiced within the illustrations. This process generated three synthesized

findings: i) childcare expectations; ii) dental interventions, and iii) service provision. Appendix 3.1 presents a complete list of study findings and illustrations. A meta-aggregation of the seven categories with their associated findings is presented in Appendix 4.1.

### **Synthesized finding 1: Childcare expectations**

Two related categories encompassing 20 findings (16U+4C) were integrated into the synthesized finding 1. The first category (parents' expectations regarding the dental intervention) captures a description of what parents expected from the dental appointment and what was delivered. Even though some parents related that is important to know their child's tooth status and receive feedback from the child's dental assessment<sup>17,18</sup>, others expect some dental treatment to be performed on their children *"At least he could receive some treatment. Or maybe the treatment could prevent further decayed teeth? I am not sure. But at least he received something and it should be beneficial to his oral health."*<sup>18(p.3)</sup>. This desire is mainly expressed by parents who take their children for a free first visit.<sup>23,24</sup> Just a dental checkup makes parents feel disappointed *"We snuck in one free visit, the under-three visit and all they did was put her in a chair. There was no checking (...) So, there goes my free thing, like the freebie, and I haven't been back since. And then I went last week and something's growing and we have to go again tomorrow to see what we can do about it."*<sup>22(p.4-5)</sup>. Regarding dental interventions, one parent reported that conventional restorative treatment was the expected treatment for caries lesions, based on his experience.<sup>19</sup> And, one parent reported that hearing the opinion of someone else who had their child undergo a surgical procedure similar to their child's made them unnecessarily apprehensive.<sup>23</sup>

The second category (*parents' perception of the child*) describes parents' thoughts related to their children and what they see as best for them. Many parents considered that establishing the dental home is effective in reducing the child's fear and anxiety and facilitating the performance of the dental intervention. *"She knows that no one is going to hurt her [during the oral examination] and she is not going to have any pain, and then she is comfortable. And it is good that she is comfortable because if we come back for the operation [and she is not comfortable] then she won't sit on the chair."*<sup>17(p.410)</sup>. However, some parents believe that when the child is aware of what will be done in the next appointment, he/she will be more anxious, which could affect his/her collaboration to return *"And she's playing with the drill [toy] but, like, if someone came near her mouth with the drill, she wouldn't be happy at all. And I think we'd have had a lot more problems in getting her to sit down and keep coming back."*<sup>17(p.9)</sup>.

Regarding the parents' perception of the children's attitudes and emotions during the dental intervention, some parents reported observing that the child was feeling pain or discomfort during the intervention, and one parent described that the child showed his emotions only after leaving the dental office *"She wouldn't cry in front him (...) she cried when she got out (...). She said it was sore."*<sup>19(p.6)</sup>. Parents who were not present during the dental consultation (held at school) stated that the child did not provide many explanations about the intervention but was happy to have received a gift *"That was it really just it didn't taste very nice but she was delighted because she had stickers [laughs]."*<sup>24(p.89)</sup>.

### **Synthesized finding 2: Dental interventions**

Three related categories encompassing 39 findings (36U+2C) were integrated into synthesized finding 2. This synthesized finding describes parents' perceptions regarding dental interventions. Category 1 (*concerns about the results*) describes parents' feelings about the choice of treatments and their possible results. Exfoliation of deciduous teeth was mentioned by two parents and was considered a determining factor for choosing the intervention. For one

parent, conventional treatment would be too invasive for a tooth that will fall out<sup>20</sup>; and for another, the use of SDF in deciduous teeth would be acceptable for the same reason *"The tooth decay already looked bad. It was black as well and the baby teeth will exfoliate anyway."*<sup>18(p.6)</sup>. Regarding aesthetic concerns, most parents reported discomfort with treatment with SDF and stainless steel crowns. The main reasons are the judgment of their adult peers<sup>18,19,26</sup>, the aesthetic discomfort caused when the child speaks or smiles<sup>20,25</sup>, and the feeling that teeth seem severely affected by the color change<sup>18</sup>. Parents believe that children accept a non-aesthetic treatment because of their young age, and over the years and the start of school this could become a problem.<sup>19,25</sup> Thus, concerning stainless steel crowns, parents reported preferring other treatments, such as preventive treatment or conventional restorative treatments, as they seem more natural *"I'd have been a bit iffy about probably leaving it and waiting and seeing, but I'm not quite sure how I feel about the stainless-steel thing to be quite honest with you. I think I'd have preferred them to try and fill it rather than (...) you see it looks more natural."*<sup>19(p.6)</sup>.

Category 2 describes how parents *valuing non-invasive interventions*. In this category, parents described the benefits of different dental procedures. When only preventive interventions were performed, although happy with the strategy, some parents raised concerns about the potential deterioration of their child's oral condition *"I'm all for that provided it doesn't cause any more damage (...) My two concerns were A) (...) the decay was going to cause more damage and therefore she's going to get some pain from it. And the second thing is whether it's going to damage the adult teeth underneath."*<sup>19(p.7)</sup>. Regarding silver crowns placed using the Hall Technique, in this category parents reported not caring about the aesthetic appearance. The intervention was described as positive, as it does not use injections<sup>19,26</sup> and does not require repair or replacement<sup>26</sup>. The same was reported for SDF<sup>23</sup>, and other aspects were cited, such as its painless characteristic<sup>25</sup> and rapid action in reducing tooth sensitivity<sup>21,22</sup>. In addition, some parents claimed to recommend this treatment to other parents and stated that oral health is more important than aesthetic appearance. *"I knew SDF would cause black staining and I was worried but I still joined this service because I did not want my daughter's tooth decay to get more and more severe. If the decay progresses and reaches the root, it will be too late."*<sup>18(p.6)</sup>. Regarding ART, parents were satisfied with avoiding tooth extractions, keeping the child's teeth *"in place"* and *"looking very healthy"*<sup>13</sup>. Participants living in remote communities also appreciated ART *"If it hadn't been for this program [ART-HT] I wouldn't have taken her for any treatment unless she'd been in obvious pain (...) So it was great to catch decay that was starting, not causing problems yet."*<sup>21(p.5)</sup>. Finally, the parents who accompanied the children in the laser frenectomy surgery described the intervention as quick and painless, causing a positive feeling.<sup>23</sup>

In category 3 (*results of dental intervention*) parents discussed the results obtained after dental intervention. In most of the findings, parents participated in preventive and health promotion interventions. Thus, they described that the intervention helped them improve the quality of toothbrushing performed at home and reduce the frequency and intensity of dental pain.<sup>17,18,19</sup> Parents also mentioned that participating in prevention interventions was important for the child, and observed the change in habits at home.<sup>18,20</sup> *"The annual dental examination is like an annual review. My child put effort into brushing better and maintaining better oral health because he wanted to get better results in the next examination."*<sup>18(p.3)</sup>. Some parents reported learning from the interventions about the importance of routine checkups to maintain their children's oral health, even for very young children<sup>20</sup>, and other parents described believing they were doing their best to promote their children's oral health *"I'm thinking myself there's every chance now that I've given her the best chance to look after her teeth then and she may not have decay."*<sup>24(p.98)</sup>.

### Synthesized finding 3: Service provision

Two related categories encompassing 38 findings (35U+3C) were integrated into the synthesized finding 3. Category 1 (*preferences for receiving information*) describes how parents perceive the provision of information related to their children's oral health. Several parents said that they preferred a non-confrontational, patient-centered style of conversation and did not want to be "lectured" about their child's oral health or feel judged.<sup>13,15,17,23</sup> *"I thought I was going to get drilled with, you know, you shouldn't be doing this, you shouldn't be doing that, but they have been pretty good with everything, you know (...) they were offering suggestions, and they were coming from experience some of them with the kids as well, rather than giving you unrealistic goals."*<sup>17(p.415)</sup>. Moreover, some parents highlighted the importance of children maintaining a trusting relationship with the dental professional. First, to have a reference outside of the family *"Young children may need someone else, not their parents or family members, to tell them what they need to do or to improve because they would like to listen to teachers and dentists."*<sup>18(p.3)</sup>. And second, to have individualized dental care *"It's just cause if you have previous concerns you've already spoken with the health visitor about, and if you see her again she's like 'Aw well has that improved?' cause she's already seen you before. And she's said you know she'll recap on the last meeting and it feels more personalized and it's a lot better cause then they know that child. And if there were concerns or things that stood out to them in one meeting they can sort of look at it in the following meeting and have a look whereas if it was someone different they would just look at it as if it was a new child and previous notes."*<sup>16(p.6)</sup>. Many parents reported that trust in the professional was fundamental for the child to accept the intervention.<sup>19,21</sup>

Some parents also reported on the importance of discussing treatment options and felt dissatisfied when only one option was provided.<sup>13,27</sup> Also, some parents highlighted that it is important that other family members, such as grandparents and other caregivers, receive information about prevention and treatment options so that the whole family is aware.<sup>20</sup> As for the delivery of this information, many parents liked to receive demonstrations on how to perform brushing.<sup>15,17</sup> Parents of younger children said that receiving tips to facilitate brushing at home is important for the family to be able to perform the child's oral hygiene.<sup>16</sup> Regarding materials such as leaflets or articles, some parents say that it is not necessary to provide additional information<sup>16</sup>, while other parents say they appreciate the materials.<sup>15,16,25</sup> To take advantage of the material, parents suggest reading it together with the dentist *"Even if you were given the leaflets, it's not gonna encourage you to read them. It's gonna be something that you stuff in your bag while you're trying to pick your kids up and that you probably don't end up looking at. Whereas when she's actually sat down, and she's going through it with you, I think you're more inclined to ask questions and understand more."*<sup>15(p.7)</sup> Some parents suggest that extra materials are useful for informing other family members who do not keep up with dental appointments.<sup>16</sup>

In category 2 (*steps to get the dental intervention*), parents reported their perspectives on accessing dental care and how aspects of their personal lives impact treatment choices and availability to accompany their children to appointments. Parents who participated in a free program expressed that it was the only way to get the child to care.<sup>22</sup> Other parents claim that dental treatments are time-consuming and expensive, and that it would not be worth investing in teeth that will exfoliate *"Dental treatments are time-consuming, and it requires multiple visits. It is tough to leave our daily wages for the sake of a tooth which is not even permanent."*<sup>27(p.219)</sup> Regarding the location of appointments, many parents stated that schools/kindergartens are good options for children to have their first dental experience. Parents believe that these are places that children already know and that they would feel safe being accompanied by a teacher they trust.<sup>18,24</sup> However, some parents reported not knowing much about the intervention

performed on their child because they were not present during the intervention. “[Interviewer: Do you understand what the study is about?] Not really no.”<sup>24(p.98)</sup>. Some parents highlighted that different professionals in routine appointments could make families aware of the importance of dental appointments for their children.<sup>27</sup> Parents cited the school as a way of accessing children most at need, as well as periodic visits to remote communities and rural areas by the dental team “It’s the first time they’ve been here in two years, because they need to do it more regular (...) It doesn’t matter what they’re doing now, it doesn’t work because every two years is a long time.”<sup>21(p.4)</sup>. As for procedures performed in dental offices or hospitals, parents reported being dissatisfied when child-/family-centered care was absent. For parents, it occurs when the team does not pay attention to the family or shows disorganization with scheduling appointments. In urgent situations, the parents stated that they did not understand why a procedure that should be performed quickly requires more than a year in a waiting list. “And he is going on a waiting list for (...) and we can’t do that for a year it didn’t make sense to me if it was that important. I mean I understand the logistics and probably the demand on the system, but I thought my goodness what are we going to do for the next year then if it’s that bad (...) I thought it’s imperative that he has this work done because he has all these issues with his teeth, and the poor little thing must be in a lot of pain.”<sup>13(p.6)</sup>.

### 3.4.2 Studies with children

Of the 4 studies included, 13 unequivocal findings were identified, aggregated in three categories, and generates one synthesized findings. Appendix 3.2 presents the list of study findings and illustrations. A meta-aggregation of the seven categories with their associated findings is presented in Appendix 4.2.

#### Synthesized finding 1: Children’s perception

Given the small number of studies retrieved with children’s participation in qualitative interviews, few findings were retrieved. In general, the children answered, from their perspectives, how they perceived sensations and how they felt during the intervention. Category 1 (*positive aspects of treatment*), children who participated in a preventive dental intervention at school mentioned that they liked having their teeth looked after or protected.<sup>24</sup> Still, in the third year of follow-up of these children, they reported that over the years and increasing age, they become more confident to perform a dental procedure “[Child 1] Because you’re like quite scared, because you haven’t been to the dentist oftenly (...) So when you get older and older and... [Child 2] You’ll be more confident.”<sup>24(p.91)</sup>. Children who underwent conventional restoration said that although the procedure was initially uncomfortable, over time it became acceptable.<sup>19</sup> And another child who had an extraction for orthodontic reasons mentioned that receiving “a lot of praise after the treatment”<sup>(p.3)</sup> made the pain and discomfort of the procedure worth it.<sup>14</sup> Finally, a child who received silver crowns placed using the Hall Technique; said he was excited to show it to others “Like the whole class. And my next door neighbour. And she’s got three (...) They said, “Oh, he’s got a silver tooth. Did they pull it out and put it in?” (...) I like it.”<sup>19(p.5)</sup>.

