



# Digital Engagement and Patient Acquisition in Dental Clinics: Insight from UAE Dentists

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## ABSTRACT

Social media has evolved into a fundamental communication and marketing tool in modern healthcare. For dental practices, these platforms serve not only to enhance visibility but also to foster trust, convey expertise, and influence patient decision-making. This study explores how social media marketing enhances patient flow in dental clinics located in Abu Dhabi, Dubai, and Sharjah. Employing a qualitative methodology, the study involved in-depth interviews with ten dentists who actively use digital platforms for professional purposes. Through thematic analysis, five core themes emerged: trust building and credibility, content strategies for engagement, platform selection, barriers to digital marketing, and evaluating marketing performance. The findings highlight that while social media improves outreach and relationship building, challenges persist, particularly concerning time constraints, content saturation, and lack of data driven decision-making tools. Using Social Exchange Theory (SET) and the Technology Acceptance Model (TAM) as interpretive frameworks, this research provides theoretical insight and practical recommendations for optimizing digital dental marketing strategies in the UAE. The study contributes new knowledge to the field of healthcare marketing and offers evidence-based guidance for dentists seeking to adapt to the demands of a competitive, digitally driven market.

## 1. Introduction

### 1.1 Background and Rationale

Digital transformation has redefined patient-provider dynamics across healthcare sectors. Among the most impactful tools in this shift is social media—web-based platforms that allow for real-time communication, content sharing, and brand development. In the realm of dentistry, where aesthetics, trust, and patient education are integral to success, the visual and interactive nature of platforms like Instagram, TikTok, and Facebook offers unprecedented marketing potential.

In the UAE, with internet penetration reaching 99% (DataReportal, 2024), and with over 10 million residents—many of whom are tech-savvy expatriates—social media has become deeply embedded in daily life and healthcare decision-making. Dental clinics, particularly in urban centers such as Abu Dhabi, Dubai, and Sharjah, face fierce competition and operate within a highly service-oriented market. In this context, digital marketing strategies are increasingly viewed not as optional, but essential for visibility, differentiation, and growth.

Yet, despite increasing adoption of digital tools, many practices struggle with sustainable implementation and return on investment. There is also a dearth of empirical, region-specific research that explores how social media marketing affects actual patient flow in dental practices. This study seeks to fill this gap through a qualitative investigation of dentists' lived experiences, exploring the nuances of platform use, engagement strategies, barriers, and perceived effectiveness.

### 1.2 Research Objectives

This study seeks to:

1. Understand how dental practitioners in the UAE use social media for marketing and patient acquisition.
2. Identify the perceived benefits and challenges associated with social media marketing in dental settings.
3. Analyze the strategies used by dentists to track, evaluate, and optimize their online marketing efforts.

4. Apply Social Exchange Theory and the Technology Acceptance Model to interpret the findings within a theoretical framework.
5. Provide actionable recommendations for improving the use of digital platforms to enhance patient flow.

### 1.3 Research Questions

1. What motivates dentists in the UAE to use social media marketing?
2. What content strategies are most effective in engaging patients online?
3. What challenges hinder the optimal use of social media in dental clinics?
4. How do dentists measure the success of their social media campaigns?
5. How can SET and TAM help explain the patient-dentist dynamic in digital environments?

## 2. Literature Review

### 2.1 Defining Social Media in Healthcare

Social media platforms, including Instagram, YouTube, Facebook, and TikTok, allow users to create, curate, and share content interactively. In healthcare, these platforms are increasingly leveraged for health promotion, patient education, and brand visibility (Grajales et al., 2014). For dentists, social media provides a visual showroom of skills, techniques, and outcomes.

Kaplan and Haenlein (2010) categorize social media by their degree of self-presentation, social presence, and media richness. Instagram and TikTok, rich in visual media, support aesthetic representation, making them highly relevant for dental marketing.

### 2.2 Theoretical Framework

Social Exchange Theory (SET) (Homans, 1958) posits that social behavior is the result of an exchange process aiming to maximize benefits and minimize costs. When applied to healthcare, SET explains how patients assess the value provided through social media, educational content, professional transparency, and patient testimonials, in exchange for their trust and eventual patronage.

Technology Acceptance Model (TAM) (Davis, 1989) explains user acceptance of technology through two key constructs: perceived usefulness and perceived ease of use. In this study, TAM helps explain why dentists select certain platforms, and how patients respond to the information shared.

### **2.3 Social Media and Patient Behavior**

Studies show that patients increasingly rely on online reviews and visual evidence before selecting a dental provider (Freire et al., 2023; Gray et al., 2021). Platforms like Instagram allow for “before and after” case presentations, while TikTok offers bite-sized educational content. This shift toward digital trust-building aligns with SET, where trust is earned through perceived value delivery.

