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# Your right to choose: parents' preferences toward a pediatric dental center

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## Abstract

**Background** Timely dental care during childhood can effectively prevent many dental issues and their potential long-term complications.

**Aim** To identify factors associated with the selection of clinics providing dental care and services for children from parental perspective.

**Design method** A thematic qualitative study was conducted, involving parents of children aged 6–12 years who visited pediatric dentists in public/private dental centers in Isfahan city from December 2022 to July 2023. Twenty semi-structured face-to-face interviews were conducted in private rooms within the selected centers. A thematic analysis method was used to analyze interview transcripts.

**Results** Seven main theme and 20 sub-themes were identified. They included accessibility (geographical location, proximity to residential area, parking), familiarity with pediatric dental center (recommendations from other dentists, recommendations from other patients, previous visits), amenities (general amenities, visual amenities), appointment arrangements (center's working hours, waiting queue, appointment booking), treatment cost (tariffs of dental care and services, installment plans, contracts with insurance companies), quality of medical equipment (supervision over treatment, quality of dental materials, diagnostic equipment, adherence to hygiene protocols), and staff (administrative and treatment staff). Treatment cost (tariffs of dental care and services, installment plans, contracts with insurance companies).

**Conclusion** Parents consider various aspects of pediatric dental centers to select ones that best in line with their priorities and needs. Specifically, parents focus on both financial aspects of pediatric treatments—and non-financial considerations.

**Keywords** Pediatric dental care, Dental centers, Stated Preferences, Thematic analysis, Iran

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## Introduction

The oral health of children holds significant importance because it serves as a reflection of an individual's overall health status [1–3]. Oral diseases in children can lead to pain, discomfort, and reduced appetite. In severe cases of tooth decay, the ramifications extend to the quality of life, growth, sleep, mobility, and mental health of children [4]. Furthermore, dental caries in childhood can even have lasting effects on an individual's health well into adulthood [5]. Despite their high prevalence, many oral diseases are preventable. Therefore, timely dental care during childhood can prevent many oral diseases and their potential long-term consequences [6–9].

Parents play a crucial role in the growth and health of children, particularly in their early years [10–12]. Given that parental decisions and preferences influence choices related to access to and utilization of healthcare, mainly dental care for children, raising awareness of parental preferences becomes an initial step in delivering appropriate dental care to children.

Given that parental decisions and preferences influence choices related to health and children's access to health services, raising awareness of family preferences becomes an initial step in delivering appropriate dental care to children [13–15]. Parents, being integral to children's health, including oral health, underscore the significance of parental functioning and preferences in decisions concerning children's health and access to healthcare services [11]. Understanding the factors influencing the utilization of oral health care and identifying parental preferences for pediatric dental services are imperative for informing the healthcare system. This information is crucial for planning and developing effective policies aimed at enhancing dental healthcare services for children, improving the oral health of children, and ultimately increasing the satisfaction of both parents and dentists [11, 13, 15].

Health intervention options have been expanding in recent years, providing healthcare providers with a broader range of choices. Moreover, it has become increasingly evident that patients are more eager than in the past to be actively involved in treatment decisions. As a result, healthcare providers are encouraged to incorporate patient preferences into the decision-making process, particularly in dental care and treatment [16]. Existing literature confirms that respecting patients' preferences (here particularly parents' preferences) positively impacts satisfaction, adherence, and treatment outcome. In cases where clients' preferences are not explicitly expressed but implied, the stated preferences can be elicited [17, 18].

Qualitative methods, such as interviews, are often used to gather such preference. A common qualitative

approach involves conducting structured interviews with sample clients. During these interviews, clients explain how they make decisions when special healthcare services or treatments are needed. Studies conducted in Iran [19] and other countries [20–24] revealed that various factors play a role in parents' decisions on children's dental visits. However, these studies have predominantly utilized quantitative analysis methods. To the best of our knowledge, there exists no study in Iran that uses qualitative methods to identify factors related to the selection of dental care clinics. Given the lack of such information in the literature the objective of this study was to identify factors associated with the selection of clinics providing dental care and services for children from the perspective of parents whose children visit dental care centers in Isfahan.

