

# Patient-dentist communication and its impact on dental services utilisation as perceived by patients in Libya

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**Objectives:** To identify the factors influencing communication between patients and dentists in Libya and their effects on patient satisfaction and trust. We explored the impact of these interactions on the subsequent utilisation of dental health services from the patient's perspective. **Design:** Qualitative descriptive study in a purposive sample of patients from oral health centres in Janzour city in Libya who were over eighteen years old. Sixteen semi-structured interviews (30-90 minutes) were conducted online. **Results:** Trust was the prime concern among patients. Other factors also positively impacting communication and patient satisfaction included information interaction, active participation, moral support, explanation about processes and the dentists' comprehension of how a patient feels. The online interviews revealed four key thematic areas that reflected the patient-dentist communication phases: 1) Welcoming and establishing a good interpersonal rapport phase; 2) the Information-sharing phase; 3) Treatment decision-making phase, and 4) Satisfaction self-evaluation phase. **Conclusion:** These data emphasise the significance of soft skills, particularly effective communication, in the context of dental practice. The findings underscore the importance of personal values and interpersonal skills among dental professionals, as these factors play a pivotal role in shaping the success of dental healthcare provision.

**Keywords:** Dentists, Communication, Satisfaction, Patients, Relationship, Utilisation

## Introduction

Effective communication between patients and dentists consistently benefits dental care. Such communication improves treatment efficacy, enables precise condition diagnosis, boosts patient satisfaction, and reduces complaints or litigation (Waylen, 2017; Yuan *et al.*, 2020). Dentists must listen to patients, provide clear explanations of treatment plans and establish trust (Cserző *et al.*, 2022). This includes facilitating informed choices, educating and motivating patients, and offering emotional support (Song *et al.*, 2020; Yong *et al.*, 2021). Patient satisfaction depends on a dentist's communication skills and positive demeanour (Yong *et al.*, 2021). Conversely, poor communication can lead to patient grievances and stress among dentists (Alvenfors *et al.*, 2022). Therefore, proficient dentists excel in bidirectional communication, discerning behavioural cues from verbal and non-verbal expressions (Smith, 2019).

Historically, patients had minimal involvement in treatment decisions due to limited communication with dentists (Röing and Holmström, 2014). Recent studies by Huang *et al.* (2022) and Sin *et al.* (2021) indicate a shift, with patients now seeking active participation, expecting information for informed choices and more opportunities to discuss concerns (Smith, 2019).

Moreover, dentists should address patients' diverse concerns, considering psycho-social, functional, and aesthetic aspects of oral health. Effective patient-dentist interactions require cultural sensitivity and essential virtues such as gentleness, affability, attentiveness, and empathy (Song *et al.*, 2020; Taibah, 2018).

Scholarly discourse explores communication and treatment decision models reflecting the evolving patient-healthcare professional relationship. The paternalistic model positions healthcare providers as exclusive decision-makers (Charles *et al.*, 1999; Emanuel and Emanuel, 1992). In contrast, the professional-as-agent model has professionals guide treatment from the patient's perspective (Evans and Brown, 1984). The informed model empowers patients with decision-making authority, with professionals providing information on treatment options (Charles *et al.*, 1999; Emanuel and Emanuel, 1992). The shared decision-making model emphasises collaborative choices, aligning with contemporary patient expectations (Kalkwarf, 1997).

Dentistry is evolving towards shared decision-making, recognising healthcare providers' role in enhancing patient-provider interactions and health outcomes (Alrawiai *et al.*, 2021; Lee *et al.*, 2018). A recent study assessed an interactive communication skills training curriculum for dental students, emphasising critical self-evaluation for better preparedness in future professional practice (Alvarez and Schultz, 2018). However, as patients become discerning consumers, heightened expectations may lead to dissatisfaction if treatment doesn't meet their anticipations (Henríquez-Tejo and Cartes-Velásquez, 2016).

Limited research exists on patient-dentist communication in Libya and its impact on patient satisfaction and future dental service utilisation. This study aims to identify factors influencing communication between patients and dentists, exploring their effects on satisfaction, trust, and subsequent utilisation of dental services from the patient's perspective.

## Method

This qualitative study used semi-structured interviews in Janzour, Libya, selected for its diverse population of approximately 199,338 inhabitants. Participants from various socio-economic backgrounds, educational levels, and dental histories were recruited through posters in public and private dental clinics. Sixteen participants were purposefully selected based on age (18 or older), residency in Libya for over five years, experience with oral health and a history of seeking dental care.

