Original Article

Parent perspectives on effective patient-provider communication during orthodontic consultations: a qualitative description study

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ABSTRACT

Objectives: To describe parent perspectives on effective patient-provider communication (PPC) during orthodontic consultations for their children.

Materials and Methods: Qualitative description guided the study design. Parents of children who recently underwent an orthodontic consultation and were fluent in English were purposefully selected. Interviews continued until data saturation was achieved. Data were analyzed using inductive, manifest thematic analysis.

Results: Fifteen parents, including 10 females and five males, participated. Four themes were inductively developed. Parents attributed several characteristics to effective PPC, including inclusivity, clarity, honesty, and comprehensiveness's. Specifically, they emphasized the importance of involving children and staff members in the consultation process, delivering honest and justifiable diagnoses and treatment plans, and adopting a holistic approach that considered all phases of the therapeutic process and various dimensions such as tasks, finances, and relationships between patients and care providers.

Conclusions: The findings underscore the significance of care provider-related factors in PPC. These findings also emphasize the need for a collaborative and inclusive approach between orthodontic patients and care providers to foster effective PPC. Subsequent researchers should delve into the perspectives of pediatric patients, particularly adolescents, and care providers regarding effective PPC. (*Angle Orthod*. 2025;95:445–451.)

KEY WORDS: Informed consent; Orthodontic consult; Parent; Provider

INTRODUCTION

Patient-provider communication (PPC) is critical in the orthodontic patient-provider relationship.[1] Effective PPC during an orthodontic consultation should bridge the information gap between patients and care providers, empowering patients to make well-informed treatment decisions that align with their interests, preferences, and values.[2,3] PPC incorporates task-focused and socioemotional communications, with the former providing information about the patient's health, dental condition, treatment, prognosis, and financial commitment and the latter including pleasantries, empathy, and reassurance.[4] Orthodontic consultations should ensure the provision of necessary task-focused information to patients and meet legal and ethical requirements for informed consent.[5]

Traditionally, authors of research on PPC in orthodontic consultations have primarily examined various information delivery formats (written, verbal, and digital, among others) and their effect on information recall.[6] However, information recall does not necessarily correlate with overall patient satisfaction or involvement in decision-making.[1] Other factors, including humor, patient ethnicity, access to support tools, clinician training in shared decision-making, and perceived patient-centeredness, have played a role in PPC during orthodontic consultations.[7–10] Despite their potential significance, many provider-related factors remain poorly understood, partially due to the predominant focus on information delivery and recall.

To date, little has been documented on PPC during orthodontic consultations, including parents' perspectives of this process. Authors of available research have suggested that parents tend to comprehend and recall

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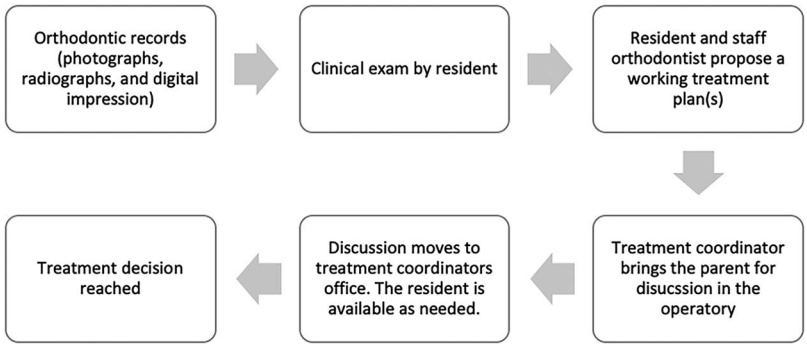

Figure 1. Consultation process.

information better than their children, wish for their children's involvement in the decision-making process, seek to understand diagnostic and treatment information, and prefer PPC over written communication for obtaining orthodontic information.[11–14] Additionally, authors of a recent qualitative study on orthodontic patients with hypodontia revealed that parents often delegate decision-making to the dental team and perceive themselves as advocates for their children's oral health.[8]

While parents are well positioned to evaluate the effectiveness of PPC during orthodontic consultations, authors of studies have yet to document their experiences and perspectives comprehensively. This is noteworthy, as perceived positive PPC experiences have been associated with enhanced overall patient satisfaction.[1] Qualitative research is particularly well-suited for comprehensively exploring individuals' perspectives within specific contexts and settings.