## Materials and methods

### Study design

We conducted a descriptive qualitative study in Isfahan, a city located at the central part of Iran. Parents who visited public or private dental centers in Isfahan city for pediatric dental services between 2022 and 2023, and who had children aged 6–12 years at the time of the interview, were included in the study sample. Exclusion criteria included: 1) being an immigrant, 2) unable to answer the questions because of any mental or physical difficulties 3) unable to answer the questions because of language barriers, 4), and withholding consent to participate in the study.

Throughout the analysis, the authors assessed the feasibility, applicability, and comprehensiveness of the interview guide to enhance the transferability of the study findings. Additionally, to minimize interviewer biases, the researchers refrained from disclosing their personal values to the interviewees.

### Sampling and data collection

Three specific sites were chosen as interview venues: a public clinic, a private office, and a private clinic. Purposive sampling with maximum variation approach was employed in each site to assure recruiting a sample with diversity in terms of participants' age, education, marital status, and employment status.

An interview guide was developed based on reviewing existing literature, conducting three pilot interviews, and giving feedback from two authors, one of them was pediatric dentist and the other an expertise in qualitative study designs.

Two authors separately conducted the semi-structured face-to-face interviews in private rooms at the selected sites. Additionally, to minimize interviewer biases, the researchers refrained from disclosing their personal

values to the interviewees. Prior to the interview, the interviewers introduced themselves, outlined the study's objectives, and obtained a verbal informed consent from the participants. The interviews commenced with socio-demographic questions, inquiries about the dental well-being of their children, and the history of their visits to dental centers for pediatric dental care. These initial questions were followed by a general open-ended question asking the participants, "What would be the characteristics of an ideal pediatric dental center option based on your opinion?" To comprehensively extract personal narratives and delve into the topic, the researchers further questioned participants about the costs of pediatric dental care, the accessibility and location of dental centers providing pediatric services, the internal environment of these centers, interactions of dentists and clinic staff with children and parents, dental facilities and equipment, and the approach to booking dental visits. The interview guide can be found in the Appendix 1. All interviews were digitally recorded with patient permission, transcribed verbatim, and supplemented with field notes taken during the interviews. Data gathering continued until reaching saturation ensuring that no new information was necessary. In total, 20 interviews were conducted, including two with parents, fourteen with mothers, and four with fathers. The interviews lasted 10 min on average. The data collection and analysis took place from December 2022 to July 2023. We obtained the research ethical approval from research ethics committee

of Isfahan University of Medical Sciences, Isfahan, Iran (Ethical code: IR.MUI.RESEARCH.REC.1402.023).

### Data analysis

We applied a thematic analysis method to analyze the transcripts of the interviews. The initial process of data familiarization through review was conducted by all authors. Subsequently, all authors collectively analyzed the transcripts. The interview data were coded using MAXQDA Analytics Pro 2020 (VERBI GmbH Berlin) Release 20.0.8. In a collaborative meeting, any inconsistencies were thoroughly discussed and resolved by the authors. The result was compiled in a comprehensive list of elicited themes and sub-themes.

### Results

In this study, 20 interviews were conducted. In two interviews, both parents were involved. A high percentage (70%) of the participants in the interviews was mothers. Eight fathers and seven mothers had not completed a university education. The age range of the interviewees was between 27 and 50 years, with an average age of 37.8 years (Table 1).

After multiple comparisons between the identified sub-themes, 20 sub-themes were extracted. These sub-themes were summarized into seven main themes (Table 2). The following explanations are provided in order for each of these themes.