### **2.4 Health Literacy and Public Engagement**

Nutbeam (2000) defines health literacy as the ability to access, understand, and use health information. Social media platforms enhance this by making clinical knowledge digestible and engaging (McNab and Skapetis, 2019). In dental care, improved literacy has been linked to increased adherence to treatment plans and preventive care practices.

### **2.5 Ethical Concerns and Regulatory Challenges**

Healthcare providers using social media must navigate a complex ethical landscape. Misinformation, privacy breaches, and unprofessional conduct can erode trust and trigger legal repercussions (Ventola, 2014; AMA, 2015). In the UAE, Federal Law No. 2 (2019) outlines stringent data-sharing and advertising guidelines for health practitioners.

### **2.6 Regional Relevance**

While global studies on healthcare digitalization abound, few focus on the UAE's unique demographic blend and regulatory environment. Moreover, dentistry, an inherently visual and competitive profession, has distinct marketing dynamics. This study situates itself within this unexplored niche.

### **2.7 Digital Trust and Brand Loyalty in Dentistry**

In the context of healthcare marketing, trust is not only a foundational element of patient relationships but also a significant determinant of brand loyalty. Research indicates that consistent, transparent, and educational digital content fosters long-term trust and recall among

patients (Berkowitz, 2021). In dental marketing, this trust is often built through repeated exposure to authentic content such as behind-the-scenes videos, procedural demonstrations, and user-generated testimonials. When patients perceive a dentist's social media presence as genuine and informative, they are more likely to convert from passive observers to active patients, and eventually, to loyal advocates. This trajectory aligns closely with SET, where value is exchanged through digital rapport and repeated, low-risk interactions that lead to eventual commitment.

### **2.8 Aesthetic Content and Patient Perceptions**

Dentistry is a highly visual discipline. The aesthetic appeal of content shared on platforms like Instagram and TikTok plays a substantial role in shaping patient perceptions. Studies suggest that high-resolution images, cohesive branding, and curated before-and-after photos not only enhance a clinic's perceived professionalism but also directly impact consumer choice (Grewal and Roggeveen, 2020). Emotional cues embedded in these visuals—such as patient smiles, transformations, or positive expressions, trigger affective responses that increase engagement and recall. This effect resonates with the TAM model, where patients gravitate towards platforms and content that they perceive as both useful (educational or reassuring) and easy to interpret (visually compelling). Aesthetic content thus operates not merely as a cosmetic tool, but as a strategic instrument for influencing patient trust and behavior.

### **2.9 Cultural Considerations in UAE's Digital Healthcare Landscape**

The UAE's population comprises a highly diverse expatriate community, each with varying expectations of professionalism, communication, and healthcare delivery. Cultural sensitivity in digital communication, such as language choice, visual modesty, or timing of posts—is essential to avoid misinterpretation and to enhance engagement (El-Shaarawi and Razek, 2022). For instance, Arabic-speaking patients may prefer bilingual content, while South Asian or Western expatriates might engage more with humor or visual transformation reels. Furthermore, religious and national holidays influence posting schedules and content appropriateness. These cultural nuances intersect with SET's principles of perceived value and reciprocity—when patients feel seen, respected, and represented in digital content, they are more likely to develop trust and initiate contact. Understanding these

micro-audiences is vital for dentists seeking to navigate the multicultural terrain of the UAE effectively.

### 3. Methodology

#### 3.1 Research Design

This study employed a qualitative, exploratory research design, grounded in the interpretivist paradigm. Such a design is appropriate for understanding subjective experiences, context-specific strategies, and perceived impacts, areas inadequately captured through quantitative methods.

#### 3.2 Sampling and Participants

Using purposive sampling, ten dentists practicing in Abu Dhabi, Dubai, and Sharjah were selected based on the following criteria:

- Active use of social media for marketing
- Minimum one year of clinical experience
- Fluency in English

The participants varied in years of practice, clinic size, and platform preference, offering a broad spectrum of insights. Table 1 below summarizes participant demographics:

Participant	Experience	City	Platform Focus
P1	4 years	Dubai	Instagram
P2	1 year	Sharjah	TikTok, Instagram
P3	8 years	Abu Dhabi	Facebook, Instagram
P4	35 years	Sharjah	Facebook
P5	4 years	Dubai	Instagram, YouTube
P6	5 years	Dubai	Instagram
P7	3 years	Abu Dhabi	TikTok, Instagram
P8	7 years	Dubai	Instagram, TikTok
P9	5 years	Dubai	Facebook, Instagram
P10	9 years	Sharjah	Instagram, YouTube

#### 3.3 Data Collection

Data were collected through semi-structured interviews conducted via Zoom. Each session lasted 30–45 minutes and was audio-recorded with consent. The interview guide included open-ended questions covering:

- Platform selection
- Content strategies
- Patient feedback
- Operational barriers
- Ethical considerations
- Perceived outcomes

#### 3.4 Data Analysis

Transcripts were generated using Otter.ai and analyzed using NVivo 15. A thematic analysis approach following Braun and Clarke's (2006) six-phase model was applied. Codes were grouped into categories, which were then synthesized into five overarching themes.

