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Social Media Usage in Dentistry: Determining Social Media–Related Opportunities and Challenges for Professional Dental Practices in Pakistan – A Cross-Sectional Study

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ABSTRACT

Background: *Social media has become integral to dental communication, education, and practice promotion, yet it also introduces risks related to misinformation, confidentiality, and professionalism. Evidence from Pakistan remains limited, especially regarding how dental professionals perceive both the opportunities and challenges associated with its professional use.* ***Objective****: To assess patterns of professional social media use among Pakistani dental professionals and evaluate perceived opportunities, challenges, and awareness of ethical and legal boundaries in digital practice.* ***Methods****: A nationwide cross-sectional study was conducted from October to November 2025 among final-year dental students, house officers, postgraduate trainees, and general practitioners. A validated, self-administered online questionnaire captured demographics, social media usage, perceived opportunities, and perceived challenges. Data from 335 respondents were analysed using descriptive statistics and inferential tests including chi-square, Fisher's exact test, and non-parametric comparisons, with significance set at $p<0.05$.* ***Results****: Overall, 64.8% reported professional social media use, most commonly Instagram (66.3%). Key challenges included confidentiality concerns (60.9%) and misinformation (49.3%). Ethical dilemmas were reported by 34.3% and legal ambiguity by 42.1%. Opportunities were widely endorsed, with 92.2% finding content helpful, 84.5% reporting enhanced professional networking, and 85.4% identifying superior marketing value. Purchasing decisions were influenced by social media in 56.4% of respondents.* ***Conclusion****: Social media is widely used by Pakistani dental professionals and offers substantial educational and promotional benefits, but significant ethical and regulatory concerns persist, underscoring the need for clear national guidelines and digital professionalism training.*

Keywords
Social media; Dentistry; Professionalism; Ethics; Pakistan; Digital health; Dental education

INTRODUCTION

Social media has become deeply embedded in healthcare communication, transforming patients and professionals from passive recipients of information into active producers, curators, and evaluators of content across platforms such as Facebook, Instagram, YouTube, and LinkedIn (1,2). In dentistry, social media is now widely used to disseminate oral health information, showcase clinical procedures, and facilitate patient engagement, with emerging evidence that these tools can enhance learning, support behaviour change, and improve access to practical oral health advice for both the public and professionals (1–3). Dental students and trainees, in particular, have been shown to be highly active social media users and often report that digital platforms complement traditional learning by providing visual demonstrations of clinical techniques, case-based discussions, and rapid access to expert opinions beyond their local institutions (1,3,4). This educational role is supported by a growing body of work indicating that social media can motivate professional learners, reinforce core knowledge, and contribute to more comprehensive, patient-centred care when used appropriately (1,3,4).

Beyond education, social media has become an important channel for professional networking and practice development in dentistry. Studies from different regions have reported high levels of professional use among dentists, including for advertising services, sharing case outcomes, and maintaining communication with patients and colleagues (5–7). In Saudi Arabia, for example, a substantial proportion of dentists use social media for professional purposes, and many perceive it as an integral part of contemporary practice promotion and patient communication (5,7). Evidence suggests that patients increasingly use dentists' social media profiles to form impressions of clinical expertise, aesthetics of care, and interpersonal style, and that these impressions can influence the selection of providers and expectations of treatment (8–10). Work from South Asia, including qualitative data from Pakistan, further indicates that social media may shape patient expectations, perceived quality of care, and satisfaction by amplifying before–after imagery, testimonials, and aesthetic ideals that may not always align with clinical realities (10,11).

At the same time, social media introduces substantial risks related to misinformation, ethical complexity, and professional conduct. Digital content about oral health often circulates without peer review or regulatory oversight, and studies have documented widespread misconceptions, promotional exaggeration, and inaccurate or incomplete dental advice on social platforms (11–13). Misinformation can distort patients' understanding of treatment options, foster unrealistic expectations of cosmetic outcomes, and encourage unsafe self-care or unregulated treatments, thereby complicating the clinical encounter and potentially undermining trust in evidence-based dentistry (11–13). From a professional ethics perspective, the online environment blurs boundaries between personal and professional identities, raises concerns about confidentiality and informed consent for clinical images, and challenges traditional norms of distance and neutrality in practitioner–patient relationships (14–16). Bioethics scholars and dental regulators have highlighted particular risks around posting identifiable patient material, engaging with patients through personal accounts, and managing online criticism or reviews, and have called for clearer guidance and explicit professionalism frameworks for social media conduct in dentistry (14–16).