**Table 1** characteristics of participants

Participant ID	Family relationship	Age	Education
P1	Mother	36	diploma
P2	Father	42	Bachelor's degree
P3	Mother	43	Associate Degree
P4	Mother	32	diploma
P5	Father	41	Associate Degree
P6	Mother	33	Associate Degree
P7	Father	40	Master's degree
P8	Mother	34	Master's degree
P9	Mother	49	Associate Degree
P10	Mother	35	diploma
P11	Mother & Father	27 & 37	Elementary education
P12	Mother	29	diploma
P13	Mother & Father	30 & 33	Associate Degree, Master's degree
P14	Father	43	Elementary education
P15	Mother	50	Bachelor's degree
P16	Mother	32	Associate Degree
P17	Mother	38	Master's degree
P18	Mother	50	Master's degree
P19	Mother	40	Bachelor's degree

**Table 2** Themes, sub-themes and codes associated with parents' decision in choosing a pediatric dental center

Main theme	Sub-theme	Code
Accessibility of dental center	geographical location Proximity to residential area parking	
Familiarity with dental center	Recommendations from other dentists Recommendations from other patients Previous Visits	
Amenities	General amenities  visual amenities	Quietness & speculation cleanliness Kids-friendly environment entertainment
Appointment arrangements	Center's working hours Waiting queue  appointment booking	Appointment waiting time Waiting time within the clinic Online In present over the phone
Treatment cost	tariffs of dental care & services	
Quality of medical equipment	Supervision over treatment quality of dental materials Diagnostic equipment Adherence to hygiene protocols	
Staff	administrative staff Treatment staff	interaction with the child and parents Being the Pediatric dentist interaction with the child Doctor's skill and experience

### 1) Accessibility of dental center:

The geographical location of the dental clinic along with its proximity to the residential area, were among crucial components influencing the selection of a dental clinic.

A recurring theme among many interviewees was the consideration of geographical location when selecting a dental clinic. For them, the key aspect was that the dental clinic be situated in a part of the city characterized by minimal traffic congestion. For example, one interviewee stated, "*The route is important for us. {This center} is very good and accessible, and it's not in a crowded or complicated place.*" (Interviewee #16).

The majority of interviewees preferred the clinic to be as close as possible to their residential area. Sometimes, an experienced pediatric dentist might not be available in the neighborhood, requiring parents to travel longer distances. For instance, one interviewee stated, "*{this center} is close to our home, and within this range, no one else does children's dental work.*" (Interviewee #9).

Some parents mentioned that dental procedures can be time-consuming, and they preferred not to face parking issues when waiting at the clinic. For example, one interviewee mentioned, "*Our house is nearby, and we didn't have problems with the long route, traffic, and parking.*" (Interviewee #17) Some parents expressed concerns about the lack of suitable parking. In this regard, one interviewee said, "*Due to the lack of proper parking, we visited the dental care clinic by taxi.*" (Interviewee #14).

### 2) Familiarity with dental center:

The results obtained from data analysis underscore the pivotal role of parents' familiarity with the dental clinic in the decision-making process for effective initiation and continuation of treatment.

Some parents expressed a preference for consulting a familiar dentist or pediatrician when choosing a dental clinic for children. For example, an interviewee mentioned:

*"The doctor we visited for ourselves said they don't treat children and recommended this place." (Interviewee #4).*

Many parents expressed the practice of consulting with friends and acquaintances when selecting a pediatric dental clinic. They sought information about their peers' experiences with previous dental treatments for children as a valuable source of guidance in their decision-making process. Interviewees provided examples:

*"We live in the county, and we had acquaintances here who got an appointment for us and said it's a good clinic." (Interviewee #10).*

*"We heard about the quality of work and the doctor's behavior from our close ones." (Interviewee #13).*

A smaller group of parents stated that they were satisfied with the services they had received for both themselves and their children in a particular clinic based on past experiences. Consequently, they returned to the same clinic for their children's dental care. In this regard, interviewees mentioned:

*"We've been coming here for dental work for several years, and since we found out they provide dental services for children too, we brought our child, and of course, we were satisfied with the work they did for us." (Interviewee #8).*

*"About seven or eight months ago, I came here, saw the work and the behavior of the doctors and staff here, they were very good, and I was satisfied, so I created a file here, and now I came here for my child's treatments." (Interviewee #16).*

### 3) Amenities:

Parents in this study emphasized the importance of clinic facilities and conditions, including general clinic amenities and visual facilities for children.