In this study, we aimed to describe parent perspectives on effective PPC during pediatric orthodontic consultations. Understanding parent perspectives can help inform the development of guidelines aimed at improving the PPC process and outcomes in orthodontic consultations.

MATERIALS AND METHODS

Study Design

Qualitative description guided the study design, a method well-suited to providing a straightforward account of participant perspectives of a human or social issue.[15,16] A constructivist paradigm influenced the study design, which assumes a relative ontology (reality is complex and socially constructed) and subjective epistemology (reality and consciousness are intertwined). Ethics approval was obtained from the Research Ethics Board at the University of Alberta (Pro00112134).

Study Setting

The study was conducted at the Graduate Orthodontics Clinic at the University of Alberta, Canada, from September 2021 to March 2022. The clinic offers a wide range of orthodontic services provided by orthodontic graduate students under the supervision of a licensed orthodontic specialist. The consultation appointment, a new patient's first appointment, consists of a clinical examination, standardized record-taking, a discussion with the orthodontic resident and staff, and a follow-up discussion with a treatment coordinator. Typically, patients come independently to have records taken by a dental assistant, including photos, radiographs, and digital impressions. Following record-taking, an orthodontic resident completes a clinical exam, and the resident and staff orthodontist propose a working treatment plan. The treatment coordinator then brings the parent in for a group discussion. Subsequently, the parent, pediatric patient, and treatment coordinator continue the conversation in the coordinator's office, where scheduling and financial details are worked out. Additional questions are addressed if necessary, and the orthodontist or the resident is available to help answer questions. This process is outlined in Figure 1.

Study Participants

Participants were purposefully sampled through the new patient intake process at the clinic. Inclusion criteria were being a parent with a dependent child who recently underwent an orthodontic consultation and having English fluency. Two treatment coordinators facilitated the recruitment process using a script. All participants were provided with an information letter detailing the study objectives, participant rights (including voluntary participation and withdrawal), their roles in the study, and the risks and benefits resulting from their involvement. Only two participants who were contacted declined to participate, citing lack of time and illness.

Data Collection

Verbal consent was obtained prior to data collection. A single researcher, trained in qualitative methods, collected the data through semistructured, individual interviews over the telephone within 2 weeks of the

consultation as early as was convenient for participants. The interview guide was developed in collaboration with an experienced qualitative research methodologist and informed by relevant literature on the study topic. Throughout the study, the interview guide, comprising main and follow-up open-ended questions, was iteratively adjusted to optimize data collection and ensure data saturation. No identifying information was deliberately collected from participants. Data collection continued until data saturation was achieved, meaning themes were sufficiently developed, and no new relevant aspects emerged from the data. Each interview lasted approximately 25–40 minutes.

Data Analysis

Interview recordings were transcribed verbatim by a professional transcriptionist who removed identifiers. Transcripts were checked for accuracy. Data were analyzed using inductive, manifest thematic analysis.[17] Transcripts were read and reread to ensure familiarity with the raw data. Notes on general meanings were recorded as memos. Transcripts were coded based on manifest content. A coding framework was not established preemptively, as data available on the subject were limited. Codes were assigned to relevant data segments based on the participants' explicit comments. Two analytical questions guided the coding process: Is this data segment relevant to answering the research question or achieving the study objective? What code or label best represents the meaning conveyed in this segment? Related codes were then grouped into potential themes and subthemes. As recommended in qualitative research, themes and subthemes were primarily developed based on their relevance to answering the research question rather than solely on their frequency. Relevance of each theme and subtheme was checked against the raw data to ensure accurate representation and establish thematic structure. As a result, some subthemes were merged, while others were reassigned to different themes. The resulting themes were refined, including their names and internal structure (the order of subthemes), to ensure that they conveyed the essential meaning that defined participant perspectives of the study phenomenon. Interviews were ongoing throughout this process, and the developing thematic structure was checked against new transcripts to ensure its relevance. Several strategies were employed to ensure methodological rigor, including choosing a method suited to answer the research question, conducting data collection and analysis iteratively, achieving data saturation at the theme and subtheme levels, and checking themes and subthemes against the raw dataset to ensure relevance.