Category 2 describes *children’s negative perceptions* regarding dental interventions. The children perceived different situations as unpleasant. Regarding local anesthesia one child declared that he did not like the sensation “Because it feels like your lips are about three-and-a-half miles long.”<sup>19(p.5)</sup>. The same was reported by a child who underwent selective removal of decayed tissue “They’re like trying to clean it out (...) It hurt a bit and I also felt a bit weird. Sort of like feeling like you haven’t felt anything like that before.”<sup>19(p.6)</sup>. Regarding the placement of pre-formed metal crowns, the children reported feeling pain or

discomfort that resulted from the pressure applied when placing it or if it was the wrong size, but discomfort and weird sensation passed after the procedure was completed.<sup>20</sup> And the child who underwent frenectomy with the use of laser stated that he did not like the strong smell felt during the surgery and the clinical appearance of the surgical area after the procedure “*My gums are still very ugly...*”<sup>23(p.5)</sup>.

In category 3 (*inclusion of the child in the intervention*), the children described feeling satisfied when receiving information about what would be done during the intervention.<sup>14</sup> On the other hand, some children declared that they did not understand the terminology that dental professional used and were worried that there might be something wrong with their teeth “[Child 1] *They say stuff like numbers and stuff and we don’t really know what that means (...)* So like, they could be saying that our teeth are really bad or really good but we don’t know. [Child 2] *Like A2 and A3 and that. [Interview] So would you like to know more, you’d like to understand what they’re saying? [Child 1] Yeah.*”<sup>24(p.92)</sup>.

#### 4. Discussion

This is the first systematic review of qualitative studies that summarizes the experiences and perceptions of children and parents regarding dental interventions. Four key findings, along with their associated categories, findings, and illustrations, are synthesized to describe the experiences and perceptions of dental interventions among children and their parents. Additionally, this systematic review provides insight into perspectives and acceptability of dental treatments from the viewpoint of parents and children. The studies included in this review demonstrate that there are different perceptions towards dental interventions, which vary among individuals in the same population, for the same procedure, and even between studies with free care programs and policies.

Regarding the results obtained from dental interventions, many parents based their choices on the belief that deciduous teeth will naturally exfoliate. While some parents prefer less invasive treatments to avoid extensive or complex procedures, others have stated they believed that no treatment was necessary due to exfoliation. Misinformation hinders parents’ ability to make informed decisions and increases their willingness to forgo conservative treatments.<sup>5</sup> In this case, educating families about the functions of deciduous teeth and the importance of keeping them, together with the use of patient-friendly treatment may be the key to successful dental management.<sup>28</sup>

The findings show that parents who had witnessed negative experiences with their children in the past valued preventive interventions more highly. In addition, parents expressed a desire for their child to participate in the process and take responsibility for their own oral health. Prevention of oral diseases in children is a lifelong effort that requires the development of the patient's self-care skills. And, for that, positive clinical experiences in their early years are important for their current and future oral health<sup>4</sup>, until they reach an age where they already have skills without needing their habits to be monitored.<sup>29</sup>

Another point always considered by parents is the negative aesthetic consequences of some treatments. Taken as a whole, this finding is well aligned with broader research in dentistry that investigated patient aesthetic preferences. As mentioned by the participants, the visual aspect of dental caries is not pleasant. So, treatment that makes the tooth look like the natural tooth is well accepted.<sup>19</sup>

This study identified many factors influencing the choice of dental treatment. Among them is the high cost of dental treatment and difficulty in accessing them. Although this review could not capture in detail the sociodemographic characteristics of the participants, it is known that families with more children, low income, or living in deprived areas may be more stressed

by multiple demands connected with healthcare<sup>5</sup>, while they are also the population most affected by oral diseases.<sup>29</sup>

Parents also have cited was confidence in the professional. Despite this study don't have the aim of focus on perception regarding the dentist, many participants cited that the authority of the dental professional can influence their choices. This highlights the need for the professional to know the different strategies that can be used in pediatric dentistry, and to know how to communicate the risks and benefits of each one, since the dentists' training status is considered important by the patients.<sup>6</sup> Parents value dentists who provide options and integrate them into the treatment decision. Moreover, their recognize when patient-centered care strategies are used, such as positive reinforcement and reassurance<sup>4</sup>, and value materials, such as leaflets, that facilitate the literacy of other family members at home.

Few findings have been identified regarding children's experiences and perceptions. In this study, only interventions conducted without physical restraint were included, assuming that children were adapted to the different settings. In this context, children reported dislike sensations caused by local anesthesia, rotatory instruments, and the pressure applied when placing a stainless steel crown. These findings are common in dentistry since this sensation is also reported by adults, and these steps of a dental procedure are the main causes of dental fear and anxiety in the dental office.<sup>28</sup>

Even though the oral health-related messages received by pediatric patients are often limited by their comprehension ability<sup>4</sup>, especially by young children, it is essential to involve the child in the procedure. While the final decision is not made by the children, they are an active part of the intervention and should be aware of what will be accomplished. This emphasizes the importance of establishing clear and accessible communication with the child.

The results of this review can inform dentists and policymakers about the importance of dialogue with patients and their families since they are the main beneficiaries of oral health interventions. Besides establishing trusting relationship between the professional and the family, it is important that the dentist be open to discussing treatment options and providing explanations about them. To this end, it is important that continuing education be provided. In addition to courses, this may involve the formulation of clinical practice guidelines with up-to-date evidence. Furthermore, the results showed that interventions in schools can be beneficial for both children and parents. Schools are places where it is possible to reach many children without interfering with parents' daily activities, avoiding absences from school or work, the need to dislocation, and increased costs.

One of the limitations of the current systematic review is related to the poor reported of sociodemographic characteristics of participants in the included studies. Of the 15 studies, only two reported the use of the consolidated criteria for reporting qualitative research (COREQ). A recent systematic review that addressed the quality of reporting of dental qualitative studies involving interviews and focus groups considered the reports typically either moderate or poor.<sup>31</sup> Even the dependability of the findings was not altered by the lack of reporting of sufficient cultural and geographical characteristics to distinguish the participants, none of the studies mentioned these aspects as altering the perception of a dental intervention, although the findings showed that these characteristics could modify experiences and perceptions. It is important that studies focus more attention on methodological and outcome reporting, using standardized instruments for this purpose.

And another limitation is related to the small number of studies focused on children. Qualitative studies with this population still face barriers related to credibility and the influence of others on children's opinions and behavior, mainly when adopting focus group discussion.<sup>30</sup> Consequently, more studies are needed using methods that describe children's perceptions with further details. To this, the use of other strategies in conjunction with interviews, such as observation, may be useful to capture children's behaviors and reactions. Furthermore, it is



important that investigations related to the outcome of dental procedures be captured after the conclusion of the intervention or within a short period of time after conclusion, to avoid possible recall biases.

A primary study that investigates the same phenomenon of interest in different populations and contexts without explaining the purpose may produce contradictory results. Therefore, it is interesting that new studies investigate phenomena of interest in populations with similar characteristics and who participated in the same interventions carried out in the same or very similar contexts. As for the theme of the studies, it is notable that a small number of studies of the perceptions of parents and children have been conducted when compared to the large number of procedures performed in pediatric dentistry that can be investigate. There is a vast field to be explored in this area.

## 5. Conclusions

Based on the findings, parents and children have different perceptions regarding dental treatments. Their perspectives can be influenced by several factors, including previous experiences, income, and access to health services. Confidence levels for the synthesized findings were assessed as moderate and high using the ConQual approach, but the findings should be interpreted carefully. Understanding these differences is crucial for providing patient-centered care in pediatric dentistry and developing targeted interventions to improve the dental experience for both children and their parents/legal guardians.

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## Tables and Figures

**Table 1.** Critical appraisal results for included studies using the JBI-Qualitative Critical Appraisal Checklist (n= 15).

Study	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	T
Arrow et al. (2021) <sup>13</sup>	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	9
Berlin et al. (2021) <sup>14</sup>	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	9
Bhatti et al. (2022) <sup>15</sup>	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	9
Bhatti et al. (2022) <sup>16</sup>	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	9
Cashmore et al. (2011) <sup>17</sup>	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	9
Chai et al. (2022) <sup>18</sup>	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	9
Chestnutt et al. (2017) <sup>19</sup>	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	9
El-Yousfi et al. (2020) <sup>20</sup>	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	9
Kyoon-Achan et al. (2021) <sup>21</sup>	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	9
Lee et al. (2022) <sup>22</sup>	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	10
Page et al. (2014) <sup>26</sup>	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	9
Piggott et al. (2021) <sup>23</sup>	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	10
Schroth et al. (2016) <sup>24</sup>	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	9
Soares et al. (2020) <sup>25</sup>	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	9
Viswanath et al. (2021) <sup>27</sup>	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	9
%	100	100	100	100	100	11,8	100	100	100	100	

Y - Yes, U - Unclear, T - Total

Q1: Is there congruity between the stated philosophical perspective and the research methodology?; Q2: Is there congruity between the research methodology and the research question or objectives?; Q3: Is there congruity between the research methodology and the methods used to collect data?; Q4: Is there congruity between the research methodology and the representation and analysis of data?; Q5: Is there congruence between the research methodology and the interpretation of results; Q6: Is there a statement locating the researcher culturally or theoretically?; Q7: Is the influence of the researcher on the research, and vice- versa, addressed?; Q8: Are participants, and their voices, adequately represented?; Q9: Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?; Q10: Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?

**Table 2.** Characteristics of included studies with parents or legal guardians (n=14).

Author (Year)	Methodology and Method	Phenomena of interest	Participants	Dental intervention, setting and country	Data Analysis	Authors conclusion
Arrow et al. (2021)	Qualitative - (No specific philosophical framework mentioned); Focus groups (conducted on community facilities and community centers near participant's home)	Parents perspectives on Atraumatic Restorative Treatments (ART)	5 groups with 9 test participants and one test written response (7 woman and 3 man who are parents and primary careers of children aged 4.7 years	ART or Hall Technic (test group)/Dental General Anesthesia (DGA) (control group); Kindergartens, Japan	Thematic analysis framework (rooted in realist/experiential exploration)	Parents generally perceived the alternative minimally invasive approach positively. The experience of timely, and child-centered/family-centered care was of importance to parents and positive impacts were reported where care had been received in such a manner.
Bhatti et al. (2021)	Qualitative - Grounded theory; Semi structured interviews (at participants' home)	Acceptability of the research process and of the intervention	20 parents (gender not reported) of children aged 0 to 5 years	Support oral health conversations (The "Strong Teeth" intervention); Dental practice setting, England	Framework analysis (with an iterative, pragmatic approach)	The "Strong Teeth" intervention was acceptable to parents. In terms of affective attitude, parents valued the intervention resources and felt it integrated well within their family life and practice.
Bhatti et al. (2022)	Qualitative - Exploratory research; Semi-structured interviews (at participants' home)	Acceptability of the oral health intervention	17 parents (all woman) of children aged 9 to 12 months	Parental supervised brushing (The HABIT intervention); Home setting, England	Framework analysis (guided by a theoretical framework of acceptability)	The HABIT intervention was acceptable to parents, but several contextual factors influenced the level of acceptability. These included establishing a relationship with the health visitors, the timing of the visit, family dynamics, and the need for consistency and availability of support from other professionals.
Cashmore et al. (2011)	Qualitative - Grounded theory; Individual semi-structured interviews (realized in a quiet room in the pediatric dental clinic)	Parents' perceptions and experiences of a parent-counselling program	12 parents (10 woman and 2 men) of children aged under 5 years	Parent-counselling program to prevent and stabilize carious lesions in children; Hospital dental clinic, Australia	Grounded theory approach	Most parents felt that they had been successful in increasing the frequency and quality of their child's tooth-brushing, which they attributed to, among other things, the demonstrations of parent-supervised brushing they received during parent counselling. Encouragingly, some reported that increased brushing reduced their child's dental pain which, in turn, improved the child's quality of life.
Chai et al. (2022)	Qualitative - Grounded theory; Focus groups (in kindergartens)	Parents' perspective on the use of Silver Dai	10 focus groups with 49 parents (44 woman and 5 man) of children aged 4 to 5 years	Silver Diamine Fluoride (SDF); Kindergartens, Japan	Thematic analysis	This qualitative study found that the outreach dental service using SDF to treat early childhood caries in kindergarten is an acceptable strategy from their parents' point of view. The parents preferred caries arrest over aesthetics and accepted SDF therapy. However, some parents worried about SDF toxicity.