Many parents preferred appointment scheduling in a manner that ensured a quiet and secluded waiting room environment. For example, interviewees stated:

*"It's very crowded. Other patients are also present. We had to keep the child outside the clinic during this time, and it's not suitable when there are several children present." (Interviewee #11).*

However, some parents expressed that the waiting room provides an opportunity for conversation with other parents, gaining insights into their experiences with pediatric dental treatments.

*"I prefer other parents to be present so I can know their opinion about the doctor, but it shouldn't be too crowded so the doctor can work more calmly on my child's teeth." (Interviewee #12).*

Cleanliness of the dental center were crucial for parents. One interviewee mentioned:

*"In terms of cleanliness and elegance, because dentistry is a profession that deals a lot with infections and microbes; therefore, that part should be clean, and the tools should be sterile." (Interviewee #2).*

A significant number of parents emphasized the importance of the visual environment within the dental clinic. They stressed that the design and coloring of the center should be child-friendly. Additionally, they suggested the inclusion of entertainments such as toys and balls in the waiting room to create a welcoming and engaging atmosphere for children. For example, interviewees suggested:

*"It should be more child-friendly. Hang toys in the waiting room and the doctor's room." (Interviewee #12).*

*"I think it would be good if there were games, a ball pit, and things to keep the kids entertained here." (Interviewee #1).*

### 4) Appointment arrangements:

This main theme included sub-themes related to center's working hours, waiting time, and appointment scheduling procedures.

Some parents raised concerns about the operating hours of specific pediatric dental clinics. For instance, some clinics, including the dental clinic affiliated with the dental school, exclusively offered appointments in the morning. Other centers had limited hours of operation in the afternoon. Parents expressed that they preferred selecting clinics with hours that accommodated the schedules of both parents and children. For instance, interviewees explained:

*"It's great that the reception is available on most days of the week." (Interviewee #17).*

*"My husband works, and we can't make it in the morning. It would be much better if they offered appointments in the afternoon." (Interviewee #18).*

Parents underscored the significance of both the waiting time for appointments and the waiting queue within the clinic. Parents, particularly when dealing with a

child's toothache, expressed a reluctance to endure extended waiting periods.

*"A few months ago, we made an appointment over the phone, came in for a checkup visit, and then it took 4, 5 months for them to call us for treatment." (Interviewee #1).*

*"Appointments are infrequent and quite bad. I want to come, but I can't. Because I've called several times, and each time either the slots were full, or on the website, it was full. I don't know when it will be available." (Interviewee #20).*

Parents also expressed concerns about a lengthy waiting queue within the clinic. Some believed that an extended wait inside the clinic could lead to fatigue in the child, potentially resulting in reduced cooperation with both parents and the dentist during the dental appointment.

Dental clinics employ various methods for appointment booking, including in-person, telephone, and online options. Most parents, especially those from distant areas, consider the convenience of obtaining appointments as crucial when selecting a dental clinic. One interviewee explained:

*"Here, appointment scheduling has been both online and by phone, and both were challenging. We couldn't get an online appointment until we made a difficult phone call. In the end, we opted for in-person appointment scheduling, and even that had some delays in getting appointments for a few days later." (Interviewee #2).*

## 5) Treatment cost

A considerable number of parents, particularly those with lower income levels, factored in the cost and payment methods when selecting a dental clinic. The fees associated with pediatric dental services, the availability of installment payment options, and whether the dental clinic accepted insurance were critical considerations for parents.