#### 3.5 Ethical Considerations

The study received ethical approval from the relevant institutional review board. Informed consent was obtained from all participants. Anonymity was ensured by coding identities, and all recordings and transcripts were stored securely.

### 4. Findings and Discussion

Thematic analysis yielded **five core themes**:

#### 4.1 Theme 1: Building Trust and Credibility

Dentists emphasized that credibility is established not merely through clinical outcomes but through digital storytelling. Patient testimonials, behind-the-scenes videos, and Q&A sessions help humanize the provider.

“They see the person behind the mask. That alone builds trust,” – P8

SET explains this reciprocity—patients offer engagement and loyalty in return for transparency and reassurance.

## 4.2 Theme 2: Content Strategies That Drive Engagement

Three main content types were consistently reported as effective:

- **Before-and-after visuals:** Demonstrate results
- **Educational reels:** Simplify complex procedures
- **Interactive stories:** Encourage real-time patient interaction

“People want quick, useful, and beautiful. That’s what works,” – P2

TAM helps explain this: content perceived as **useful** and **easy to consume** attracts more engagement.

## 4.3 Theme 3: Platform Selection and Strategic Use

Each platform served a distinct strategic purpose:

- **Instagram:** Visual appeal, especially for cosmetic dentistry
- **TikTok:** Younger audience, viral trends
- **Facebook:** Community engagement, older demographics

“We use Instagram to attract and Facebook to explain,” – P3

Multi-platform strategies are essential for reaching varied patient groups.

## 4.4 Theme 4: Barriers to Effective Social Media Use

Participants reported several common barriers:

- **Time constraints:** Content creation vs. clinical responsibilities
- **Financial limitations:** Hiring agencies or buying equipment is costly
- **Content saturation:** Difficulty standing out in a competitive space

“It’s not just about posting, it’s about posting well. That takes time and money,” – P6

The need for outsourcing or in-house marketing support was echoed by most respondents.

## 4.5 Theme 5: Evaluating Performance and Measuring ROI

Most dentists used **engagement metrics** (likes, comments, DMs) to evaluate performance. However, these often failed to translate into measurable patient flow.

“People like our posts but don’t always book. It’s hard to connect the dots,” – P10

Few used CRM tools or patient tracking software. This lack of integration hinders accurate ROI assessment, pointing to a critical gap in **digital literacy** and analytics training.

## 4.6 Theoretical Integration: SET and TAM in Practice

The integration of Social Exchange Theory (SET) and the Technology Acceptance Model (TAM) offers a robust lens for interpreting how dentists and patients interact in digital spaces.

From the SET perspective, dentists described social media as a platform for relational exchange, where the non-monetary “costs” (time, effort, transparency) invested in content creation are offset by intangible “returns” such as trust, loyalty, and patient conversions. Several participants shared that they routinely post free educational content, live Q&A sessions, and post-treatment care tips—actions that are not directly compensated but are perceived to build goodwill. Patients, in turn, reciprocate by engaging with content, recommending the clinic, or booking appointments. This cycle of value exchange illustrates the non-transactional yet strategically reciprocal nature of digital engagement in healthcare.

TAM complements this analysis by illuminating the decision-making behavior behind both platform adoption by dentists and content engagement by patients. Dentists favored platforms that offered ease of use (e.g., user-friendly interfaces like Instagram stories or Canva for design) and clear perceived benefits (e.g., patient inquiries, visibility, and appointment conversions). Likewise, patients demonstrated higher engagement with content that was visually accessible, informative, and shareable—key components of perceived usefulness and ease of use. For instance, TikTok’s short-form videos were favored for quick educational bursts, while Instagram

reels facilitated visual storytelling of patient transformations.

Together, SET and TAM explain the dual motivations underpinning social media marketing in dentistry: the relational depth that builds trust (SET), and the usability-driven mechanisms that shape platform choice and content engagement (TAM). This layered understanding supports the notion that successful digital marketing in healthcare is not merely about visibility, but about perceived value and mutual ease of participation.

## 5. Conclusions and Implications

### 5.1 Summary of Key Findings

This study explored how dentists in the UAE use social media to enhance patient flow. Through in-depth interviews and thematic analysis, five key themes were identified:

1. **Trust and Credibility:** Dentists build trust by showcasing real cases, offering transparency, and responding directly to patient concerns.
2. **Content Strategy:** Engaging, educational, and visually rich content performs best, particularly on Instagram and TikTok.
3. **Platform Strategy:** Strategic platform use is essential to target varied demographics; Instagram is ideal for visuals, TikTok for short-form info, and Facebook for community building.
4. **Barriers:** Time, finances, and content saturation hinder consistent high-quality social media presence.
5. **Evaluation Challenges:** Most dentists lack sophisticated tools to assess ROI, relying instead on vanity metrics like likes or comments, which don't always translate into bookings.

