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Qualitative study of children's dental experiences and ways to improve them

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Background

- Dental fear and anxiety (DFA) can result in distress, avoidance, and life-long negative perceptions about dental treatment.
- In children, DFA can result due to intrinsic factors (age/patient characteristics) and/or extrinsic factors (concerns about pain/fear of needles).
- Limited literature exists on children's perceptions of coping strategies to reduce DFA.
- A patient-centered framework called The CARD™ System (Comfort, Ask, Relax, Distract) has been shown to mitigate fear related to needles when receiving vaccinations.
- The CARD™ system has not been adapted for the dental setting.

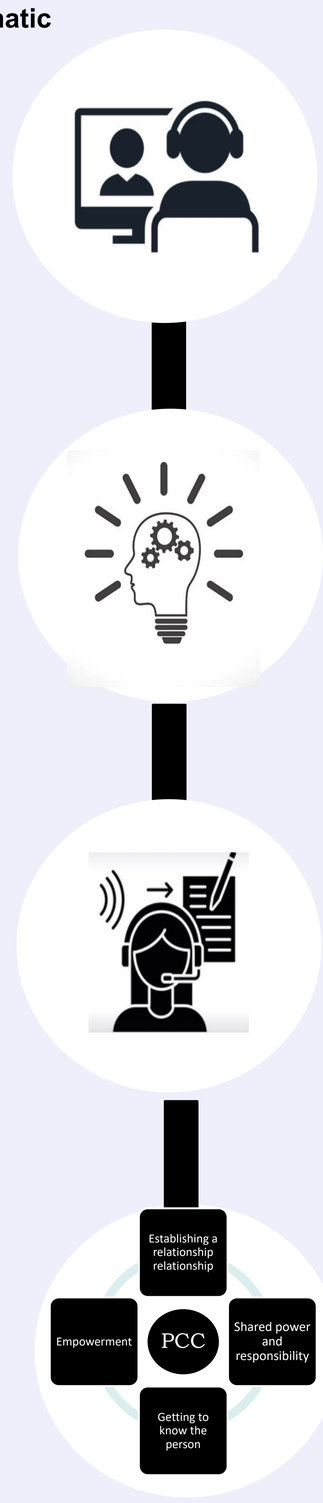
Research Objectives

- To investigate children's views of their experience at the dentist.
- To explore use of the CARD™ system adapted to a dental context and its perceived impact on children's dental experience.

Methods

- A qualitative descriptive study was conducted with a purposeful sample of 12 participants (7 males) aged 8-12.
- All participants were active patients receiving dental care at the Pediatric Dental Clinic, University of Toronto in the last 12 months.
- See **Figure 1** for study schematic. Children took part in one-on-one virtual interviews using a Zoom-platform.

Figure 1. Study Schematic



Results

Table 1. Identified Domains From PCC and Definitions

PCC DOMAIN	DEFINITION
Establishing a therapeutic relationship	Components that influence the establishment of mutual dependency and partnership between patient and provider
Shared power and responsibility	The active role of the person towards disease process and treatment planning
Getting to know the person	Understanding of patient, their needs, and values towards care. Family roles and need for involvement during care should also be recognized
Empowerment	Providing support and resources to allow the person to make medical related decisions and undergo necessary care to optimize their health

Table 2. Identified Domains From PCC and Example Quotes

PCC DOMAIN	SUBDOMAIN	EXAMPLE QUOTE
Establishing a therapeutic relationship	Dental team characteristics	"He was nice and put a smile on my face. He also said a lot of funny jokes. I like their personality. They always put a smile on my face. It felt like it made the procedure go by really fast." P5
	Demonstration of advocacy	"They make me feel safe because they're trying to help me. They're wasting their time for me. Dentists also make you feel safer." P3
	Knowledge and experience of dental team	"It made me feel comfortable because I felt that they knew what they were doing. I don't have to worry, I know I am in a safe place." P11
	Effective open communication	"They always listened to what you were saying, and they never ignored you." P11
Shared power and responsibility	Person autonomy/ advocacy	"I would like to probably pick the flavours (prophy paste/fluoride). It would make my mouth more comfortable since I cannot eat anything." P2
	Person-directed support	"I allow yourself to daydream about the way I'm feeling, and I won't notice anything." P10
Getting to know the person	Patient lived experience	"Getting the needle is terrible. It hurts a lot. It was the worst part of going to the dentist." P5
	Patient needs and resources	"It's scary just to look at a needle, so maybe distracting kids and not having them see the needle." P4
	Patient desire for family involvement	"I would not be scared when she (mom) is there. I feel comfortable, because there is someone from my family there. My mom explains to me what is going to happen." P8
Empowerment	The CARD™ framework	"CARD™ is really good. I got to choose my own favourite cards and I also got to choose when to use it and where I would play it." P10
	Coping strategies	"I want a favorite object or toy or squishy. That way I have something I like with me and I can hold on to something and be more comfortable." P2
	Breaks	"Before treatment I want a break so I can think about things, take a deep breath, so that you are ready if something bad is about to happen." P6
	Privacy	"It's privacy, because when you get scared you can let your feelings out." P3

Summary

Summary of Main Domains

1. Establishing a therapeutic relationship

- Display of positive attributes by professionals, and honest bi-directional communication were critical in the establishment of a positive patient-provider relationship. Failure to demonstrate these resulted in suboptimal clinic experiences for children.

2. Shared power and responsibility

- Participants preferred to have an active role during dental appointments, and engage in self-directed coping strategies (distraction, positive self-talk). Inability to self-advocate resulted in feeling of helplessness and enhanced DFA.

3. Getting to know the person

- Participants requested child-friendly settings and procedures devoid of pain. Need for disclosure of age-appropriate, honest information was also noted to be critical in mitigating DFA.

4. Empowerment

- Participants were highly receptive to incorporation of CARD™ framework during invasive procedures. This framework catalyzed ability for children to verbalize needs and select coping strategies in an individualized approach.

Strengths/limitations of the study

- The only study that has evaluated the acceptability of CARD in the dental setting.
- Data are subject to recall bias as interviews were not conducted in dental clinic.

Conclusion

- As recipients of care, children should be actively involved in treatment plan decision making and selection of coping strategies.
- Incorporation of the CARD™ framework can be effective in optimizing children's dental experiences.
- Future studies should evaluate the effectiveness of integrating the CARD™ framework within dental clinics.