Tariffs vary significantly among different dental clinics. A high proportion of those who visited university-affiliated clinics cited low tariffs as a significant reason for choosing these clinics. For example, interviewees expressed:

*"Because my husband is a laborer, and we don't have insurance, these matters are important to us." (Interview #10).*

Conversely, some visitors to private clinics placed less importance on tariff levels:

*"At least, if costs are higher at a private office, the services and comfort for the child are greater." (Interview #16).*

Many interviewed parents, regardless of whether they attended university-affiliated or private clinics, advocated for the availability of installment plans due to the high costs associated with dental services. Those with children requiring multiple treatments particularly emphasized the importance of this payment option. The interviewees stated:

*"In this clinic, the fact that they allow you to pay the costs in installments is excellent." (Interview #4).*

*"It depends on the cost; if it becomes too much, we pay in installments." (Interview #3).*

Some parents were however unaware of installment conditions.

Due to the high costs of dental treatments, families find it important that dental clinics have agreements with insurance companies. However, parents were concerned that most insurance plans do not cover a significant portion of pediatric dental services. One parent explained:

*"Since we have supplementary social security insurance, we haven't inquired about installment options." (Interview #17).*

## 6) Quality of medical equipment

As expected, parents placed significant emphasis on the quality of services when selecting a pediatric dental clinic. Their preference leaned towards clinics that demonstrated ample supervision over treatment, maintained suitable quality standards for consumables and medical diagnostic equipment, and strictly adhered to health protocols.

Some parents mentioned that in centers such as university clinics where dental services are provided by dental students, experienced professors and specialist dentists should oversee their work. In case of need for assistance and guidance, necessary actions should be taken. For example, one interviewee stated:

*"Alongside students, professors should be present. In a previous instance, for one of my child's teeth, the student kept contacting their professor and asking questions." (Interview #1).*

The majority of parents expressed that the quality of dental materials was important to them, even if they lacked detailed knowledge on the subject. Their general belief was that the success and longevity of treatment served as indicators of suitable quality in dental materials. For example, one interviewee expressed,

*"I don't have knowledge about materials and equipment, but my child had two treated teeth, and there were no issues, no broken veneers, and no pain."* (Interview #15).

A few parents talked about the quality of dental equipment. They suggested dental clinics require vital equipment mainly medical one. For example:

*"I feel like the devices have become very old. I think they've been using them for several years. Don't they have anything to replace them? For instance, these lights seem old now."* (Interview #6).

The possibility of transmitting various diseases through dental instruments exists. Parents, especially after the COVID-19 pandemic, were concerned about the transmission of COVID-19 and other illnesses during dental services for their children. For example, the interviewees stated:

*"I saw four people above my son. Two had masks, and two didn't. I'm not very strict about this, but dental work gets very close to the person. They should all wear masks for sure."* (Interview #3).

## 7) Staff

A significant number of parents expressed that one of the crucial factors influencing their choice of a dental clinic is the personnel, including the treatment and administrative staff.

Parents assert that the engagement of administrative staff with both children and parents is of great importance. The reception staff, being the initial point of contact for parents and children, wields considerable influence in establishing a climate of security and serenity for visitors. For example, interviewees shared positive experiences:

*"The receptionists were very kind and friendly. They were patient and had good behavior."* (Interview #16).

*"They guide us; tell us what to do before and after the procedure for the child, schedule the next appointment, and advise on what to bring for the next session."* (Interview #4).

Nearly all parents emphasized that one of the most crucial considerations in choosing a pediatric dental clinic is the characteristics of the dental staff providing care and services to children. Most parents preferred seeking care and dental services for their children from pediatric dentistry specialists. For example, two interviewees mentioned:

*"I prefer them to be specialists. If my child's treatment is not an emergency, I schedule a day when the specialist is present."* (Interview #12).

Parent also consistently highlighted the significance of the interaction between the dentist and their child. They emphasized the importance of the dentist approaching their child with calmness, respect, and an understanding of both the parents' concerns and the child's fears and anxieties. For example, an interviewee mentioned:

*"Due to my child's lack of cooperation, other clinics wouldn't accept her. But in this clinic, due to the good manners of the dentist, the treatment was performed well for our child."* (Interview #11). Some parents believed that if the dentist could establish a friendly relationship with the child, the child's cooperation during the treatment process would increase.