These opportunities and risks appear to be especially pronounced on highly visual platforms such as Instagram, where aesthetic content and algorithm-driven visibility incentivize dramatic "smile makeover" imagery and continuous self-promotion. Recent work has shown that Instagram is deeply integrated into the daily lives of dental students and practitioners and is perceived as one of the most effective platforms for professional branding, networking, and patient outreach, particularly among younger cohorts (17,18). At the same time, practice management and marketing reports suggest that social media–based promotion is increasingly viewed as more impactful than traditional advertising, with dentists using these platforms to attract new patients, retain existing ones, and even influence purchasing decisions for dental materials and equipment through exposure to sponsored content and peer recommendations (7,17,19). However, most of these insights come from high-income or upper–middle-income settings, and the balance between opportunity and risk may differ in countries where regulatory frameworks, digital literacy, and health system structures are distinct.

In Pakistan, the dental profession is experiencing rapid digitalization amid a young, social media–savvy population. Prior research has documented high levels of social media use among dental students and a substantial proportion of practitioners using these platforms for professional purposes, including education, marketing, and peer networking (6,11). Nevertheless, existing Pakistani data largely focus on usage patterns and general attitudes, with limited attention to how dental professionals perceive specific ethical, legal, and professional challenges in their local regulatory and socio-cultural context (6,11). Furthermore, there is little empirical evidence on how Pakistani dental professionals conceptualize "professional use" of social media, how they navigate issues of patient confidentiality, consent, and boundary management online, and to what extent social media influences their clinical decision-making and purchasing behaviour. This represents a critical knowledge gap, given the growing visibility of dental content online and the potential consequences of unregulated digital practices for patient safety, public trust, and professional integrity (11–15).

Against this background, there is a clear need for context-specific data on the perceived opportunities and challenges of social media use in dentistry in Pakistan, spanning clinical practice, education, marketing, and ethical–legal domains. Understanding how different groups of dental professionals—students, house officers, postgraduate trainees, and general practitioners—use social media, what benefits they derive, and which risks they encounter is essential to inform professional guidelines, curricular interventions, and regulatory policies tailored to this setting (6,11,14–16,19). Therefore, the present cross-sectional study aimed to (i) describe patterns of social media use for professional purposes among Pakistani dental professionals, (ii) identify their perceived ethical, legal, and professional challenges related to social media, including concerns about confidentiality, misinformation, and productivity, (iii) explore perceived opportunities for dental education, patient communication, practice promotion, and purchasing decisions, and (iv) assess self-reported awareness of legal and professional boundaries in online environments. The overarching research question was: among dental professionals in Pakistan, what are the perceived opportunities and challenges associated with the professional use of social media, and how do these perceptions inform the need for clear, context-appropriate guidelines and ethical frameworks for its use in dentistry?

MATERIALS AND METHODS

This study employed a cross-sectional observational design to evaluate professional social media use, perceived opportunities, and perceived challenges among dental professionals in Pakistan. The rationale for this design was to obtain a national snapshot of attitudes, behaviours, and experiences across multiple stages of dental training and practice, enabling assessment of patterns without manipulating exposure or outcomes (20). The study was conducted nationwide using an online survey distributed electronically through social media platforms commonly used by dental professionals, ensuring accessibility to geographically dispersed participants. Data were collected over a defined period from October to November 2025, allowing adequate time for survey dissemination and completion.

Eligible participants included individuals actively involved in dental practice or clinical training in Pakistan at the time of the study, comprising final-year Bachelor of Dental Surgery (BDS) students, house officers, postgraduate trainees, and general dental practitioners. Eligibility required active involvement in clinical dentistry and voluntary informed consent. Individuals not engaged in dental practice, those unwilling to participate, and duplicate responses were excluded. Participants were selected using non-probability convenience sampling, as this method is consistent with digital data collection strategies and facilitates recruitment of a large, heterogeneous sample across the country (21). Recruitment occurred via professional WhatsApp groups, Facebook dental forums, institutional alumni networks, and Instagram pages followed by dental professionals. Potential respondents accessed the survey link, reviewed an electronic consent statement on the first page, and proceeded only after selecting "I consent," which served as documented informed participation.