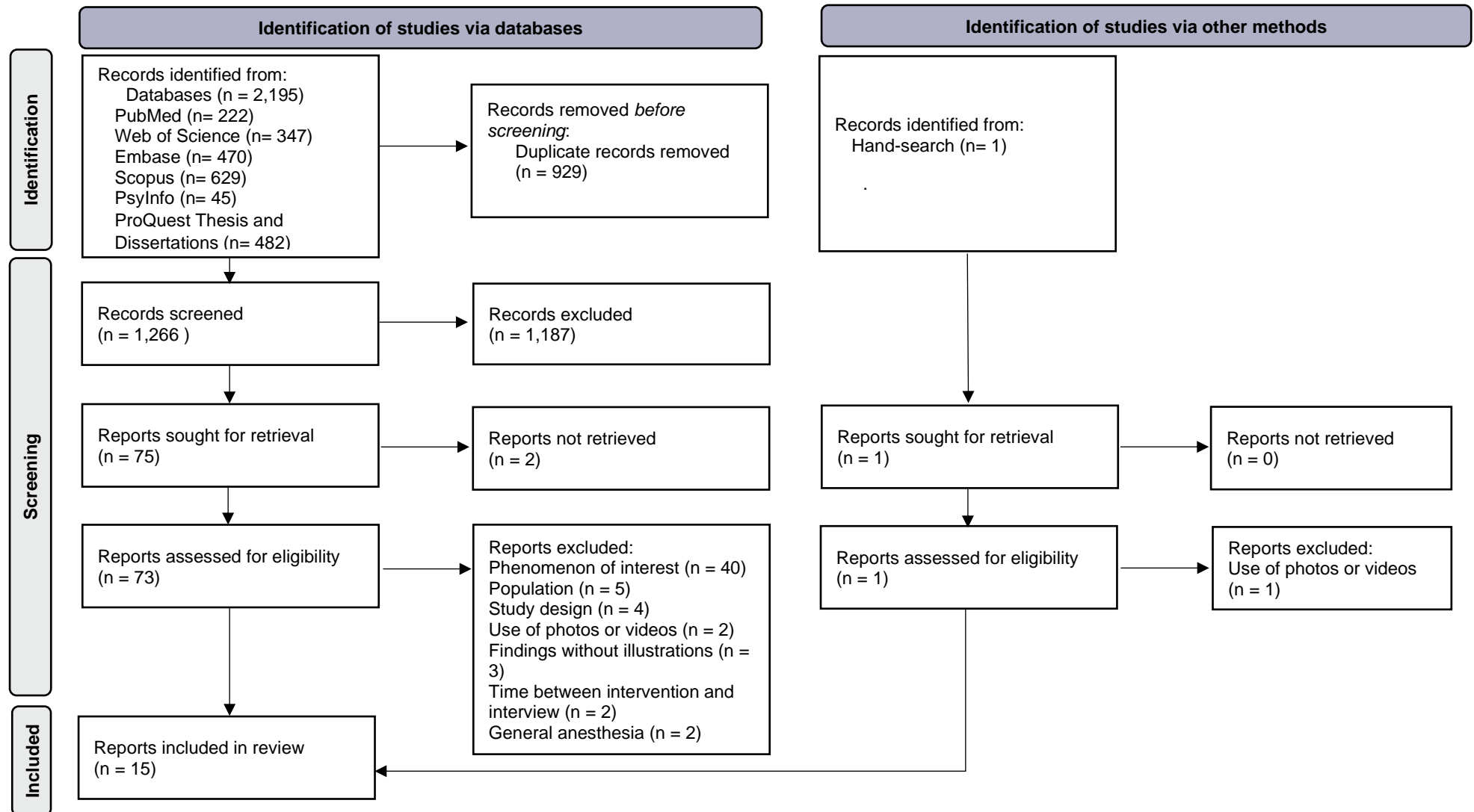
Chestnutt et al. (2017)	Qualitative (no specific philosophical framework mentioned); Individual interview (telephone interviews)	The acceptability of the interventions provided and of the setting in which they were being provided	49 parents (gender not reported) of children aged 6-7 years (in the first year of research)	Pit and fissure sealant and fluoride varnish in preventing dental decay; Schools, Wales	Framework analysis	The acceptability of the treatments was very high. Parents reported trust in the school and convenience of access as important factors in utilizing the service. The child-friendly nature of the setting, the longer-term and ongoing relationship of the CDS with the participating schools and the convenience of attending in school were all factors affecting the acceptability of the treatment setting for parents.
El-Yousfi et al. (2020)	Qualitative - Exploratory research; Semi-structured interviews (conducted on participant's home or another convenient location)	Acceptability of caries management in primary teeth for children and parents	13 parents (10 woman and 3 men) of children aged 5 to 11 years	Conventional management of caries, with best practice prevention (BPP); Biological management of caries with BPP; and BPP alone; Primary care, Scotland and England	Framework analysis	Overall parents found each of the three strategies for the management of dental caries in primary teeth acceptable, with trust in the dental professional playing an important role.
Kyoon-Achan et al. (2021)	Qualitative - Grounded theory; Semi structured interviews (in the clinic environment, and by phone)	Parents' views on Silver Diamine Fluoride (SDF)	19 parents (14 woman and 5 man) of children under 6 years	Silver Diamine Fluoride; Dental schools, Canada	Coding and categorization	Most parents were accepting of SDF as a nonsurgical treatment to arrest caries and minimize dentinal sensitivity secondary to caries, although some expressed concern about the black staining in anterior teeth. It is important to adequately inform parents of the negative aesthetic consequences and obtain informed consent before treatment.
Lee et al. (2022)	Qualitative - Community-based participatory research; Semi structured in-person interviews (at a local film studio)	Indigenous parents' perspectives on oral health care for their children, and their stories and experiences about managing the disease	6 parents (4 woman and 1 man) of children aged under 6 years	Silver diamine fluoride (SDF) and fluoride varnish; Communities, Canada	Thematic analysis	The digital storytelling method facilitated interactions and engaged Indigenous parents in creating a digital representation of oral health in general and their experiences caring for children with ECC in particular.
Page et al. (2014)	Mixed-method approach - Grounded theory; Individual in-depth interviews (telephone interviews)	Parent perceptions of different aspects of the use of the Hall Technique	10 parents (3 woman as 7 men) of children aged 6 to 7 years	Stainless steel crowns placed using the Hall Technique; Community clinics, New Zealand	Coding and categorization (using an inductive approach)	There is an overall positive reaction to the Hall Technique from the parents. Negative experiences also arose when the Hall Technique was not successful, and the tooth then required preparation. This suggests that perhaps more emphasis should be placed on informing parents of possible complications and alterations to the treatment plan, and

						investigating how clinicians can act to ensure that these complications do not arise.
Piggott et al. (2021)	Qualitative - Community-based participatory research; One-to-one interviews (community locations of convenience to participants)	Views of parents of a model of care for dental treatment	29 parents (26 woman and 3 man) and carers of children aged 0 to 6 years	ART and Hall technique (test group) and follow up child's dental treatment through their usual dental service provider (control group); Communities, Australia	Thematic analysis framework	The findings suggest higher parent satisfaction with care that was accessible and delivered in a child and family-centered manner, and where service providers had appropriately engaged with the community and families. The minimally invasive dental treatment approaches were well accepted by the children and their parents.
Schroth et al. (2016)	Qualitative - Descriptive research; Focus group (realized held at or near parenting program sites)	Parents' and caregivers' perspectives on the Free First Visit program	3 focus groups with 21 parents (19 woman and 2 men) of children aged 1 to 5 years	A program to promote early dental visits for children less than three years of age; Dental offices, Canada	Coding and categorization	Many participants liked the program and believed that it should continue. Parents would benefit from further education and encouragement to seek oral care for their child by age one.
Soares et al. (2020)	Qualitative - Exploratory research; Semi-structured interviews (at dental school)	Discover the opinion about the experiences with the surgical procedures	12 parents (10 woman and 2 man) of children aged 5 to 8 years	Diode laser in frenectomy surgeries; Dental school, Brazil	Thematic analysis	The results pointed to the acceptance of surgical laser use in pediatric dentistry; however, the feelings of frustration indicate that its use requires guidance from the child and his/her parents, in addition to careful handling and specific training.
Viswanath et al. (2021)	Mixed-method approach - Grounded theory; Semi structured interviews (at the participant's home/workplace)	Individual perceptions of parent's view on their child's first dental visit	10 parents (6 woman and 4 man) of children aged 4 to 6 years	First dental visit (FDV); Dental offices and schools, India	Thematic content analysis	Main barriers to dental visits were the cost of dental treatments and lack of knowledge about primary teeth and the importance of preventive dental visits. Most of the parents felt that school dental health education and mass communication could be an effective means for creating awareness on FDV. Lack of interdisciplinary practices among different healthcare professionals and lack of awareness had a significant impact on the child's FDV.

**Table 3.** Characteristics of included studies with children (n=4)

Author/ Year	Methodology and Method	Phenomena of interest	Participants	Dental intervention, setting and country	Data Analysis	Authors conclusion
Berlin et al. (2022)	Open interviews (At the dental clinic or at the informant's home. Owing to Covid-19 interviews were performed via telephone or Zoom)	General thoughts about dental visits, thoughts specifically around tooth extraction, being at the dentist's office, and experiences from the post-operative period	12 children (5 girls and 7 boys) aged 10 to 16 years	Tooth extraction due to orthodontic reasons; Orthodontic clinics, Sweden	Grounded theory approach	Children describe experiencing discomfort during and after dental extractions; however, they also explain that they can cope with it. Children want to be well informed about the whole treatment: what to expect before, during, and after the treatment. It is important that information is individually tailored, and given at the right time, to reduce and/or avoid uneasiness prior to the first treatment.
Chestnutt et al. (2017)	Qualitative (no specific philosophical framework mentioned); Face-to-face paired interviews (at school)	The acceptability of the interventions provided, and the setting in which they were being provided	50 children in the 1st year (gender not reported); (6-7 years) and 32 children in the 3rd year follow-up (8- 9 years)	Pit and fissure sealant and fluoride varnish in preventing dental decay; Schools, Wales	Framework analysis	The acceptability of the treatments was very high, as judged by the fact that very few children refused treatments or discontinued in the trial because of the lack of acceptability. Acceptability was apparent influenced to a large degree by the wider factors rather than the actual treatments being provided. In deprived areas in which encouraging at-risk children to attend services is key, this work has shown that the school context can be an effective delivery organization for preventative services.
El-Yousfi et al. (2020)	Qualitative - Exploratory research; Semi-structured interviews (at participant's home or another convenient location)	Acceptability of caries management in primary teeth for children	13 children (8 girls and 5 boys) aged 5-11 years	Conventional management of caries, with best practice prevention (BPP); Biological management of caries with BPP; and BPP alone; Primary care, Scotland and England	Framework <u>analysis</u>	Overall children found each of the three strategies for the management of dental caries in primary teeth acceptable, with trust in the dental professional playing an important role.
Soares et al. (2020)	Qualitative - Exploratory research; Semi-structured interviews (at dental school)	Discover the opinion about the experiences with the surgical procedures	12 children (6 girls and 6 boys) aged 5 to 8 years	Diode laser in frenectomy surgeries; Dental school, Brazil	Thematic analysis	The results pointed to the acceptance of surgical laser use in pediatric dentistry; however, the feelings of frustration indicate that its use requires guidance from the child and his/her parents, in addition to careful handling and specific training.





**Figure 1.** Flow chart diagram of literature search and selection criteria according to the PRISMA statement.

## Appendices

### Appendix 1: Search strategy for all databases (up to October 14th, 2022)

#### MEDLINE (PubMed)

Results retrieved: 222

Search	Search parameters	Search results October 14, 2022
1	"Child"[Mesh] OR "children"[tiab] OR "Preschool"[tiab] OR "Infant"[tiab] OR "Toddler"[tiab] OR "minor"[tiab]	2,833,258
2	"Perception"[Mesh] OR "Acceptability"[tiab] OR "Expectations"[tiab] OR "Preferences"[tiab] OR "Opinions"[tiab] OR "Experiences"[tiab] OR "Perspectives"[tiab] OR "Parents views"[tiab]	1,065,628
3	"Dental Care for children"[Mesh] OR "Dental Health Services"[tiab] OR "Oral health"[tiab] OR "Dental Care "[tiab] OR "Pediatric Dentistry"[tiab]	47,800
4	"Qualitative research"[Mesh] OR "Qualitative study"[tiab] OR "Qualitative exploration"[tiab] OR "Phenomenology" [tiab] OR "Grounded theory" [tiab] OR "Ethnography" [tiab] OR "Action research" [tiab] OR "Discourse analysis" [tiab] OR "Focus groups"[tiab] OR Interviews[tiab] OR "Mixed-method approach"[tiab]	47,800
5	S1 AND S2 AND S2 AND S4	222

#### Web of Science (Clarivate Analytics)

Data searched: October 14, 2022

Results retrieved: 347

Search	Search parameters	Search results October 14, 2022
1	TS=("Child" OR "children" OR "Preschool" OR "Infant" OR "Toddler" OR "minor")	2,395,194
2	TS=("Perception" OR "Acceptability" OR "Expectations" OR "Preferences" OR "Opinions" OR "Experiences" OR "Perspectives" OR "Parents views")	1,816,110
3	TS=("Dental Care for children" OR "Dental Health Services" OR "Oral health" OR "Dental Care" OR "Pediatric Dentistry"))	39,418
4	TS=("Qualitative research" OR "Qualitative study" OR "Qualitative exploration" OR "Phenomenology" OR "Grounded theory" OR "ethnographic" OR "Action research" OR "Discourse analysis" OR "Focus groups" OR Interviews OR "Mixed-method approach")	863,918
5	S1 AND S2 AND S2 AND S4	347