*"To be honest, our son wouldn't allow them to give him anesthesia injections, but both students and professors dealt with him calmly and cooperatively."* (Interview #2).

*"Every time my son goes to him, he puts his drawings on the wall and then sends a voice message asking how my son is. The fact that he takes the time and listens to my voice message, plays my child's voice message, and values my child's drawing on the wall is very precious to me."* (Interview #7).

Some parents preferred seeking dental care and services for children from female dentists because they believe that women could interact better with children. For instance:

*"I prefer a female dentist because females are more caring."* (Interview #11).

*"It's better if it's a woman because children have a better relationship with women. When scheduling an appointment, I ask about the gender of the dentist."* (Interview #8).

However, some parents were not particular about the gender of the dentist. For example:



*"Their gender is not important to us; what matters is that they do their job correctly." (Interview #1).*

Some parents preferred the dentist to explain the treatment process transparently to them:

*"The dentist's responsiveness and appropriate guidance to parents about the treatments are crucial. It is very important that explanations be given before treatment begins." (Interview #19).*

*"Initially, an explanation was given about the problem, and then necessary guidance is provided at the end." (Interview #8).*

Some parents preferred to remain with the child in the dental operatory room during treatment. Some children are highly dependent on their parents and become anxious and fearful in their absence. Some parents also wanted to be present to support their child. For example:

*"If my child wants me to be {in the dental operatory room}, they should allow me to be present." (Interview #13).*

*"The first time, I trusted and went outside. My daughter said their behavior towards her was not good after you left {the dental operatory room}." (Interview #9).*

However, some parents believed that if the parents' assurance and the child's comfort were ensured, there is no need for parents to be present in the dental operatory room.

*"If the conditions during treatment are such that the child can be alone and independent inside {the dental operatory room}, and there is no need for the presence of parents, it is very good." (Interview #12).*

Parents also placed great importance on the experience and skills of the dentist. For example:

*"They said experienced dentists are here, so that's why we came here." (Interview #3).*

*"I think the dentist's experience and how he interacts with my child are important." (Interview #14).*

## Discussion

In this study, we identified seven main themes and 20 sub-themes that influence parents' decisions when selecting a pediatric dental center, highlighting both therapeutic and non-therapeutic attributes. Our findings suggest that parents' decision-making is driven by a complex

interaction of these factors, shaped by both practical considerations and personal preferences.

One of the most significant non-therapeutic factors identified was access to healthcare centers. Consistent with previous research [21, 22, 25], ease of access emerged as a key determinant in parents' choice of dental services. However, unlike studies focused on adults [21, 22, 25], our findings suggest that for parents, accessibility is not solely about physical proximity. Parents in our sample emphasized the importance of convenient access during non-traditional hours, reflecting the unique scheduling needs of families with children. This highlights a broader pattern where the functionality of healthcare services must adapt to the routines and constraints of family life, especially in urban settings like Isfahan. The notion of "accessibility" for this population, therefore, extends beyond geographical considerations to include temporal flexibility, a concept that can be theorized as part of the broader healthcare accessibility framework.

Another critical non-therapeutic factor was familiarity with the healthcare center. This is not merely about recognition but speaks to a deeper concept of trust and social capital. When parents prefer centers that have been recommended by trusted individuals, they are engaging in a form of social validation, where decisions are heavily influenced by community networks and personal relationships. This finding aligns with theories of social influence and decision-making under uncertainty [26, 27], where individuals rely on the experiences of others to reduce perceived risk. It is particularly relevant in the context of pediatric care, where the perceived vulnerability of the child intensifies the need for trusted recommendations. Thus, familiarity can be conceptualized as a proxy for trust, which plays a central role in parental decision-making.

The general facilities and visual amenities of the dental centers were also highly valued by parents. This aligns with research on healthcare environments [20, 28], which suggests that the physical space in which care is delivered can influence patient perceptions and outcomes. For parents, particularly those seeking pediatric care, the design of the dental center becomes part of the therapeutic process itself, contributing to a calming environment for children and reducing the anxiety that may accompany dental visits.