Interested individuals meeting the criteria contacted the researcher and provided consent for online interviews on platforms like Zoom and Skype, with the option for follow-up sessions. Data collection involved inductive interviewing and ethnographic observation, guided by a semi-structured interview guide aligned with study objectives. Interviews in Arabic were later transcribed and translated into English, ensuring confidentiality. Ethical approval was obtained (Project Ref: 2020-8775-14926). The primary researcher used NVivo software for data analysis, focusing on participants' perceptions of their relationship with dental professionals. Thematic analysis identified recurring themes, ensuring rigor and trustworthiness through principles like credibility, transferability, dependability, and confirmability. Data saturation indicated reliable results, capturing diverse perspectives on the research topic.

## Results

The study involved interviews with sixteen adults, of whom ten (62.5%) were female. The age of the participants varied from 19 to 45 years. The participants had different levels of education and income, contributing to a varied sample (Table 1).

Overall the results indicated that effective communication and patient engagement by dentists built trust and enhanced treatment satisfaction. This, in turn, led to positive treatment outcomes and increased the likelihood of patients seeking dental services in the future. Patients described three interaction phases with dentists, followed by a self-evaluation phase, significantly influencing their future use of dental services. The phases and sub-themes are summarised in Table 2 and detailed in the text that follows.

**Table 1.** Demographics of the participants.

<i>Gender</i>	Male	6
	Female	10
<i>Age</i>	19-25	1
	26-35	8
	36-45	7
<i>Education level</i>	Primary	0
	Secondary	1
	University degree	8
	Higher degree	7
<i>Income level (LYD/ Monthly)</i>	Low (< 1000)	0
	Medium (1000-3000)	14
	High (>3000)	2
<i>Clinic attended.</i>	Public only	0
	Private only	13
	Both	3
<i>Dental Insurance</i>	Yes	2
	No	14

LYD = Libyan Dinar

**Table 2.** Emerging Themes and Sub-Themes from Study Findings.

<i>Phase</i>	<i>Sub-themes</i>
Welcoming and establishing a good interpersonal rapport	Satisfactory dentist-patient relationship Support availability
Information-sharing	Trusting the dentist Inter-collaborative compromise
Treatment decision-making	Knowledge and power asymmetry Patient-centred decision making
Satisfaction self-evaluation	Positive experience Negative experience

### ***Theme One: Welcoming and establishing a good interpersonal rapport phase.***

#### *Satisfactory dentist-patient relationship*

Effective communication was regarded as crucial in building a satisfying patient-dentist relationship. Participants emphasised that a satisfying relationship should be devoid of anxiety and pointed out that without such an anxiety-free relationship, neither satisfaction nor cooperation and compliance with treatment plans could be achieved.

*“In my opinion, being content with a dentist can help in managing stress, which, in turn, promotes satisfaction. This mutual facilitation leads to greater compliance”* (Interview 6)

Patients tended to feel more at ease with dentists who invest in building this relationship. In such cases, there was indirect reinforcement of positive dental attitudes, which, in turn, motivated patients to seek future dental services.

*“Yes, I think the dentist’s behaviour, such as their friendly demeanour, their ability to ask encouraging questions, and their empathy, strongly correlates with satisfaction. This, undoubtedly, encourages me to return to them for future visits”* (Interview 14)

#### *The availability of support*

Overall, the participants exhibited a profound awareness of the dentist’s support and attitude, recognising their significant role in fostering positive experiences that, in turn, motivated them to embrace good oral health behaviours and enhance their utilisation of dental services.

*“Yes, definitely the relationship between the dentist and the patient is very important as the patient must be at ease with the dentist”* (Interview 2)

The role of the dentist extended beyond formal treatment and encompassed moral and psychological support, as perceived from participants’ perspectives.

*“If my dentist wasn’t supportive of my feelings and dealing with my humanity prior to my illness, I think he lost a lot of key communication tools because it’s not just a matter of formal therapy but a relationship as a human being first”* (Interview 6)

### ***Theme Two: Information-sharing phase***

#### *Trusting the Dentist*

Participants emphasised the fundamental importance of trust in the dentist, highlighting that it played a significant

role in the acceptability of treatment. They expressed that feelings of security and trust in the treatment provider were crucial factors. Without these elements, they felt less informed and less comfortable discussing treatment plans with dental personnel.

*“It is paramount for dentists to communicate properly with us as patients so that we can be confident in their work. Simply put, it all comes down to trusting them”* (Interview 16)

To enhance their experience, participants felt dental personnel could actively understand and connect with the emotions and feelings of each patient. Establishing common ground and adapting behaviour based on individual cues was felt to foster a more empathetic and patient-centred approach, ultimately improving overall satisfaction.

*“The initial contact with dental personnel holds great significance as it sets the tone for future visits. Therefore, I firmly believe that dentists need to be sensitive enough to ensure a positive rapport is established between them and the patient.”* (Interview 12)

### *Inter-collaborative compromising*

Patients sometimes opted for different treatments than those recommended by dental professionals. While most dental personnel accommodated patient preferences, some dentists hesitated, expressing concerns about ensuring the effectiveness of alternative treatments and asked for signed consent when patients refuse recommended courses of action.