RESULTS

Fifteen interviews were completed prior to achieving data saturation. Five males and 10 females participated. Four themes related to parent perceptions of effective PPC were inductively developed. These themes reflected key characteristics attributed to effective PPC during orthodontic consultations, including inclusivity, clarity, honesty, and comprehensiveness. Table 1 shows developed themes, subthemes, and representative quotes.

PPC Should Be Inclusive

Participants valued the involvement of orthodontists, staff members, parents, and their child patients in the consultation process. They expected orthodontists to be directly engaged, with staff members participating throughout the entire consultation process. Involving parents and children in major clinical decisions was highly recommended. Participants highlighted that all stakeholders had important and unique roles. Specifically, parents preferred orthodontists to deliver clinical information directly and staff members to provide financial and insurance information as well as address follow-up questions. Parents emphasized that treatment coordinators should effectively communicate the information provided by orthodontists and other staff members to families, especially pediatric patients.

PPC Should Be Clear

Parents expressed that the amount of information shared during consultations could be overwhelming, potentially compromising PPC. They emphasized the need for clear, straightforward information to enhance understanding and alleviate stress and confusion. They also valued the opportunity to ask questions to gain further information and improve understanding. They stressed the importance of not rushing decision-making processes or ending consultations prematurely. Some parents perceived rushed decision-making as coercive. Additionally, parents mentioned that dental jargon could be challenging to comprehend, suggesting using various informational aids such as pictures, radiographs, written materials, emails, tutorials, before-and-after case presentations, and improved Websites to enhance understanding of clinical information further.

PPC Should Be Truthful

Parents emphasized the importance of honesty and professionalism from care providers regarding diagnosing orthodontic conditions, treatment recommendations, and treatment necessity. They highly valued an accurate and understandable diagnosis. Similarly, they appreciated straightforward treatment recommendations,