**Embase (Elsevier)**

Data searched: October 14, 2022

Results retrieved: 470

Search	Search parameters	Search results October 14, 2022
1	('child' OR 'children' OR 'preschool' OR 'infant' OR 'toddler' OR 'minor')	4,761,653
2	('Perception' OR 'Acceptability' OR 'Expectations' OR 'Preferences' OR 'Opinions' OR 'Experiences' OR 'Perspectives' OR 'Parents views')	1,210,631
3	('dental care for children' OR 'dental health services' OR 'oral health' OR 'dental care' OR 'pediatric dentistry')	91,710
4	('qualitative research'/exp OR 'qualitative research' OR 'qualitative study'/exp OR 'qualitative study' OR 'qualitative exploration' OR 'phenomenology'/exp OR 'phenomenology' OR 'grounded theory'/exp OR 'grounded theory' OR 'ethnographic' OR 'action research'/exp OR 'action research' OR 'discourse analysis'/exp OR 'discourse analysis' OR 'focus groups'/exp OR 'focus groups' OR 'interviews'/exp OR interviews OR 'mixed-method approach')	2,922,635
5	S1 AND S2 AND S2 AND S4	470

**Scopus**

Data searched: October 14, 2022

Results retrieved: 629

Search	Search parameters	Search results October 14, 2022
1	TITLE-ABS-KEY ("Child" OR "children" OR "Preschool" OR "Infant" OR "Toddler" OR "minor")	4.593.371
2	TITLE-ABS-KEY ("Perception" OR "Acceptability" OR "Expectations" OR "Preferences" OR "Opinions" OR "Experiences" OR "Perspectives" OR "Parents views")	5.661.556
3	TITLE-ABS-KEY ("Dental Care for children" OR "Dental Health Services" OR "Oral health" OR "Dental Care" OR "Pediatric Dentistry")	115.445
4	TITLE-ABS-KEY ("Qualitative research" OR "Qualitative study" OR "Qualitative exploration" OR "Phenomenology" OR "Grounded theory" OR "ethnographic" OR "Action research" OR "Discourse analysis" OR "Focus groups" OR interviews OR "Mixed-method approach")	1.193.474
5	S1 AND S2 AND S2 AND S4	629

**PsycInfo (EBSCO)**

Data searched: October 14, 2022

Results retrieved: 45

Search	Search parameters	Search results October 14, 2022
1	("Child" OR "children" OR "Preschool" OR "Infant" OR "Toddler" OR "minor")	1,099,430
2	("Perception" OR "Acceptability" OR "Expectations" OR "Preferences" OR "Opinions" OR "Experiences" OR "Perspectives" OR "Parents views")	1,102,451
3	("Dental Care for children" OR "Dental Health Services" OR "Oral health" OR "Dental Care" OR "Pediatric Dentistry")	3,593
4	("Qualitative research" OR "Qualitative study" OR "Qualitative exploration" OR "Phenomenology" OR "Grounded theory" OR "ethnographic" OR "Action research" OR "Discourse analysis" OR "Focus groups" OR Interviews OR "Mixed-method approach")	489,539
5	S1 AND S2 AND S3 AND S4	45

**ProQuest: Dissertations and Theses Global**

Date searched: October 14, 2022

Results retrieved: 482

Search	Search parameters	Search results October 14, 2022
1	("Child" OR "children" OR "Preschool" OR "Infant" OR "Toddler" OR "minor") AND ("Perception" OR "Acceptability" OR "Expectations" OR "Preferences" OR "Opinions" OR "Experiences" OR "Perspectives" OR "Parents views") AND ("Dental Care for children" OR "Dental Health Services" OR "Oral health" OR "Dental Care" OR "Pediatric Dentistry") AND ("Qualitative research" OR "Qualitative study" OR "Qualitative exploration" OR "Phenomenology" OR "Grounded theory" OR "ethnographic" OR "Action research" OR "Discourse analysis" OR "Focus groups" OR Interviews OR "Mixed-method approach")	482

## Appendix 2. List of excluded studies and reasons.

<b>Reason for exclusion: Phenomena of interest (n= 40)</b>
Badri P, Dahlan R, Amin M. Impact of Acculturation on Dental Attendance of Preschoolers Among Filipino Immigrants in Edmonton, Canada. <i>Global Social Welfare</i> . 2022;9(1):1–10.
Barzangi J, Arnrup K, Unell L, Skovdahl K. Experiences and perceptions of infant dental enucleation among Somali immigrants in Sweden: a phenomenographic study. <i>Acta Odontol Scand</i> [Internet]. 2019;77(8):566–73.
Bhatti A, Vinall-Collier K, Duara R, Owen J, Gray-Burrows KA, Day PF. Recommendations for delivering oral health advice: a qualitative supplementary analysis of dental teams, parents' and children's experiences. <i>BMC Oral Health</i> . 2021 Apr;21(1):210.
Bitencourt FV, Rodrigues JA, Toassi RFC. Narratives about a stigma: attributing meaning to the early loss of deciduous teeth on children's caregivers. <i>Braz Oral Res</i> . 2021;35:1–10.
Burgette JM, Wu SX, Divaris K. "The pediatric dentist is different": A qualitative study of young children's caregivers' experiences of oral health care in the Galapagos Islands. <i>Int J Paediatr Dent</i> . 2023 Jan;33(1):40-49.
Butten K, Johnson NW, Hall KK, Toombs M, King N, O'Grady KAF. Impact of oral health on Australian urban Aboriginal and Torres Strait Islander families: A qualitative study. <i>Int J Equity Health</i> [Internet]. 2019;18(1).
Chi DL, Milgrom P, Gillette J. Engaging Stakeholders in Patient-Centered Outcomes Research Regarding School-Based Sealant Programs. <i>J Dent Hyg</i> [Internet]. 2018;92(1):16–22.
Cortés DE, Réategui-Sharpe L, Spiro A, García RI, Cortes DE, Reategui-Sharpe L, et al. Factors affecting children's oral health: perceptions among Latino parents. <i>J Public Health Dent</i> [Internet]. 2012;72(1):82–9.
Custódio NB, Scharadosim LR, Piovesan CP, Hochscheidt L, Goettems ML. Maternal perception of the impact of anterior caries and its treatment on children: A qualitative study. <i>Int J Paediatr Dent</i> . 2019 Sep;29(5):642-649.
da Silva BDM, Forte FDS. Access to dental treatment, mothers perception of oral health and intervention strategies in the city of Mogeiro, PB, Brazil. <i>Pesqui Bras Odontopediatria Clin Integr</i> [Internet]. 2009;9(3):313–9.
Durey A, McAullay D, Gibson B, Slack-Smith LM. Oral health in young Australian aboriginal children: Qualitative research on parents' perspectives. <i>JDR Clin Trans Res</i> . 2017 Jan;2(1):38-47.
Finlayson TL, Beltran NY, Becerra K. Psychosocial factors and oral health practices of preschool-aged children: a qualitative study with Hispanic mothers. <i>Ethn Health</i> . 2019 Jan;24(1):94–112.
Fleming PS, Colonio-Salazar F, Waylen A, Sherriff M, Burden D, O'Neill C, et al. Prioritising NHS dental treatments: a mixed-methods study. <i>Br Dent J</i> . 2022 Jan.
Frazier PJ, Jenny J. Use of community residents as interviewers in a dental health care research project. <i>Public Health Reports</i> [Internet]. 1976;91(1):77–85.
Gilchrist F, Marshman Z, Deery C, Rodd HD. The impact of dental caries on children and young people: What they have to say? <i>Int J Paediatr Dent</i> [Internet]. 2015;25(5):327–38.
Herval ÁM, de Oliveira FPSL, Machado KM, Vasconcelos M, Ferreira RC, Ferreira EF e., et al. Mothers' perception about health education in brazilian primary health care: A qualitative study. <i>Int J Paediatr Dent</i> . 2019;29(5):669–76.
Hilton I v., Stephen S, Barker JC, Weintraub JA. Cultural factors and children's oral health care: A qualitative study of carers of young children. <i>Community Dent Oral Epidemiol</i> . 2007 Dec;35(6):429–38.
Isong IA, Luff D, Perrin JM, Winickoff JP, Ng MW. Parental perspectives of early childhood caries. <i>Clin Pediatr (Phila)</i> [Internet]. 2012;51(1):77–85.
Kay EJ, Quinn C, Gude A, Taylor A, Erwin J. A qualitative exploration of promoting oral health for infants in vulnerable families. <i>Br Dent J</i> [Internet]. 2019;227(2):137–42.
Kenny K, Vinall-Collier K, Douglas G, Day PF. 'He was distraught, I was distraught.' Parents' experiences of accessing emergency care following an avulsion injury to their child. <i>Br Dent J</i> . 2019 Oct;227(8):705-10.

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- Prado LH, Previato K, Delgado RZR, Nelson Filho P, Bezerra RAS, Matsumoto, MAN et al. Adolescents' perception of malocclusion, their motivations, and expectations concerning the orthodontic treatment. Is it all about attractiveness? A qualitative study. *Am J Orthod Dentofacial Orthop*. 2022 Apr;161(4):e345–e352.
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**Reason for exclusion: Population (n= 5)**

Anderson R. Patient expectations of emergency dental services: a qualitative interview study. *Br Dent J*. 2004 Sep;197(6):331–4.

Cabudol M, Asgari P, Stamm N, Finlayson TL. Illuminating mexican migrant adolescents' dental access and utilization experiences. *Community Dent Health [Internet]*. 2018;35(4):204–10.

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Parekh S, Almhateb M, Cunningham SJ. How do children with amelogenesis imperfecta feel about their teeth? *Int J Paediatr Dent*. 2014;24(5):326–35.

Turton B, Durward C, Crombie F, Sokal-Gutierrez K, Soeurn S, Manton DJ. Evaluation of a community-based early childhood caries (ECC) intervention in Cambodia. *Community Dent Oral Epidemiol*. 2021 Jun;49(3):275–83.

**Reason for exclusion: Study design (n= 4)**

Graham MV, Uphold CR. Health Perceptions and Behaviors of School-Age Boys and Girls. *J Community Health Nurs [Internet]*. 1992;9(2):77–86. (Quantitative study)

Dyer TA, Owens J, Robinson PG. Summary of: What matters to patients when their care is delegated to dental therapists? *Br Dent J [Internet]*. 2013;214(6):302–3. (Research summary)

Doherty R, Williams A, Mackintosh J, Bateman B, Holland S, Rushworth A, et al. Summary of: The development of a designated dental pathway for looked after children. *Br Dent J*. 2014 Feb;216(3):136–7. (Research summary)

Vermaire JH, Hoogstraten J, van Loveren C, Poorterman JHG, van Exel NJA. Attitudes towards oral health among parents of 6-year-old children at risk of developing caries. *Community Dent Oral Epidemiol*. 2010;38(6):507–20. (Q-methodology)

**Reason for exclusion: Use of photos or videos (n= 3)**

Adams SH, Rowe CR, Gansky SA, Cheng NF, Barker JC, Hyde S. Caregiver acceptability and preferences for preventive dental treatments for young African-American children. *J Public Health Dent*. 2012;72(3):252–60.

Crystal YO, Kreider B, Raveis VH. Parental expressed concerns about silver diamine fluoride (SDF) treatment. *J Clin Pediatr Dent*. 2019;43(3):155–160.

Seifo N, Cassie H, Radford JR, Innes NPT. "I guess it looks worse to me, it doesn't look like there's been a problem solved but obviously there is": a qualitative exploration of children's and their parents' views of silver diamine fluoride for the management of carious lesions in children. *BMC Oral Health [Internet]*. 2021;21(1):367.

**Reason for exclusion: Findings without illustration (n= 3)**

Barber S, Bekker H, Marti J, Pavitt S, Khambay B, Meads D. Development of a Discrete-Choice Experiment (DCE) to Elicit Adolescent and Parent Preferences for Hypodontia Treatment. *Patient*. 2019 Feb;12(1):137–148.

Ware EB, Drummond B, Gross J, Hayne H. Giving children a voice about their dental care. *J Dent Child*. 2020;87(2):116–9.

Quintero M del CV, Cerezo Correa M del P, Cifuentes Aguirre OL, Paz Delgado AL, Parra Ramírez G. Systematization of the healthy smiles program implemented in Manizales, Colombia. *Rev Cubana Estomatol [Internet]*. 2020;57(2):1–14.

**Reason for exclusion: Use of general anesthesia (n= 2)**

Rosenblatt A, Kremer M, Paun O, Swanson B, Hamilton R, Schwartz A. Parental Decision-Making for Surgery and Anesthesia in Young Children. *West J Nurs Res*. 2022 Oct;44(10):904–911.

Smith PA, Freeman R. Remembering and repeating childhood dental treatment experiences: Parents, their children, and barriers to dental care. *Int J Paediatr Dent*. 2010 Jan;20(1):50–8.

**Reason for exclusion: Time between intervention and interview (n= 2)**

Chang CP, Barker JC, Hoeft KS, Guerra C, Chung LH, Burke NJ. Importance of content and format of oral health instruction to low-income mexican immigrant parents: A qualitative study. *Pediatr Dent*. 2018 Jan 1;40(1):30–36.

Reich SM, Ochoa W, Gaona A, Salcedo Y, Espino BG, Newhart V. et al. Disparities in Caregivers' Experiences at the Dentist With Their Young Child. *Acad Pediatr*. 2019 Nov-Dec;19(8):969–977.