Appointment conditions further illustrate the multifaceted nature of decision-making. While practical in nature, scheduling flexibility speaks to a broader concept of healthcare accessibility and responsiveness. Parents' preference for diverse scheduling methods and shorter waiting times reflects an increasing demand



for healthcare systems to adapt to the fast-paced, often unpredictable, nature of modern family life. This suggests that parents view healthcare not just as a service to be accessed but as one that must fit seamlessly into their existing routines. From a theoretical standpoint, this finding underscores the shift in healthcare toward patient-centered care models, where service delivery is tailored to the needs and lifestyles of patients rather than requiring patients to adapt to the system [29, 30].

Also the cost of dental services emerged as a major concern for parents. This is consistent with economic theories of healthcare decision-making [31], which posit that cost considerations are a primary factor when choosing between healthcare options, especially in contexts where services are not fully covered by insurance or public funding. For many families in Iran, where dental care is classified as an essential but costly service, the decision to seek pediatric dental care becomes a balancing act between financial constraints and healthcare needs [19]. This mirrors findings from studies in other contexts, such as Germany and Romania, where out-of-pocket costs heavily influence healthcare utilization [1, 19, 25]. The financial dimension of healthcare decision-making can be seen as part of a larger framework of healthcare equity, where socioeconomic status directly impacts access to and quality of care.

A critical therapeutic attribute identified for choosing pediatric dental centers revolves around the quality of dental services, with particular emphasis on consumables, dental equipment, and hygiene standards during procedures. While previous research has recognized the importance of factors such as the use of advanced dental equipment and stringent sterilization protocols in patient decision-making [25], there remains limited discussion on how the quality of dental equipment specifically influences parental choices. This could be attributed to the technical nature of this factor, as well as a general lack of awareness among patients and parents regarding the specifics of dental equipment quality. However, our findings suggest that for the greater part of the parents, the perceived quality of dental equipment serves as a proxy for overall service reliability and safety, which are key concerns when it comes to the well-being of their children.

In addition to the quality of dental equipment, various therapeutic and non-therapeutic attributes of both the dentists and administrative staff were found to significantly influence parents' decisions. Beyond clinical expertise, the dentist's ability to build rapport with children and communicate effectively with parents was consistently highlighted as essential for ensuring a child's

comfort and reducing fear during dental visits. This supports the broader theoretical concept of patient-centered care, where the interactional aspects of healthcare are as important as the technical proficiency of the provider. In pediatric care, where children may experience heightened anxiety, the dentist's interpersonal skills become a central component of care delivery; ultimately influencing treatment outcomes [25].

The importance of the dentist's gender also emerged as a notable factor, with around 15% of parents in our study expressing a preference for female dentists, citing their better interaction with children. This finding is consistent with existing literature, such as Eluri et al. (2015), who found that Indian parents and children often consider the gender of the dentist important, particularly for pediatric care [20]. The preference for female dentists may be theoretically grounded in gender-based social roles, where caregiving and nurturing are often culturally associated with women. This highlights the role of cultural expectations in shaping healthcare preferences and suggests that gender concordance between patient and provider could be an important consideration in pediatric dental care, especially in contexts where trust and comfort are paramount.

The interaction between parents, children, and both the dental and administrative staff was another key non-therapeutic factor influencing parental decision-making. Managing children's behavior during dental visits is notoriously challenging, particularly when dealing with young children or those with mental or physical challenges [32, 33]. The ability of both the dentist and the administrative staff to engage positively with children not only impacts the quality of the treatment but also significantly affects parental satisfaction. The emotional labor required in these interactions underscores the importance of "soft skills" in healthcare settings, particularly in pediatric dentistry, where cooperative behavior is often difficult to elicit from young patients. Parents, therefore, place high value on the dentist's experience in managing child behavior, seeing this as a crucial factor to the success of the dental encounter.

Parents, therefore, place high value on the dentist's experience in managing child behavior, seeing this as a crucial factor to the success of dental encounters.