Table 1. Thematic Map and Representative Quotes

Theme 1: PPC Should Be Inclusive
The doctor (n = 11), staff (n = 9), patient (n = 8), and parent (n = 11) should participate
• "This time I started with both. . . people, [the] doctor and the coordinator. . . that was a good thing. . ."—P8
Each participant has a unique role
• ". . . [as kids], sometimes they feel like they don't have a voice in these kind of situations. . . So I think it's important that the professionals actually speak to them. . . so that they can feel like they have a choice in the matter."—P11
Theme 2: PPC Should Be Understandable
Facilitate questions (n = 9)
• "I don't have. . . questions written down, but I have them kind of in my head, and it's really frustrating when you feel like you're rushed and don't get to ask the questions that you have, or. . . you don't get the full answer that you need."—P4
Allow time to process the information (n = 12)
• ". . . I like to be able to spend enough time with. . . the doctors—I don't like to be rushed out or anything like that. I like to be able to mull over the conversation and ask questions as they come up."—P6
Avoid jargon (n = 6)
• ". . . it wasn't littered with extreme dental terms; it was down to earth. . . the information was perfect."—P2
Use various information-delivery formats (n = 12)
• "That amount of information, they gave it to me with pictures that were worth 1,000 words. . . but what I really loved. . . were the images that were shown. . . the x-rays were also shown to me as well along with even just saying, 'This is happening; that is happening'. . ."—P3
Theme 3: PPC Should Be Truthful
Honesty in relation to condition (n = 8)
• "I really love the fact that. . . I was able to understand [my daughter's] situation, and. . . got the information I needed."—P3
Honesty in relation to treatment recommendation (n = 9)
• "It was no fuss; it was just very honest and straightforward and to the point, and that seemed right to me, and it resonated as being like a very true and honest perspective on what [my son] may need and how we would approach it."—P7
Honesty in relation to treatment necessity (n = 12)
• "I appreciated when [they] mentioned the surgery and just said. . . 'It's probably not necessary. Like if you want to do it, we can obviously do that'. . . kind of giving me [their] judgment call on whether this is actually necessary or not."—P12
Theme 4: PPC Should Be Holistic
Task-focused dialog (n = 15)
• "I guess that communication was lacking in that [the orthodontist] told me what [my child] needed or what was recommended but didn't really go into detail."—P9
Socioemotional dialog (n = 12)
• "You can still provide all the information while being friendly and chatty, like the [treatment coordinator] and the [orthodontist were] just very calm and just said what [they] needed to say. . . it wasn't uncomfortable or an awkward situation at all, just friendly and chatty. . . but still getting [their] point across."—P10
Concise information delivery (n = 9)
• ". . . I feel like you don't want to. . . give too much information because then, as a parent, you're like, 'Oh, okay, I think I only remember like half of what they were talking about because they gave me too much information'. . ."—P4
Occurring before, during, and after (n = 13)
• ". . . I really wanted to have. . . a document, so that I can reread that. . . at my own time because I might have missed [something] when [they were] explaining. . ."—P8

including a clear definition of the treatment offered (the what) and the rationale for the treatment (the why). Parents strongly believed recommended treatment should be necessary, designed to address an identified problem, and performed only when their child was ready.

PPC Should Be Holistic

Parents emphasized the importance of PPC being comprehensive, yet concise and task-focused, yet friendly. They valued receiving task-focused information such as treatment details and options, oral hygiene instructions, and financial details. Specifically, they appreciated details regarding treatment duration, appointment frequency, appliance functions, and expected discomfort. Financial information was particularly valued, although parents often commented on the perceived high cost. Generally, they appreciated task-focused information that was relevant and actionable while cautioning that excessive details could lead to confusion.

Parents expressed that consultations should encompass more than just task-focused information, advocating for a balance between task-focused and socioemotional dialogue. They appreciated and anticipated personalized socioemotional communication that respects, encourages, and supports patients and families. Parents also perceived PPC as an ongoing process beyond the consultation appointment. They pointed out that information

provided before the appointment could alleviate frustration and anxiety, while information provided afterward could serve as reference material to be reviewed at their own pace.

DISCUSSION

In this study, we have described parent perspectives regarding effective PPC during orthodontic consultations for their children. Parents characterized effective PPC as inclusive, clear, truthful, and holistic. This research represents the first attempt to comprehensively explore parent perspectives on this matter, offering insights that can guide interventions aimed at improving PPC in orthodontic and dental settings at large.

Participants emphasized the importance of involving orthodontists, staff, patients, and parents in PPC, each with a specific role. Orthodontists were expected to deliver diagnostic and treatment information directly, while staff members were expected to elaborate on this information and address financial matters. These expectations underscored the necessity for well-trained staff with effective communication skills whose actions are aligned with the orthodontist's approach. Parental involvement was reported to improve comprehension and alleviate anxiety among pediatric patients, which needs further examination. Parents' understanding of the information provided by orthodontists and staff was deemed crucial for making informed decisions on behalf of their children, given that children may not be able to comprehend this information fully.[11–13,18,19]

Providers should assess, rather than assume or underestimate, the preparedness of pediatric patients to ensure their proper involvement in decision-making.[20] Chronological age does not necessarily dictate their ability to give informed consent. Researchers have suggested that parents may perceive their children as equal partners in the consultation, appreciating their direct involvement in decision-making processes.[14] To meet this expectation, orthodontists should be equipped with the skills required to involve pediatric patients in clinical decisions and, more importantly, to keep them engaged during this process. Further research is warranted to examine whether orthodontists and their staff have the necessary skills to facilitate the engagement of pediatric patients.