### Appendix 3. Findings and illustrations.

#### 3.1 Parents

<b>Arrow P, Forrest H, Piggott S. Minimally Invasive Dentistry: Parent/Carer Perspectives on Atraumatic Restorative Treatments and Dental General Anaesthesia to the Management of Early Childhood Caries. 2021</b>	
Finding	Parents were relieved when teeth could be treated more conservatively and the extractions were able to be avoided (U)
Illustration	“I was told initially, they would just pull out as a precaution are now still in place and looking very healthy (...) and he has none removed at the moment. She did say we don’t know about the molars whether they will have to be eventually but I think three other teeth were saved.” (p.8)
Finding	Parents found difficulty in reconciling what appears to be some urgency required to have the child treated and yet having to wait a substantial length of time (U)
Illustration	“And he is going on a waiting list for (...) and we can’t do that for a year it didn’t make sense to me if it was that important. I mean I understand the logistics and probably the demand on the system, but I thought my goodness what are we going to do for the next year then if it’s that bad (...) I thought it’s imperative that he has this work done because he has all these issues with his teeth, and the poor little thing must be in a lot of pain.” (p.6)
Finding	Parents expressed appreciation of the concept of child-centred/family-centred care when it was experienced (U)
Illustration	“Yeah, and I think the way (clinician’s name) did it, she said, “Well, we’ll work up to scary things like pulling the most painful teeth out”. So, all that was done at the end when she was quite confident to go in. So, she started off with the smaller things and then worked up to fillings and things like that... Yeah, so dentist visits are now viewed as a positive experience... Everyone involved was very approachable and non-judgmental..., ever since she was young, every time we went to see the dentist, they sort of made us feel like we were doing something wrong with her and that’s why her teeth were like that... it didn’t feel very rushed; ... “It’s a trust, yeah, to build that rapport.”” (p.5)
Finding	Parents also reported the limited discussion of the available options as a negative point (U)
Illustration	“It was just one option, there was no, we could try this or this or this, it was straight, it’s the general anaesthetic because I can’t get him to sit still to have an X-ray.” (p.4)
Finding	Parents were dissatisfied when child-/family centered care was absent (U)
Illustration	“Being shunted really, without actually having anything done... It’s, yeah, you get all set up, you get your expectations up, okay, he’s going to get something done. And it’s, oh, no, it’s not going to happen now... The staff at the hospital have been atrocious. They don’t save the messages, they don’t write anything down, appointments, we were there, you know, we’re here, make an appointment, and they didn’t even bother saving the appointment and we’re sitting around until 5 o’clock in the afternoon, you know.” (p.6)
<b>Bhatti A, Gray-Burrows KA, Giles E, Rutter L, Purdy J, Zoltie T et al. “Strong Teeth”: the acceptability of an early-phase feasibility trial of an oral health intervention delivered by dental teams to parents of young children. 2021</b>	



Finding	The leaflets supported parents to have oral health conversations with wider friends and family, especially where they were previously hesitant to do so (U)
Illustration	“[the leaflet] says you should do it twice a day. Cause that argument of well yeah I only want to do it once, it’s like, ‘well actually, the guidelines suggest...’. So it’s nice to have a bit of, for me, yeah a bit a’ back up... I can reinforce the message that I’m already saying. Cause people just think that I just, I’m saying it for no reason. So I feel like if its written down and published, if somebody paid to get it printed they might listen a bit more.” (p. 7)
Finding	One parent highlighted the likelihood of leaflets being discarded if they were to be provided at the end of the visit (U)
Illustration	“Even if you were given the leaflets, it’s not gonna encourage you to read them. It’s gonna be something that you stuff in your bag while you’re trying to pick your kids up and that you probably don’t end up looking at. Whereas when she’s actually sat down, and she’s going through it with you, I think you’re more inclined to ask questions and understand more.” (p. 7)
Finding	Participants also highlighted the usefulness of the toothbrushing demonstration within their dental appointment (U)
Illustration	“Once you start getting children, or even yourself, for it to be mandatory for someone to show you how to brush your teeth.” (p. 7)
Finding	Some parents reported how the preventive intervention enabled a two-way, friendly conversation between parent and dental team members (C)
Illustration	“What was helpful for me was that I went in thinking, ‘I need to come out with a list of things that they’re not allowed to have, and I was ready for a bit of a bashing [laughs]. Whereas actually, that wasn’t really what I came out with. It was more like treats are okay, [...] but just be careful and think about when you’re giving them to them and make it work for your family rather than restrict [them].” (p. 4)
<b>Bhatti A, Wray F, Eskyté I, Gray-Burrows KA, Owen J et al. HABIT (Health visitors delivering Advice in Britain on Infant Toothbrushing): a qualitative exploration of the acceptability of a complex oral health intervention. 2022</b>	
Finding	Some parents found it challenging to implement parental supervised brushing (PSB) at age over 1-year-old because they struggled to establish how far they could “push” their child while also keeping toothbrushing a positive experience (U)
Illustration	“I think it might be useful to give tips of how he might actually, he might move around or he might do this and try, like little tips of different sort of things that we could do in scenarios basically. Cause he wouldn’t really, he didn’t like it at the beginning and he would just bite and after a few months, it weren’t working he would just bite on the brush and now he kind of like, he’ll walk” around and play with the toothbrush and just put it in his mouth and bite on it and just do what he wants with it.” (p. 8)
Finding	Parents felt comfortable with the information being delivered by health visitors and thought they were the right person to deliver the intervention (C)
Illustration	“Obviously, you get a bond with them, don’t you, cause they’ve, like, you know, measured your baby and they’ve measured their everything, their head, this and that, and they come round from when they’ve been little for, like, now. So, you’re more comfortable, aren’t you, with them.” (p. 5)

Finding	Although these parents perceived additional information as unnecessary and non-essential, they stated how the intervention had provided reassurance that they were undertaking appropriate oral health behaviours (U)
Illustration	“They give you reassurance that he’s following the right stages cause maybe as a first-time parent, or a second time or even a third time just check... is he doing okay, is this normal so kind of ask the first point of call is “is this normal?” (p. 6)
Finding	Having a “personalised” visit is essential for parents and strengthens the notion of having a good rapport and establishing “bonds” (U)
Illustration	“It’s just cause if you have previous concerns you’ve already spoken with the health visitor about and if you see her again she’s like “aw well has that improved?” cause she’s already seen you before. And she’s said you know she’ll recap on the last meeting and it feels more personalised and it’s a lot better cause then they know that child. And if there were concerns or things that stood out to them in one meeting they can sort of look at it in the following meeting and have a look whereas if it was someone different they would just look at it as if it was a new child and previous notes.” (p. 6)
Finding	The leaflet also provided parents with the opportunities to pass on information to the wider family (U)
Illustration	“But they concentrated a lot more on the toothbrushing, which was really good. So it was good for me cause I know how important it is but you don’t know how to explain to other people. Sometime like my mother-in-law or someone [unclear words 0:05:03]. So, it was really good the way they explained it so I could tell my mother-in-law, ‘look’. And I gave her that little booklet as well and I said, ‘look this will help’. So, it was really good.” (p. 9)
<b>Cashmore AW, Noller J, Johnson B, Ritchie J, Blinkhorn A. Taking the pain out of waiting: The oral health counselling experiences of parents of children with extensive dental caries. 2011</b>	
Finding	Participants appreciated the face-to-face demonstrations that they received from the dental professional (U)
Illustration	“It helped me a lot. I know how to brush correctly for them. It’s helped me for the first child and the second child.” (p.412)
Finding	Some parents wanted to monitor the progress of their child’s tooth decay and therefore valued the feedback that they received from the child’s dental assessment (U)
Illustration	“Here they check her teeth properly and I want to know if they have gotten worse or stayed the same.” (p.410)
Finding	Parents reported a reduction in the frequency and intensity of the child’s dental pain by increasing the regularity and quality of tooth-brushing (U)
Illustration	“During the waiting time I brushed for her and her disease it’s gone and her dental pain too. I brushed for her, and in about one week, all the pain had gone, and then she was sleeping better and eating better. Before, she didn’t want to eat.” (p.413)
Finding	Parents did not want to be ‘lectured’ about their child’s oral health (U)
Illustration	“I thought I was going to get drilled with, you know, you shouldn’t be doing this, you shouldn’t be doing that, but they have been pretty good with everything, you know (...) they were offering suggestions, and they were coming from experience some of them with the kids as well, rather than giving you unrealistic goals.” (p.415)

Finding	Participants' appreciation of a non-confrontational, patient-centred style of parent counselling seemed to be influenced by their feelings of guilt and/or embarrassment about the condition of their child's carious teeth (U)
Illustration	"When I came in I was like 'oh here we go, everyone's going to think I'm a bad mother'. That's what I was thinking. When I look at him now I think shit, why did I give him that bottle? I feel guilty." (p.415)
Finding	Parents felt that the familiarization the dental setting was effective in reducing their child's dental fear and anxiety (U)
Illustration	"She knows that no one is going to hurt her [during the oral examination] and she is not going to have any pain, and then she is comfortable. And it is good that she is comfortable because if we come back for the operation [and she is not comfortable] then she won't sit on the chair." (p.410)
Finding	Children – at least as much as parents – need to take responsibility for their own oral health (U)
Illustration	"She [the dental professional] didn't just talk to me, she made sure that they're involved [the child]. And they [the child] have to take care of their teeth as well as mum and dad." (p.415)
Finding	Parents felt that they had been successful in increasing the frequency and quality of their child's tooth-brushing (U)
Illustration	"She was going in and cleaning her teeth twice a day and going in and filling it in and colouring it in and receiving a reward at the end of the week (...) it makes your job a little easier to try to keep her teeth clean." (p.412)
<b>Chai HH, Chen KJ, Duangthip D, Lo ECM, Chu CH, Gao SS. Parental perspectives on the use of silver diamine fluoride therapy to arrest early childhood caries in kindergarten outreach dental services: A qualitative study. 2022</b>	
Finding	The parents agreed that their children's toothbrushing behavior improved after the service (U)
Illustration	"My boy did not brush very well before. He did not know where to put the toothbrush and how to brush, and he did not like toothbrushing at all. But after joining this service, he brushes more carefully and for longer. He told me that the dentist asked him to do so." (p.3-4)
Finding	Dental care in kindergarten could alleviate the child's dental fear and anxiety and allowed them to adapt to dental examinations (U)
Illustration	"Young children will be scared when they go to a dental clinic but they may have a good experience if the dental check-up is at kindergarten. Everyone in the kindergarten opens his/her mouth and the dentist uses a cotton bud to check everyone's teeth. It looks funny and so the children feel like playing. It will be good training for them. ... and if the parents are not around, they (the children) need to grow up and rely on themselves. If the parents are present, they may cry and not want to see the dentist." (p.4)
Finding	Some parents accepted SDF therapy even though it caused black staining on the treated lesion because oral health is valued more than aesthetics (U)
Illustration	"I knew SDF would cause black staining and I was worried but I still joined this service because I did not want my daughter's tooth decay to get more and more severe. If the decay progresses and reaches the root, it will be too late." (p.6)
Finding	Parents believed their children's oral health-related knowledge improved because it was imparted by a professional, i.e., a dentist (U)

Illustration	“Young children may need someone else, not their parents or family members, to tell them what they need to do or to improve because they would like to listen to teachers and dentists.” (p.3)
Finding	Some parents accepted SDF therapy even though it caused black staining on the treated lesion because the appearance of dental caries already affects aesthetics, and the primary teeth will exfoliate (U)
Illustration	“The tooth decay already looked bad. It was black as well and the baby teeth will exfoliate anyway.” (p.6)
Finding	Some parents said they learnt from this service that regular dental visits are necessary even for young children (U)
Illustration	“This service lets me and my child know that if we have tooth decay, we have to go to see a dentist and seek treatment. Even if we do not have tooth decay, we still need to see a dentist for regular check-ups.” (p.5)
Finding	The parents believed that this service helped them to know more about their children’s oral health status (U)
Illustration	“I noticed she had two decayed front teeth but I did not know much about it. Would it get severe? Would it hurt? Or whatever, I did not know. So, I would like to join this service and let the dentist take a look. Then the dentist can let us know how the tooth decay will progress.” (p.3)
Finding	The parents noticed that the outreach dental service allowed their children to understand their own oral health status (U)
Illustration	“The annual dental examination is like an annual review. My child put effort into brushing better and maintaining better oral health because he wanted to get better results in the next examination.” (p.3)
Finding	Some parents thought the carious lesions looked more severe because they turned black after SDF therapy (U)
Illustration	“I know the progression of tooth decay has been stopped by SDF treatment but it is black. It feels like the tooth decay is more severe than before because it used to be yellow or light brown.” (p.5)
Finding	Parents believed that other people might admonish them about the black staining, thinking that they have taken no action about the carious lesions (U)
Illustration	“I do not like the black staining. People do not know it is staining and so they will consider it to be severe tooth decay. When people see the black staining, they say that the parents do not take good care of the child, like ‘why does her mother not help her to brush her teeth?’ or ‘why does her mother leave her decayed teeth there?’ They blame the parents for letting the tooth decay develop without taking any action. I have received a lot of pressure.” (p.5)
Finding	The service provided treatment for dental caries and prevented the further development of dental caries, which in turn improved oral health of children (U)
Illustration	“At least he could receive some treatment. Or maybe the treatment could prevent further decayed teeth? I am not sure. But at least he received something and it should be beneficial to his oral health.” (p.3)
<b>Chestnutt IV, Hutchings S, Playle R, Trimmer SM, Fitzsimmons D, Aawar N et al. Seal or varnish? A randomised controlled trial to determine the relative cost and effectiveness of pit and fissure sealant and fluoride varnish in preventing dental decay (Chapter 5 Acceptability of the Seal or Varnish? intervention and trial). 2017</b>	
Finding	Most parents were not fully aware of the details of the treatment or study (Year 1) (U)