These findings affirm the dual importance of **strategic content creation** and **platform literacy**, while also highlighting the persistent challenges in resource allocation and performance tracking.

### 5.2 Theoretical Contributions

The study contributes to existing literature by validating the application of **Social Exchange Theory (SET)** and the **Technology Acceptance Model (TAM)** within the specific context of dental marketing in the UAE:

- **SET** explains the reciprocal nature of social media interactions, where patients receive valuable content in exchange for attention and loyalty.
- **TAM** accounts for the behavior of both patients and practitioners, showing how perceived usefulness and usability affect platform choice and engagement strategies.

This integration enriches the academic understanding of social media as a medium for relational marketing in healthcare, particularly in visual, service-based fields like dentistry.

### 5.3 Practical Recommendations

Based on the study findings, several practical strategies can help dental clinics optimize their use of social media for improving patient flow:

1. **Invest in Digital Marketing Training for Dental Teams**  
Many dentists rely on trial and error or delegate marketing to inexperienced staff. Structured training programs—covering content strategy, visual storytelling, platform algorithms, and compliance—can significantly enhance effectiveness. Continuing education courses or certified workshops in healthcare digital marketing should be made accessible to all levels of dental staff.
2. **Develop Hybrid and Platform-Specific Marketing Strategies**  
A balanced mix of organic content and paid promotions yields better reach. Clinics should use platform-specific approaches: Instagram for visual case presentations, TikTok for trends and FAQs, and Facebook for community events or service announcements. Paid ads can be strategically used to promote seasonal offers or new services, particularly in competitive markets.

3. Utilize Automation, Templates, and Scheduling Tools  
 Time management emerged as a significant barrier. Automation tools such as Buffer, Later, or Hootsuite can help maintain consistency without overburdening clinical staff. Canva templates or AI-assisted video tools like Lumen5 can streamline design and post-production for non-experts.
4. Enhance Tracking of Patient Journey Through Analytics  
 Dentists often equate likes with success, but deeper insights are needed. Integration of customer relationship management (CRM) software can help track digital touchpoints—such as link clicks, appointment requests, and form submissions—offering better measurement of return on investment (ROI). Google Analytics, Meta Business Suite, and platform insights should be reviewed monthly to inform content decisions.
5. Incorporate Storytelling and Emotionally Intelligent Content  
 The emotional element of dental anxiety and cosmetic transformation makes dentistry uniquely positioned for human-centered storytelling. Content should reflect empathy, education, and relatability—testimonials, behind-the-scenes clips, and day-in-the-life videos build personal connections that foster trust.
6. Create Internal Guidelines for Ethical and Regulatory Compliance  
 To prevent breaches in confidentiality or unintentional misinformation, clinics should maintain a social media policy. This includes protocols for obtaining patient consent, handling comments, and clarifying boundaries between personal and professional accounts. Periodic audits and staff training ensure compliance with UAE healthcare advertising standards.

#### 5.4 Policy Recommendations

Health authorities in the UAE should:

- Offer **official guidelines** on healthcare social media use that are specific, accessible, and culturally informed.
- Subsidize **digital literacy programs** for independent practitioners and small clinics.
- Encourage platforms to verify licensed health professionals, enhancing trust and accountability.

#### 5.5 Limitations of the Study

Several limitations should be acknowledged:

- **Sample Size:** Only ten participants were interviewed; while sufficient for qualitative analysis, the sample may not reflect all dental sectors or specialties.
- **Geographical Focus:** Findings are specific to urban centers in the UAE and may not be generalizable to rural settings or other Gulf countries.
- **Time Sensitivity:** Social media trends and algorithms evolve rapidly; what is effective today may be obsolete in six months.
- **Self-Reported Data:** Interviews are based on dentists' perceptions, which may differ from actual patient behavior or outcomes.

#### 5.6 Suggestions for Future Research

- **Mixed-Methods Approach:** Combine interviews with quantitative data (e.g., platform analytics, patient surveys) for a more robust analysis.
- **Longitudinal Studies:** Track how sustained social media use influences clinic growth, patient retention, and health outcomes over time.
- **Patient Perspectives:** Explore how patients perceive and act on dental social media content, including trust, decision-making, and satisfaction.
- **Cross-Cultural Comparisons:** Compare UAE practices with those in other regions

(e.g., Europe, North America, Southeast Asia) to identify universal vs. local trends.

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