*“Personally, I feel that the dentist always recommends what they think is the best treatment alternative. But for me as a patient, the cost of treatment dictates the option and sometimes the length and number of treatment sessions.”* (Interview 14)

Some patients only visited the dentist when experiencing toothache (perceived need), but additional oral issues were uncovered during examinations (evaluated need). Effective communication was crucial in bridging the gap between perceived and evaluated needs, serving as a vital tool in this process.

*“When I go to a dentist for a specific problem, and he tells me that there is another problem that needs treatment, I try to talk to him about the situation clearly, and if he convinces me, I, of course, go with his advice.”* (Interview 1)

Patients acknowledged that, despite disagreements with their dentists, the communication style and level of trust helped shape a positive dental attitude. This influence persisted even if the patient chose not to continue seeing the same dentist, highlighting the impact of effective communication and trust beyond treatment options.

*“I still recall that dentist, who had a great influence on my attitude toward dentistry. He had a good way of communicating. I continued going to the dentist regularly following that experience.”* (Interview 9)

### **Theme Three: Treatment decision-making phase**

#### *Knowledge and power asymmetry*

According to the participants, their dentists made a concerted effort to provide them with comprehensive

information about all possible care options, including their respective benefits, shortcomings, expected outcomes, financial implications, and associated risks. Following this, the dentists would present their professional opinions and recommend the optimal treatment plan.

*“In my opinion, patients should be actively involved in the decision-making process when choosing the mode of treatment. However, the dentist’s role is to guide and provide us with necessary information rather than forcing us into a specific option.”* (Interview 5)

Moreover, due to rapid advancements in media and the Internet, participants reported greater knowledge and interest in dental care plans. However, uncertainty about the gathered information led to hesitation when communicating with their dentist.

*“As a patient, the information we come across on the Internet can make us feel knowledgeable and illiterate simultaneously. While we gain some understanding of the subject, we are also overwhelmed with an abundance of information.”* (Interview 3).

Some participants perceived their dentists as authoritative and powerful, seemingly viewing patients as less active and relying on them for essential treatment information.

*“A dentist must not belittle their patients by misusing their position of power.”* (Interview 9)

While patients generally found this acceptable, there were occasions when they preferred to switch to a dentist who tried to balance this power imbalance.

*“As a patient, when I encounter a dentist who appears biased, I prefer to switch to a more accommodating dentist rather than continuing to use their services.”* (Interview 10)

#### *Patient-centred decision making*

Most participants wanted to be involved in decision making with their dentists regarding their problems, or at least to be allowed the opportunity to choose the degree to which they wished to engage, based on their knowledge and, of course, within their limits.

*“Yes, I know that the dentist knows the best for my case and the most appropriate treatment, but this does not prevent him from taking my opinion and involving me in understanding the treatment plan, and of course, I will leave the final decision to him.”* (Interview 13).

Involving patients in treatment decisions appeared to be a delicate balance between patients’ wishes and dentists’ suggestions. This balance in turn revealed the benefits of patient participation and the role that active participation can play in some patients’ decisions regarding their treatment and satisfaction.

*“I feel more satisfied when the dentist allows me to share my opinions regarding my treatment plan.”* (Interview 5)

However, it was observed that when patients were satisfied with their active participation in decision-making, it encouraged them to utilise the same services again in the future.

*“A dentist who allowed me to comprehend, talk about, and participate in the treatment process provided services that I will undoubtedly use again.”* (Interview 5)

#### **Theme Four: Satisfaction self-evaluation phase**

The participants engaged in discussions about their self-evaluation after their communication with the dentist and how their satisfaction with this experience could influence their future utilisation of dental services, either positively or negatively.

##### *Positive experience*

The participants were in general agreement that open communication with the dentist positively influences the course of treatment and enhances their perception of the importance of utilising dental services in the future whenever necessary.

*“Yes, having a positive dental experience motivates you to seek out their services right away in the future.”* (Interview 8)

According to some participants, a positive experience could have a significant impact on the patient’s behaviour, leading to the adoption of new, healthy attitudes and motivating them to use dental services again, even for preventative purposes.

*“I started visiting dental clinics even for preventive treatments and ongoing periodic examinations after a very positive experience and a dentist who provided information and advice in a unique style and method”* (Interview 1)

##### *Negative experience*

Despite their dentist’s excellent technical skills, some participants indicated that a lack of flexible and acceptable communication could lead to a negative experience that caused them to feel disconnected or alienated.