Illustration	“[Interviewer: Do you understand what the study is about?] Not really no.” (p.98)
Finding	Most parents participating to generally benefit their children’s teeth and to feel that they had done as much as possible to promote their child’s dental health (Year 3) (U)
Illustration	“I’m thinking myself there’s every chance now that I’ve given her the best chance to look after her teeth then and she may not have decay.” (p.98)
Finding	Parents trusted the school and several said that they participated partly because of this (Year 1) (U)
Illustration	“It was with the school I was quite happy because it was recognised through the school.” (p.99)
Finding	Parents said that children did not say much about the treatment (Year 1) (U)
Illustration	“That was it really just it didn’t taste very nice but she was delighted because she had stickers [laughs] you know I was like ‘What was it like, what did they do?’ and she said ‘They put something in my mouth and it didn’t taste very nice’.” (p.89)
<b>El-Yousfi S, Innes NPT, Holmes RD, Freeman R, Cunningham KB, McColl E. Children and parents’ perspectives on the acceptability of three management strategies for dental caries in primary teeth within the ‘Filling Children’s Teeth: Indicated or Not’ (FiCTION) randomized controlled trial – a qualitative study. 2020.</b>	
Finding	Parents raised concerns about the potential of further deterioration of their child’s teeth with prevention alone (PA group) (U)
Illustration	“I’m all for that provided it doesn’t cause any more damage (...) My two concerns were A) (...) the decay was going to cause more damage and therefore she’s going to get some pain from it. And the second thing is whether it’s going to damage the adult teeth underneath.” (p.7)
Finding	Children disliked the PMC using the Hall Technique due to the pain or discomfort that resulted from the pressure applied when placing it or if it was the wrong size (B+P group) (U)
Illustration	“The first one as I say, he did say this was the wrong size. She wouldn’t cry in front him (...) she cried when she got out (...). She said it was sore.” (p.6)
Finding	Parents expressed the value they placed on avoiding any drilling and injections (B+P group) (U)
Illustration	“Well, I felt good with this one (...) because one of the other ones has got some injections in it.” (p.5)
Finding	Parents found that the dental team was usually able to facilitate the child’s acceptance of the procedure (B+P group) (U)
Illustration	“We’re very lucky because she really, really likes ‘the dentist’, don’t you? (...) She’s made you feel really, really comfortable. Sometimes even if when you’re feeling a bit nervous, she’ll still get in the chair and at least let her look and things.” (p.9)
Finding	Parents in the prevention arm found this strategy acceptable as long as the carious teeth were pain-free and considered it the less ‘radical’ or ‘significant’ method of treatment (PA group) (U)
Illustration	“But none of the three are causing her any pain. I think that’s the key thing for me. So we’re trying to do this thing with diet and brushing, with full strength toothpaste and all that kind of things (...) I think that it’s all down to pain. So that would obviously influence that decision.” (p.7)
Finding	Parents preferred avoiding fillings and found other aspects of the prevention arm a positive experience (PA group) (U)



Illustration	"I'd say a lot of positive things has come out of it. There's nothing negative, definitely something positive. And it makes the children aware (...) What they're eating and what they're doing...I think it's been really helpful." (p.7)
Finding	Parents viewed the more invasive nature of the conventional restorative treatment approach for managing carious primary teeth negatively (C+P group) (C)
Illustration	"I wondered why they were gonna put her through that when this thing was going to fall out anyway (...) why are you filling a tooth that's gonna just fall out?" (p.5)
Finding	The 'unnatural' aesthetics of a PMC, was a concern for some parents (B+P group) (U)
Illustration	"Slightly worried that with (...) all of her back teeth capped now (...) that like she'd notice, that other children didn't (...) But she's been absolutely fine. She's not bothered by it." (p.6)
Finding	Some parents did not have any aesthetic concerns (B+P group) (U)
Illustration	"It seemed sensible .... don't really care what the look of it is." (p.6)
Finding	Some parents preferred a more restorative approach over prevention alone however they had reservations regarding the 'unnatural' appearance of PMCs (B+P group) (U)
Illustration	"I'd have been a bit iffy about probably leaving it and waiting and seeing, but I'm not quite sure how I feel about the stainless steel thing to be quite honest with you. I think I'd have preferred them to try and fill it rather than (...) you see it looks more natural." (p.6)
Finding	Some parents disfavoured PMCs for aesthetic reasons and thus favoured the preventive approach (PA group) (U)
Illustration	"She wants one, I'm not sure. I think it's me that's saying no. I just (...) well, partly the aesthetics. I think having a piece of lump of silver in her mouth is not ideal at this age." (p.7-8)
Finding	Being anxious of certain procedures because of potential pain, and concern that their child would not cooperate, was also reported by parents (B+P group) (U)
Illustration	"I think I were more nervous at first then she were (...) It was just the thought of her having an injection I thought, oh no it's going to hurt ... She's not going to let them do it. But no, she were fine (...) he talked her through it. No problems at all." (p.9)
Finding	Some parents described the conventional restorative treatment as the 'traditional' or 'expected' treatment based on their own experience (C+P group) (U)
Illustration	"I think it was the filling, the traditional filling (...) I didn't realize there were other treatment options to be fair. I had to get a filling, it was a needle (...) and I expected it before I was told about any other options." (p.5)
Finding	Parents raised an additional concern regarding the aesthetic aspect of PMCs in a child's mouth as potentially being a visible sign of inadequacies in their parenting practices, but felt that if it was the best option then it was justified (C+P group) (U)
Illustration	"Obviously, I'm to blame as the Mum for the overall hygiene of his teeth. But you just felt like okay, everyone would see how bad mum I am (...) But then I thought you know what, whatever is best for you. That's what I was going to do." (p.5)

Finding	Parents also reported being concerned about their child's willingness to return for certain procedures (B+P group) (U)
Illustration	"And she's playing with the drill [toy] but, like, if someone came near her mouth with the drill, she wouldn't be happy at all. And I think we'd have had a lot more problems in getting her to sit down and keep coming back." (p.9)
Finding	Parents found the preventive strategy to be beneficial to them as a parent in terms of encouraging ways to improve tooth brushing (PA group) (U)
Illustration	"Spent quite a lot of time on helping us to brush properly (...) she's very good in terms of giving us advice in terms of how to brush and obviously looking at the pink and knowing where we're missing, that helps as well." (p.8)
Finding	Acceptability of procedures was once again linked to trust and the building of a treatment alliance between the child, the parent and the DP providing care (B+P group) (U)
Illustration	"When before appointments, she was crying and everything, but when the dentist was suggesting us to do it in front of her and she was listening to her, and then when we're coming and she was saying, okay, you're allowed to do it just because of the dentist." (p.7)
Finding	Engaging with parents personally, allowing them the opportunity to support their child while undergoing treatment was also appreciated (B+P group) (U)
Illustration	"[DP name] explains everything really well. And like she's very big on pull a chair up, hold her hand, have a look at what we're doing." (p.10)
Finding	Some parents felt that when their child had prior knowledge of the specific procedures to be undertaken at the next dental visit that this would increase anxiety (C+P group) (U)
Illustration	"Think if they're told they're going for something, they get more worried (...) because I think if I'd just said we've got another check-up and then when she was in the chair, that would save her because she gets worked up way in advance." (p.9)
Finding	Children did not express any concern regarding the aesthetics of PMCs and parents spoke of their child showing them off (B+P group) (U)
Illustration	"She had a question asked about her silver crowns and one of her friends liked it and wanted it (...) she was showing off with them." (p.7)
<b>Kyoon-Achan G, Schroth RJ, Martin H, Bertone M, Mittermuller BA, Sihra R. Parents' Views on Silver Diamine Fluoride to Manage Early Childhood Caries. 2021</b>	
Finding	All parents learning about SDF as a treatment option for caries from the dentist in the study (U)
Illustration	"I asked the doctor and he explained. He said that it is safe so we're not worried about it (...) A lot of time at the dentist and he said, this one will help me to stop cavities and the cavities was causing too much problems. It helps a lot." (p.4)
Finding	Parents reported acceptance because the treatment was minimally invasive, and avoided the need for surgical intervention with the dental drill and restorations (U)
Illustration	"I don't want to go through like all those extensive procedures." (p.4)
Finding	Some parents expressed concern with the black staining of lesions resulting from SDF treatment on anterior teeth (U)
Illustration	"We don't like that treatment because when my son laughs or smiles, his upper teeth look black and dirty, it's not appropriate at all and the lower teeth are white." (p.5)

Finding	Some parents felt that their children's reaction might change to embarrassment once they are old enough to attend school (U)
Illustration	"[My child] is very young, he's only 4 years old. He didn't care about that yet. But it will be a big trouble when he goes to school, when he is at the age of going to school." (p.5)
Finding	Almost all parents in the study said that they would recommend SDF to other parents as a way to nonrestoratively manage ECC (U)
Illustration	"I already informed other parents who have the same problem like my child because this treatment is helpful. When you see a child, a small child having his teeth decayed and broken and going to be worse, you're worried. But when I see this medication and [how] it comes to normal, that is where I already told some parents." (p.5)
Finding	Some parents were happy to have received additional information and articles to read about SDF to make an informed decision (U)
Illustration	"He [dentist] said it is safe. So I trust him. He gave us a few papers to read about it. I read all of those and I think it's good." (p.4)
Finding	Some parents were accepting of SDF treatment because it decreases sensitivity and halts the progression of the child's caries lesions (U)
Illustration	"It reduces the cavity (...) When we use SDF on the teeth, after a few minutes, pain stopped." (p.4)
Finding	Most parents were accepting of the treatment primarily because it was recommended by the dentist to manage their children's ECC and they were trusting of the dentist's recommendation (U)
Illustration	"We never have seen before this kind of treatment. The doctor explained to us and so we were satisfied about his explanation. That's why we'll go with that one." (p.4)
Finding	Some parents were accepting of SDF treatment because it is a painless procedure (U)
Illustration	"I think that this is good for the kids because it is a painless treatment." (p.4)
<b>Lee J, Schroth RJ, Lawrence HP. Nishtam Niwiipitan (My First Teeth): Oral Health Digital Stories from Urban Indigenous Parents. 2022</b>	
Finding	Parents shared that additional information should be provided to parents/grandparents and other caregivers so that they can be made aware of all the treatment options available for their children (U)
Illustration	"They never heard of anything like this. Most of the time so far, almost everybody I've told [about the SDF treatment] they were really surprised . . . and they liked that idea instead of having their kids to be put under or you know, having to watch their kids go through all of this pain and yeah." (p.7)
Finding	Parents mentioned that their oral health care routines with their children had either changed or improved since the children had undergone the dental procedures (U)
Illustration	"Now they are getting their adult teeth and I'm like these are what you are going to have for the rest of your life, so you need to take care of them. (...) They improved some with having their teeth brushed. (...) I don't want them to go through pain and dental problems." (p.6)
Finding	Parents whose children went through the SDF treatment shared that they had some feelings of fear and guilt about their children's ECC (U)
Illustration	"A little bit, tiny bit I felt a little guilty because I was like, man they look like they just had a bunch of Oreo cookies. (...) But because I learned a little bit about [SDF treatment] it will be fine. It's okay (...) I've seen other little kids



	with so much black stuff on their teeth and for my boys it's just a few spots here and there. But I am glad that we did it for them." (p.6)
Finding	Parents whose children received the SDF treatment expressed that non-GA pathway options should be promoted more often when managing caries (U)
Illustration	"I am glad that we did this [SDF]... I feel better knowing that she didn't have to go under... The only thing is that her teeth [are] going to be black now, not the whole tooth but you know just that little part. But I'm glad that it's going to stop the cavities." (p.6)
<b>Schroth RJ, Ndayisenga S, Guenther K, Marchessault G, Prowse S, Hai-Santiago K et al. Parents' and caregivers' perspectives on the Manitoba Dental Association's Free First Visit program. 2016</b>	
Finding	Some parents indicated that finances were limited and anything to offset the cost was appreciated (U)
Illustration	"I wouldn't have gone as early if wasn't free. So it encouraged me to go and see why they want them to go at one, or one and a half." (p.4)
Finding	Participants suggested that receiving information during prenatal care can be more effective than during postnatal care (U)
Illustration	"When you're in the hospital they give you quite a few pamphlets on different things. Maybe that'd be a way to get the message out too. But pediatricians regularly see babies from six months, so maybe they should be the ones that are promoting that FFV and giving pamphlets out at your first appointment around the six month [visit]." (p.5)
Finding	There was agreement in one group that the program was not reaching those who needed help the most (U)
Illustration	"Sadly, probably not (...) And then that's just talking about within the city where it's even easier access. I'm sure in the remote communities, I don't know if this is a Manitoba or a Winnipeg thing, but if it's a Manitoba thing, are they getting to the remote communities where it's harder to buy milk than it is to buy Pepsi?" (p.5)
Finding	Several parents seemed disappointed that so little was done during the appointment (U)
Illustration	"We snuck in one free visit, the under-three visit, and all they did was put her in a chair. There was no checking (...) So, there goes my free thing, like the freebie, and I haven't been back since. And then I went last week and something's growing and we have to go again tomorrow to see what we can do about it." (p.4-5)
Finding	Participants' opinions regarding the value of the program were a further indication of parental expectations (U)
Illustration	"The first visit though they don't do much. They just look at the teeth and count them. I was thinking they did more like screening, and the first free dental visit is just to kind of help give you awareness and to show you, I think it's more screening yeah and seeing where your kid's at, seeing what potential things they would need." (p.4)
Finding	Participants also concern expressed for reaching children most at need, with the suggestion that dentists should go into the schools and daycares in disadvantaged areas (U)
Illustration	"I think too, that by having this program there would be a lot more people that would take advantage of it, and it'd give the dentists a lot better idea of what stages people's teeth are at, or what problems they need, things that they could