The findings from other studies, such as Tansu et al. (2019), which evaluated preferences for choosing dental centers in Romania, reinforce the importance of dentist reputation, professionalism, and personal recommendations over other factors like online advertising [25]. In our study, the reputation of the dentist and word-of-mouth recommendations were similarly central to the

decision-making process, especially in economically deprived areas, where access to information and trust in the healthcare system may be more limited. This suggests that for parents from lower socioeconomic backgrounds, the perceived reputation of the dentist can serve as a substitute for more direct assessments of service quality, with peer recommendations functioning as a key source of information.

The role of cost in decision-making, particularly for essential but expensive services like dental care, cannot be overlooked. Many parents in our study highlighted the high costs of pediatric dental services as a critical factor in their choice of dental center. This aligns with economic theories of healthcare decision-making, which suggest that cost considerations are often paramount, particularly in contexts where services are not fully subsidized by public health systems. The findings of Moshkelgosha et al. (2014) support this, demonstrating that in economically deprived areas, unemployed individuals and those with lower education levels place a higher emphasis on the cost of services [19]. Our study similarly found that if dental centers can provide high-quality services at affordable costs, this would enhance access and utilization, particularly among economically disadvantaged populations.

Our findings suggest the selection of clinics providing dental care and services for children is influenced by a range of factors, including the quality of care, interpersonal interactions, logistical convenience, and cost. These findings suggest that parents are not only rational decision-makers but also emotional and socially-influenced actors, whose choices are shaped by both practical concerns and broader socio-cultural and economic contexts. From a theoretical perspective, understanding parental decision-making requires an integrative approach that considers both individual-level preferences and the structural factors that shape healthcare access and utilization. Dental policy makers and care providers should recognize the importance of aligning pediatric dental cares and services with the preferences of parents as this will not only enhances satisfaction but also improves the overall quality of care delivered.

The current study is subject to several limitations. Our sample was restricted to three pediatric dental centers in Isfahan, while reputable, may not reflect the experiences of all parents at the local or national levels. Further qualitative and quantitative studies are needed to validate these findings and to explore whether similar decision-making patterns are observed in different cultural or geographic contexts.

## Conclusion

Parents seem to consider a combination of various factors when selecting pediatric dental centers, aiming to choose those that best meet their priorities and needs. Specifically, parents focus on both therapeutic and non-therapeutic factors (such as financial aspects—primarily the cost of pediatric treatments—and non-financial considerations, such as the accessibility of the dental centers, familiarity with the facility, available amenities, appointment scheduling, the quality of medical equipment, and the staff professionalism). It's important for dental policy makers and care providers to recognize that aligning pediatric dental cares and services with the preferences of both parents and children not only enhances satisfaction but also improves the overall quality of delivered care.

## Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s12903-025-05707-x>.

Supplementary Material 1.

## Acknowledgements

We would like to thank all participants for their contributions to this study.

## Authors' contributions

"M.M. and M.J. conceived the ideas and designed the study; R.G. and E.A. collected data, and conducted the analyses. M.M. and E.A. wrote the manuscript. K.P. helped interpretation of data, and provided critical edits to this manuscript. All authors have read and approved the final manuscript."

## Funding

None.

## Data availability

"As this is a qualitative study; the voices of the participants and the transcribed data cannot be shared with third parties due to ethical considerations."

## Declarations

### Ethics approval and consent to participate

All methods of the study were carried out in accordance with relevant guidelines and regulations of the Declaration of Helsinki. Research ethical approval was given by research ethics committee of Isfahan University of Medical Sciences, Isfahan, Iran (Ethical code: IR.MUI.RESEARCH.REC.1402.023). Prior to the interview, the interviewers introduced themselves, outlined the study's objectives, and obtained verbal informed consent from the participants. And, verbal consent procedure was approved by the ethics committee.

### Consent for publication

Not applicable.

### Competing interests

The authors declare no competing interests.

Received: 4 June 2024 Accepted: 20 February 2025  
Published online: 15 March 2025

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