*“My opinion is that the dentist’s communication skills with the patient are more crucial than his level of training. Even if a dentist’s treatment is appropriate, a patient won’t accept it if there is tension in their relationship”* (Interview 11)

Participants also highlighted that due to the dentist’s improper manner, the patient may choose not to use the dentist’s services again, even when they are needed. This negative experience could have a broader impact on the patient’s dental attitude in general.

*“You might decide to completely avoid using dental services in the future based solely on one dentist’s behaviour”* (Interview 15)

## **Discussion**

The role of communication in patient care is well-documented in dentistry (Waylen, 2017; Yong *et al.*, 2021; Yuan *et al.*, 2020). This study explored how patient-dentist communication quality affects service value, patient satisfaction, and re-utilisation intention. Patient satisfaction and service value mediated the link between health communication quality and patients’ intention to reuse dental services. Trust emerged as a key factor, with higher trust correlating with increased satisfaction and contentment with care, aligning with established literature in fields like law, medicine, dentistry, and religion (Armfield *et al.*, 2017; Nash, 2007; Park *et al.*, 2021).

Additionally, the a dentist’s reliability and communication played a vital role in increasing patient satisfaction and service re-utilisation, mirroring their clinical competence. This aligns with the findings of Chang *et al.* (2013), who demonstrated that a doctor’s communication style impacts patient satisfaction, the quality of medical care, and provider reliability. Moreover, patient satisfaction, primarily associated with the dental care provider’s communication, significantly influenced intentions to reuse dental services. Mehta (2011) emphasises that patient satisfaction enhances treatment adherence and influences re-utilisation intentions.

The results also emphasised how patients value person-centred care and shared decision-making in enhancing their dental attendance. The shared decision-making (SDM) model, empowering patients by involving them in treatment decisions, has gained prominence in clinical practice (Alzaharani and Gibson, 2018). Active patient participation in SDM leads to increased satisfaction for both patients and providers, even though it necessitates changes in traditional healthcare practices (Yong *et al.*, 2021).

Other important factors in this study included supporting and acknowledging a patient’s emotions, providing procedural explanations, and encouraging patient questions. These actions were seen as crucial for evaluating a dentist’s professional competence and patient-dentist interactions (Park *et al.*, 2021). Satisfaction increased when these factors were met. Previous research (Afrashtehfar *et al.*, 2020), has shown that meeting patient expectations correlates with increased satisfaction with treatment outcomes. Similarly, Song *et al.* (2020) found that trust issues, personal feelings, and humane qualities are vital in doctor-patient relationships.

In conversations surrounding treatment options and the collaborative determination of the most suitable treatment, patients frequently voiced apprehensions about their dentists striking a balance between their professional expertise and incorporating patient input. Nash (2007) pointed out that professionals gain power through advanced learning, leading to a power imbalance between them and those they serve. Röing and Holmström (2014) noted that dentists, while not wanting to be overly autocratic, may feel the need to guide patients toward what they perceive as optimal treatments due to disparities between online information and their professional judgment.

Dentists are often seen as guiding patient healthcare decisions, potentially influencing treatment choices (Charles *et al.*, 1997). Despite this, patients have the autonomy to choose to visit or discontinue visits willingly (Dunstone, 1990). As paying customers, patients may feel entitled to influence treatment modes. Some dentists may appear flexible to retain patients, possibly due to inexperience, emphasising the need for communication skills and patient psychology in dental curricula (Alvarez and Schultz, 2018).

The study demonstrated that patients evaluate their dental treatment and service experiences, with their re-utilisation intentions significantly influenced by satisfaction with these evaluations. These findings align with research on customer satisfaction and re-utilisation of dental services, which emphasises the role of patient satisfaction and reliability in service choice (Wang *et al.*, 2020).

Given these findings, effective communication, trust-building, and shared decision-making are crucial for patient satisfaction in Libya. Additionally, factors like information dissemination, empathetic care, moral support, and clear treatment explanations contribute positively to patient satisfaction. These results highlight the vital role of effective communication in enhancing patient experiences and ensuring their ongoing commitment to seeking dental services.

This study marks the first attempt in Libya to directly involve patients in evaluating their relationship with dentists and understanding the variables influencing their dental experiences. The findings provide insight into patients' values and preferences, impacting their satisfaction with dental services and future utilisation. These results form the foundation for further research into the efficiency of patient-dentist communication in enhancing dental experiences. Limitations include the potential sample bias and the impact of the researcher's personal biases, which cannot be entirely eliminated.

In conclusion, patient-dentist communication impacted on dental service utilisation as perceived by patients in Libya. Improving communication skills and practices within the dental profession could enhance patient satisfaction, treatment adherence, and the overall utilisation of dental services. Findings from this study provide insights and recommendations to enhance patient-dentist communication strategies in Libya, ultimately contributing to improved oral healthcare outcomes and patient-centred care.

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