	make better and that by seeing more children through this type of program, maybe more people would come that wouldn't have come before." (p.5)
<b>Viswanath S, Asokan S, Pollachi-Ramakrishnan G. First dental visit of children – A mixed-method approach. 2021</b>	
Finding	Lack of interdisciplinary practices among paediatricians, physicians, general dentists, and paediatric dentists also influenced the child's dental care (U)
Illustration	"We used to meet our daughter's physician during every vaccination schedule, but he never asked us to have dental check-up; neither we enquired about her tooth problems." (p.219)
Finding	Parents were not ready to spend money on teeth which get exfoliated (U)
Illustration	"Dental treatments are time-consuming, and it requires multiple visits. It is tough to leave our daily wages for the sake of a tooth which is not even permanent." (p.219)
Finding	General dentists were not used to treating child patients, and mostly they opted for extractions of primary teeth when reported with pain (C)
Illustration	"My daughter's back tooth was removed long back due to tooth decay... The doctor did not give any clip (space maintainer) for that area, and he did not mention anything related to that. He insisted that permanent tooth inside will erupt eventually. It has been a year, but no sign of permanent tooth is seen." (p.219)
Finding	The first experience for most of the children in the dental office was not very pleasant (U)
Illustration	"The place was completely new to him. He was staring all around and questioning each and everything. The moment he was seated on the dental chair, he started crying and refused to open his mouth. They tried different methods to make him cooperative, but nothing helped. They had to restrain him completely to do the treatment." (p.217)
Finding	All the parents agreed that they should have sought a more preventive approach before (U)
Illustration	"Doctor said that the teeth have to be removed as it was completely decayed. We were not much concerned about milk teeth and removed all four front teeth. However, when we noticed that he stopped smiling while taking photos because of his appearance, we felt very bad." (p.217)
<b>Page LAF, Boyd DH, Davidson SE, McKay SK, Thomson WM, Innes NP. Acceptability of the Hall Technique to parents and children. 2014</b>	
Finding	Some parents approved the technique for replacing conventional restorations, preventing their loss (U)
Illustration	"They (fillings) fall out...and then we have tears... because they don't want go back... with this (Hall Technique)...it's stayed on... we haven't had a problem with it." (p.15)
Finding	Some parents believed the children and their peers to be accepting of the metal appearance (C)
Illustration	"All think she is pretty cool since she has got a silver crown in her mouth." (p.13)
Finding	Some parents reported that their child was not concerned before treatment (C)
Illustration	"You don't have to go through all the injections... they're good to go within minutes." (p.15)

Finding	Some parents expressed concern about their adult peers' attitudes to its appearance, with fears expressed about being viewed as parents who neglected their children's teeth or diet (U)
Illustration	"It (the crown) makes me feel really bad... oh my God, everyone's gonna look at him and think, my God, what does this mother feed this child." (p.16)
Finding	Generally, opinions of the Hall Technique were very positive (C)
Illustration	"You don't have to go through all the injections... they're good to go within minutes" (p.15)
Finding	Some parents described their child experiencing some discomfort while the clinician was trying on different crowns to determine the correct size (U)
Illustration	"She (dental therapist) sliced and diced and there was blood... he was very uncomfortable... they ended up numbing him... I just wish we had gone for a filling... the amount of agony he went through... was in my opinion not worth it... I would've made a crown to fit his tooth." (p.16)
Finding	Some parents reported that children were pain-free during the procedure (C)
Illustration	"Funny going on but was okay." (p.13)
<b>Piggott S, Carter S, Forrest H, Atkinson D, Mackean T, Mcphee R et al. Parent perceptions of minimally invasive dental treatment of Australian Aboriginal pre-school children in rural and remote communities. 2021</b>	
Finding	Child-centred care positions the child at the centre of the care and empowers them to engage in the care process (Test group) (U)
Illustration	"I think, yeah just the way they treated, talked to her, made her feel comfortable, you know, let her know that she didn't have to go through with it if she didn't feel comfortable (...) And my daughter is happy, so." (p.5)
Finding	Participants reported a feeling of ease and comfort, which builds a trusting relationship between the provider team and the care recipient (Test group) (U)
Illustration	"I think it has to come from the staff, I reckon for the kids to feel that they can trust them." (p.5)
Finding	Participants appreciated services that were targeted towards younger children and where comprehensive care was provided in community (Test group) (U)
Illustration	"If it hadn't been for this program [ART-HT] I wouldn't have taken her for any treatment unless she'd been in obvious pain (...) So it was great to catch decay that was starting, not causing problems yet." (p.5)
Finding	Interview participants reported infrequent visits and the limited time spent by service providers in community (Control group) (U)
Illustration	"It's the first time they've been here in two years, because they need to do it more regular (...) It doesn't matter what they're doing now, it doesn't work because every two years is a long time." (p.4)
Finding	The minimally invasive approach was well received by parents and children (Test group) (U)
Illustration	"Um yeah it was good I liked it, you did everything. Yeah not so much needle and things that makes them scared so yeah it was good he liked it yeah." (p.6)
Finding	Disappointment was evident when only examinations were performed, leaving parents and carers with unmet expectations of treatment for their children (Control group) (U)
Illustration	"Um but they just check it and they'll say what they gotta do you know to their mouths what needs to be done, um but then you gotta go into town you know." (p.5)

<b>Soares KG, Carvalho TYA, Santos AMC, Silveira LB, Costa LCM, Fernandes MLMF et al. Perceptions of the Use of the Diode Laser in Dental Surgery: A Qualitative Study. 2020</b>	
Finding	Parents and children stated that the procedure was quick, painless and didn't have bleeding (U)
Illustration	"My feelings are positive because the procedure is precise, the healing is easier and there is not much bleeding; it does not expose as much as conventional surgery that opens and cuts." (p.4)
Finding	An unpleasant (ugly) clinical aspect of the surgical wound and a strong smell during surgery were perceptions and complaints from some children and parents (U)
Illustration	"I was afraid that the smell and smoke would disturb my daughter, that is, she would be frightened." (p.5)
Finding	Only one father also indicated that he was misinformed by other people who had undergone a similar procedure, and therefore he felt unnecessarily stressed (U)
Illustration	"I talked to a friend whose daughter had undergone such treatment. She told me that the procedure was terrifying because smoke came out of her daughter's mouth. So I was very apprehensive. But it wasn't as bad as the stories." (p.4)

### 3.2 Children

<b>Berlin H, Hallberg U, Ridell K, Toft D, Klingberg G. A grounded theory study on Swedish 10 to 16-year-olds' perceptions of pain in conjunction with orthodontically indicated tooth extraction. 2022 (n= 2)</b>	
Finding	Handling the unavoidable unknown (Information is crucial in order to reduce patients' anxiety levels) (U)
Illustration	"Had received information on how it could feel during and after injection, and also afterwards." (p.3)
Finding	(Looking forward to a treat) Identify motivators for the child; why treatment [and possible pain/discomfort] is worth it (U)
Illustration	"Got a lot of praise after the treatment." (p.3)
<b>Chestnutt IV, Hutchings S, Playle R, Trimmer SM, Fitzsimmons D, Aawar N et al. Seal or varnish? A randomised controlled trial to determine the relative cost and effectiveness of pit and fissure sealant and fluoride varnish in preventing dental decay (Chapter 5 Acceptability of the Seal or Varnish? intervention and trial). 2017</b>	
Finding	Fewer children in the low-deprivation schools commented that they felt more confident about being at the dentist now that they were older (one FS arm and one FV arm, year 3) (U)
Illustration	"[Child 1] Because you're like quite scared, because you haven't been to the dentist oftenly (...) So when you get older and older and... [Child 2] You'll be more confident." (p.91)
Finding	Children did not understand the tooth-numbering terminology the CDS hygienist used and were worried that there might be something wrong with their teeth (one FS arm and one FV arm, year 3) (U)
Illustration	"[Child 1] They say stuff like numbers and stuff and we don't really know what that means (...) So like, they could be saying that our teeth are really bad or really good but we don't know. [Child 2] Like A2 and A3 and that. [Interview] So would you like to know more, you'd like to understand what they're saying? [Child 1] Yeah." (p.92)
Finding	Some children mentioned that they liked having their teeth looked after or protected (FV arm, year 1) (U)
Illustration	"I like the dentist because they look after your teeth and keep them clean." (p.91)
<b>El-Yousfi S, Innes NPT, Holmes RD, Freeman R, Cunningham KB, McColl E. Children and parents' perspectives on the acceptability of three management strategies for dental caries in primary teeth within the 'Filling Children's Teeth: Indicated or Not' (FiCTION) randomized controlled trial – a qualitative study. 2020.</b>	
Finding	Children reported their dislike for some specific dental procedures, namely the physical conventional placement of pre-formed metal crowns (C+P group) (U)
Illustration	"She did something with this drill (...) It's a little silver crown that went over the tooth (...) They felt a bit weird (...) yeah they feel a bit fizzy (...) they don't feel fizzy now it's just when they go on." (p.5)
Finding	Children reported their dislike for some specific dental procedures, namely local anaesthetic injections (C+P group) (U)
Illustration	"When he numbs your teeth. (...) Because it feels like your lips are about three-and-a-half miles long." (p.5)
Finding	Children found it possible to have the dental treatment procedures and would be willing to undergo them again (C+P group) (U)

Illustration	At some point it felt like it hurt a little bit, but if you get used to it and you just get on with it, it'll be fine." (p.5)
Finding	Children dislike of specific procedures, such as removal of some carious tissue (B+P group) (U)
Illustration	"They're like trying to clean it out (...) It hurt a bit and I also felt a bit weird. Sort of like feeling like you haven't felt anything like that before" (p.6)
Finding	Children were not concerned with the aesthetics of PMCs and were excited to show them to others (C+P group) (U)
Illustration	"Like the whole class. And my next door neighbour. And she's got three (...) They said, "Oh, he's got a silver tooth. Did they pull it out and put it in?" (...) I like it." (p.5)
Finding	Children disliked the PMC using the Hall Technique due to the pain or discomfort that resulted from the pressure applied when placing it or if it was the wrong size (B+P group) (U)
Illustration	"Quite sore (...) He made sure it fit your tooth and then he put it on. (...) It's just stinging when he tries to fit it on." (p.6)
<b>Soares KG, Carvalho TYA, Santos AMC, Silveira LB, Costa LCM, Fernandes MLMF et al. Perceptions of the Use of the Diode Laser in Dental Surgery: A Qualitative Study. 2020 (n= 1)</b>	
Finding	An unpleasant (ugly) clinical aspect of the surgical wound and a strong smell during surgery were perceptions and complaints from some children and parents (U)
Illustration	"My gums are still very ugly..." (p.5)



## Appendix 4. Synthesized findings.

### 4.1 Parents

<b>Synthesized finding 1: Childcare expectations</b>
<b>Category 1: Parents' expectations regarding the dental intervention.</b>
Findings (n= 9) (8U+1C)
Some parents described the conventional restorative treatment as the 'traditional' or 'expected' treatment based on their own experience (C+P group) (U)
Only one father also indicated that he was misinformed by other people who had undergone a similar procedure, and therefore he felt unnecessarily stressed (U)
Children – at least as much as parents – need to take responsibility for their own oral health (U)
The service provided treatment for dental caries and prevented the further development of dental caries, which in turn improved oral health of children (C)
Some parents wanted to monitor the progress of their child's tooth decay and therefore valued the feedback that they received from the child's dental assessment (U)
The parents believed that this service helped them to know more about their children's oral health status (U)
Participants' opinions regarding the value of the program were a further indication of parental expectations (U)
Several parents seemed disappointed that so little was done during the appointment (U)
Disappointment was evident when only examinations were performed, leaving parents and carers with unmet expectations of treatment for their children (Control group) (U)
<b>Category 2: Parents' perception of the child.</b>
Findings (n= 11) (8U+3C)
Parents said that children did not say much about the treatment (Year 1) (C)
Some parents reported that children were pain-free during the procedure (C)
Some parents described their child experiencing some discomfort while the clinician was trying on different crowns to determine the correct size (U)
Some parents believed the children and their peers to be accepting of the metal appearance (C)
Children disliked the PMC using the Hall Technique due to the pain or discomfort that resulted from the pressure applied when placing it or if it was the wrong size (B+P group) (U)
Children did not express any concern regarding the aesthetics of PMCs and parents spoke of their child showing them off (B+P group) (U)
The first experience for most of the children in the dental office was not very pleasant (U)
Parents felt that the familiarization the dental setting was effective in reducing their child's dental fear and anxiety (U)
Being anxious of certain procedures because of potential pain, and concern that their child would not cooperate, was also reported by parents (B+P group) (U)
Some parents felt that when their child had prior knowledge of the specific procedures to be undertaken at the next dental visit that this would increase anxiety (C+P group) (U)
Parents also reported being concerned about their child's willingness to return for certain procedures (B+P group) (U)