The study findings suggested that employing various information aids, avoiding technical jargon, allowing time for information processing, addressing questions and concerns, and confirming understanding can enhance PPC during orthodontic consultations. Researchers have supported using various information-delivery formats to meet the communication needs of parents and pediatric patients.[6] Additionally, information aids designed to help patients understand clinical information have been shown to improve PPC.[12,18,19,21] Parent preference for explanations in plain language is aligned with previous studies, in which authors reported that the information provided by orthodontists may be challenging to understand by patients.[8,22] Avoiding technical jargon in orthodontic consultations is likely in the best interest of patients and providers. The feeling of being rushed or coerced in decision-making processes deserves further consideration, and it suggests that the type of information exchange during this process and its duration are equally crucial in orthodontic consultations. Some participants felt comfortable asking questions to orthodontists, while others preferred discussing their concerns with staff members. This may reflect the orthodontist's time constraints in clinical practice, which both parents and orthodontists have previously acknowledged.[8]

Parents expected clear, accurate, and honest communication regarding diagnosis and treatment planning, emphasizing transparency and truthfulness in PPC. The emphasis placed on performing only truly necessary treatment may be linked to perceptions of orthodontists as operators of for-profit businesses, potentially leading to overprescription of treatment.[23,24] Parents expressed reluctance to subject their children to uncomfortable, costly procedures without a clear, reasonable indication. They valued straightforward, honest, and justifiable explanations of their child's condition to alleviate apprehension toward treatment decisions. This finding partially explains why decision-making aids and supplementary written information may not be sufficient to reduce decisional conflict or apprehension.[25,26] These parental expectations extend beyond simply establishing rapport to encompass a trusted and fair PPC experience.

PPC was expected to be holistic, encompassing both task-focused and socioemotional communications, better to meet the needs of both parents and pediatric patients. While the importance of these communication types has yet to be discussed in dentistry compared with medicine, the study findings indicated that parents value concise, thorough, relevant, and focused clinical information delivered in a sensitive, caring, and responsive manner.[4] Balancing task-focused and socioemotional communications may pose challenges for some orthodontists primarily trained to provide accurate clinical information. Parents also anticipated PPC to extend beyond the consultation appointment, suggesting that providing information beforehand may alleviate anxiety and improve treatment experiences for parents and pediatric patients. Acknowledging that treatment information may be forgotten over time, as orthodontic treatment spans a considerable period, agreed with existing literature.[10,12,27,28]

This study had several limitations that need to be acknowledged. First, the applicability of the findings relies on the similarity between the context and population of the study and those of the intended application. Second, despite variability within the study sample, those who volunteered to participate may have differed from those who did not in certain respects. However, sampling in qualitative research aims to represent a study phenomenon rather than a specific population. Lastly, in the present study, we focused on parent perspectives of PPC during orthodontic consultations, given their significant role in decision-making processes for their children. Based on the study's findings, a potential future research project could involve assessing Knowledge, Attitude, and Practice (KAP) regarding PPC among orthodontists or orthodontic residents. For example, it could be assessed whether these care providers possess the necessary knowledge and attitude for involving patients in decision-making, ensuring understanding, engaging in socioemotional communication, and actually performing these behaviors (practice). Future researchers can also explore the perspectives of orthodontic patients and care providers using mixed-method designs to further describe and understand the complexity of PPC during orthodontic consultations.

CONCLUSIONS

- Parent perspectives of effective PPC highlight the importance of factors related to care providers in facilitating this interaction, many of which are modifiable and within the sphere of control of orthodontic care providers.
- The study findings also stress the importance of collaboration and inclusivity between orthodontic patients and care providers to enhance PPC outcomes.
- Future researchers should explore the perspectives of pediatric patients, especially adolescents, and care providers to gain deeper insights into effective PPC strategies.

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