<b>Synthesized finding 2: Dental interventions</b>
<b>Category 1: Concerns about the results.</b>
Findings (n= 13) (13U)
Parents viewed the more invasive nature of the conventional restorative treatment approach for managing carious primary teeth negatively (C+P group) (U)
Some parents accepted SDF therapy even though it caused black staining on the treated lesion because the appearance of dental caries already affects aesthetics, and the primary teeth will exfoliate (U)
Some parents expressed concern about their adult peers' attitudes to its appearance, with fears expressed about being viewed as parents who neglected their children's teeth or diet (U)
Some parents felt that their children's reaction might change to embarrassment once they are old enough to attend school (U)
Parents believed that other people might admonish them about the black staining, thinking that they have taken no action about the carious lesions (U)
Parents raised an additional concern regarding the aesthetic aspect of PMCs in a child's mouth as potentially being a visible sign of inadequacies in their parenting practices, but felt that if it was the best option then it was justified (C+P group) (U)
Some parents expressed concern with the black staining of lesions resulting from SDF treatment on anterior teeth (U)
Some parents thought the carious lesions looked more severe because they turned black after SDF therapy (U)
Parents whose children went through the SDF treatment shared that they had some feelings of fear and guilt about their children's ECC (U)
The 'unnatural' aesthetics of a PMC, was a concern for some parents (B+P group) (U)
Some parents preferred a more restorative approach over prevention alone however they had reservations regarding the 'unnatural' appearance of PMCs (B+P group) (U)
Some parents disfavoured PMCs for aesthetic reasons and thus favoured the preventive approach (PA group) (U)
An unpleasant (ugly) clinical aspect of the surgical wound and a strong smell during surgery were perceptions and complaints from some children and parents (U)
<b>Category 2: Valuing non-invasive interventions</b>
Findings (n= 18) (16U+2C)
Parents raised concerns about the potential of further deterioration of their child's teeth with prevention alone (PA group) (U)
Parents in the prevention arm found this strategy acceptable as long as the carious teeth were pain-free and considered it the less 'radical' or 'significant' method of treatment (PA group) (U)
Parents preferred avoiding fillings and found other aspects of the prevention arm a positive experience (PA group) (U)
Generally, opinions of the Hall Technique were very positive (C)
Some parents approved the technique for replacing conventional restorations, preventing their loss (U)
Some parents reported that their child was not concerned before treatment (C)
Parents expressed the value they placed on avoiding any drilling and injections (B+P group) (U)
Some parents did not have any aesthetic concerns (B+P group) (U)
Almost all parents in the study said that they would recommend SDF to other parents as a way to nonrestoratively manage ECC (U)
The minimally invasive approach was well received by parents and children (Test group) (U)



Some parents accepted SDF therapy even though it caused black staining on the treated lesion because oral health is valued more than aesthetics (U)
Parents whose children received the SDF treatment expressed that non-GA pathway options should be promoted more often when managing caries (U)
Some parents were accepting of SDF treatment because it is a painless procedure (U)
Some parents were accepting of SDF treatment because it decreases sensitivity and halts the progression of the child's caries lesions (U)
Parents reported acceptance because the treatment was minimally invasive, and avoided the need for surgical intervention with the dental drill and restorations (U)
All the parents agreed that they should have sought a more preventive approach before (U)
Parents were relieved when teeth could be treated more conservatively and the extractions were able to be avoided (U)
Parents and children stated that the procedure was quick, painless and didn't have bleeding (U)
<b>Category 3: Results of dental intervention.</b>
Findings (n= 8) (8U)
Parents felt that they had been successful in increasing the frequency and quality of their child's tooth-brushing (U)
Parents reported a reduction in the frequency and intensity of the child's dental pain by increasing the regularity and quality of tooth-brushing (U)
The parents agreed that their children's toothbrushing behavior improved after the service (U)
The parents noticed that the outreach dental service allowed their children to understand their own oral health status (U)
Parents mentioned that their oral health care routines with their children had either changed or improved since the children had undergone the dental procedures (U)
Parents found the preventive strategy to be beneficial to them as a parent in terms of encouraging ways to improve tooth brushing (PA group) (U)
Some parents said they learnt from this service that regular dental visits are necessary even for young children (U)
Most parents participating to generally benefit their children's teeth and to feel that they had done as much as possible to promote their child's dental health (Year 3) (U)

<b>Synthesized finding 3: Service provision</b>
<b>Category 1: Preferences for receiving information.</b>
Findings (n= 26) (23U+3C)
Participants' appreciation of a non-confrontational, patient-centred style of parent counselling seemed to be influenced by their feelings of guilt and/or embarrassment about the condition of their child's carious teeth (U)
Child-centred care positions the child at the centre of the care and empowers them to engage in the care process (Test group) (U)
Parents expressed appreciation of the concept of child-centred/family-centred care when it was experienced (U)
Some parents reported how the preventive intervention enabled a two-way, friendly conversation between parent and dental team members (C)
Parents did not want to be 'lectured' about their child's oral health (U)
Parents felt comfortable with the information being delivered by health visitors and thought they were the right person to deliver the intervention (C)
Having a "personalised" visit is essential for parents and strengthens the notion of having a good rapport and establishing "bonds" (U)
Parents believed their children's oral health-related knowledge improved because it was imparted by a professional, i.e., a dentist (U)
Participants suggested that receiving information during prenatal care can be more effective than during postnatal care (U)
Parents shared that additional information should be provided to parents/grandparents and other caregivers so that they can be made aware of all the treatment options available for their children (U)
Parents also reported the limited discussion of the available options as a negative point (U)
General dentists were not used to treating child patients, and mostly they opted for extractions of primary teeth when reported with pain (C)
Participants appreciated the face-to-face demonstrations that they received from the dental professional (U)
Participants also highlighted the usefulness of the toothbrushing demonstration within their dental appointment (U)
Some parents found it challenging to implement parental supervised brushing (PSB) at age over 1 year-old because they struggled to establish how far they could "push" their child while also keeping toothbrushing a positive experience (U)
The leaflets supported parents to have oral health conversations with wider friends and family, especially where they were previously hesitant to do so (U)
One parent highlighted the likelihood of leaflets being discarded if they were to be provided at the end of the visit (U)
Although these parents perceived additional information as unnecessary and non-essential, they stated how the intervention had provided reassurance that they were undertaking appropriate oral health behaviours (U)
The leaflet also provided parents with the opportunities to pass on information to the wider family (U)
Some parents were happy to have received additional information and articles to read about SDF to make an informed decision (U)
All parents learning about SDF as a treatment option for caries from the dentist in the study (U)

Most parents were accepting of the treatment primarily because it was recommended by the dentist to manage their children's ECC and they were trusting of the dentist's recommendation (U)
Engaging with parents personally, allowing them the opportunity to support their child while undergoing treatment was also appreciated (B+P group) (U)
Acceptability of procedures was once again linked to trust and the building of a treatment alliance between the child, the parent and the DP providing care (B+P group) (U)
Participants reported a feeling of ease and comfort, which builds a trusting relationship between the provider team and the care recipient (Test group) (U)
Parents found that the dental team was usually able to facilitate the child's acceptance of the procedure (B+P group) (U)
<b>Category 2: Steps to get the dental intervention.</b>
Findings (n= 12) (12U)
Lack of interdisciplinary practices among paediatricians, physicians, general dentists, and paediatric dentists also influenced the child's dental care (U)
Parents were dissatisfied when child-/family centered care was absent (U)
Participants also concern expressed for reaching children most at need, with the suggestion that dentists should go into the schools and daycares in disadvantaged areas (U)
Parents trusted the school and several said that they participated partly because of this (Year 1) (U)
Dental care in kindergarten could alleviate the child's dental fear and anxiety and allowed them to adapt to dental examinations (U)
Some parents indicated that finances were limited and anything to offset the cost was appreciated (U)
Parents were not ready to spend money on teeth which get exfoliated (U)
Most parents were not fully aware of the details of the treatment or study (Year 1) (U)
There was agreement in one group that the program was not reaching those who needed help the most (U)
Interview participants reported infrequent visits and the limited time spent by service providers in community (Control group) (U)
Participants appreciated services that were targeted towards younger children and where comprehensive care was provided in community (Test group) (U)
Parents found difficulty in reconciling what appears to be some urgency required to have the child treated and yet having to wait a substantial length of time (U)

## 4.2 Children

<b>Synthesized finding 1: Children's perception (N= 12U)</b>
<b>Category 1: Positive aspects of treatment</b>
Findings (n= 5)
Some children mentioned that they liked having their teeth looked after or protected (FV arm, year 1)
(Looking forward to a treat) Identify motivators for the child; why treatment [and possible pain/discomfort] is worth it
Children were not concerned with the aesthetics of PMCs and were excited to show them to others (C+P group)
Fewer children in the low-deprivation schools commented that they felt more confident about being at the dentist now that they were older (one FS arm and one FV arm, year 3)
Children found it possible to have the dental treatment procedures and would be willing to undergo them again (C+P group) El-Yousfi
<b>Category 2: Children's negative perceptions</b>
Findings (n= 5)
An unpleasant (ugly) clinical aspect of the surgical wound and a strong smell during surgery were perceptions and complaints from some children and parents
Children reported their dislike for some specific dental procedures, namely local anaesthetic injections (C+P group)
Children dislike of specific procedures, such as removal of some carious tissue (B+P group)
Children disliked the PMC using the Hall Technique due to the pain or discomfort that resulted from the pressure applied when placing it or if it was the wrong size (B+P group)
Children reported their dislike for some specific dental procedures, namely the physical conventional placement of pre-formed metal crowns (C+P group)
<b>Category 3: Inclusion of the child in the intervention</b>
Findings (n= 2)
Children did not understand the tooth-numbering terminology the CDS hygienist used and were worried that there might be something wrong with their teeth (one FS arm and one FV arm, year 3)
Handling the unavoidable unknown (Information is crucial in order to reduce patients' anxiety levels)

## Appendix 5. ConQual Score

### 5.1 Studies with parents

<b>Systematic review title:</b> Children's and parents' perceptions of dental interventions: a qualitative systematic review <b>Population:</b> Parents or legal guardians of children who had accompanied or authorized their children to participate in dental interventions <b>Phenomena of interest:</b> Parents' perspective describing their own experiences and perceptions about a dental intervention <b>Context:</b> Dental care services performed in private and public clinics, in both urban and rural areas, educational settings (e.g., universities/dental schools or elementary schools), and community centers					
Synthesized finding	Type of research	Dependability	Credibility	ConQual score	Comments
Synthesized finding 1: Childcare expectations	Qualitative	High	Downgraded one level	Moderate	Dependability: The classification was not changed because all studies presented 4 to 5 yes answers.  Credibility: Downgraded one level due to a mix of unequivocal and equivocal findings.
Synthesized finding 2: Dental interventions	Qualitative	High	Downgraded one level	Moderate	Dependability: The classification was not changed because all studies presented 4 to 5 yes answers.  Credibility: Downgraded one level due to a mix of unequivocal and equivocal findings.
Synthesized finding 3: Service provision	Qualitative	High	Downgraded one level	Moderate	Dependability: The classification was not changed because all studies presented 4 to 5 yes answers.  Credibility: Downgraded one level due to a mix of unequivocal and equivocal findings.

## 5.2 Studies with children

**Systematic review title:** Children's and parents' perceptions of dental interventions: a qualitative systematic review

**Population:** Children who underwent dental interventions

**Phenomena of interest:** Children's perspective describing their own experiences and perceptions about a dental intervention

**Context:** Dental care services performed in private and public clinics, in both urban and rural areas, educational settings (e.g., universities/dental schools or elementary schools), and community centers

Synthesized finding	Type of research	Dependability	Credibility	ConQual score	Comments
Synthesized finding 1: Children's perception	Qualitative	High	High	High	Dependability: The classification was not changed because all studies presented 4 to 5 yes answers.  Credibility: All findings were found unequivocal within this review.

## **5 Considerações finais**

Estudos qualitativos são importantes para que as experiências e percepções dos pacientes sejam compreendidas de forma mais aprofundada. O presente estudo descreveu as expectativas de pacientes e seus pais/responsáveis legais que participaram de intervenções odontológicas ou que realizaram procedimentos odontológicos em diferentes contextos. Além disso, foi possível captar preocupações relacionadas aos resultados das intervenções odontológicas, tanto relacionadas ao efeito, durabilidade e aparência estética. Com base na avaliação metodológica dos estudos incluídos na revisão sistemática, foram identificadas lacunas a serem preenchidas por novos estudos dentro da temática.

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