Data were collected using a structured, self-administered questionnaire created through an iterative development process. Items were generated after reviewing existing literature on social media use in dentistry, misinformation, professionalism, and ethical challenges (1–19,21–23). The questionnaire underwent expert review by dental educators and health communication specialists to ensure clarity, relevance, and content validity. A pilot test with 20 dental professionals was conducted to assess comprehensibility, internal consistency, and timing; feedback led to refinement of item wording and sequencing. The final instrument consisted of demographic variables (city, gender, years of practice, and practice type), social media use variables (professional use, preferred platforms), perceived challenges (misinformation, confidentiality, privacy violations, ethical dilemmas, legal concerns, productivity effects, boundary issues), and perceived opportunities (learning, professional networking, patient communication, practice promotion, influence on purchasing decisions). Likert-type scales were used where appropriate, with response options

ranging from "strongly agree" to "strongly disagree," or from "not at all confident" to "extremely confident," ensuring ordinal measurement integrity. Multiple-response options were available for items assessing platform use and specific concerns.

The primary variables were (i) professional use of social media (yes/no), (ii) perceived opportunities (learning, marketing value, networking, patient engagement), and (iii) perceived challenges (confidentiality, misinformation, ethical dilemmas, legal ambiguity, impact on productivity). Operational definitions were standardized before data collection. "Professional use" referred to any utilization of social media for patient communication, education, clinical promotion, networking, or professional development. "Misinformation" was defined as inaccurate, misleading, or unverified dental or oral health content encountered online. An "ethical dilemma" referred to any instance in which participants felt uncertain about appropriate professional behaviour or boundaries when using social media in a clinical or educational context.

To minimize bias, the instrument avoided leading questions and provided balanced response options. Electronic data capture eliminated interviewer bias and ensured standardized presentation of items. Anonymity was preserved by avoiding collection of identifiable patient or practitioner information, which reduced social desirability bias in reporting sensitive items such as ethical dilemmas or legal warnings. Because convenience sampling may lead to overrepresentation of frequent social media users, recruitment channels were diversified across institutions and online communities to improve sample heterogeneity. All collected data were automatically stored in Google Forms without manual entry, reducing transcription error. Data integrity was maintained by restricting the survey to one response per device and timestamp-based audit trails.

Sample size was determined using a single-population proportion formula assuming that 68% of Pakistani dental professionals use social media for professional purposes, based on prior national estimates (6). With a 95% confidence level, 5% absolute precision, and expected proportion of 0.68, the minimum sample size required was 335 respondents (24). This sample allowed adequate precision for estimating proportions of key variables. All variables were fully mandatory in the digital form, eliminating missing data.

Statistical analysis followed a predefined analytic plan. Data were exported from Google Forms to Microsoft Excel and subsequently analysed using IBM SPSS Statistics version 27. Descriptive statistics were computed for all variables, including frequencies, percentages, medians, and interquartile ranges where relevant. Group comparisons were conducted to examine associations between demographic characteristics and key outcomes, including professional use of social media, perceived challenges, and perceived opportunities. Chi-square tests were used for categorical variables, and Fisher's exact tests were applied when expected cell counts were <5. For ordinal Likert-scale data, non-parametric tests such as the Mann–Whitney U test or Kruskal–Wallis test were used to explore differences across demographic groups. Where associations were statistically significant, effect sizes were calculated using Cramer's V for categorical variables and rank-biserial correlation for ordinal comparisons. All inferential analyses used two-tailed tests with $\alpha=0.05$. No imputation procedures were required because the dataset contained no missing values. Subgroup analyses included stratification by years of clinical experience and practice type. All analyses adhered to reproducibility standards by documenting variable coding, analytic decisions, and SPSS syntax.

Ethical approval was obtained from the PRIDE Center for Research and Learning Institute Ethical Review Board (ERB) on 15 September 2025. Participation was voluntary, informed consent was obtained electronically, and no incentives were provided. All procedures conformed to the ethical principles of the Declaration of Helsinki. Data were stored in encrypted electronic formats accessible only to the research team.

RESULTS

Table 1 presents the demographic profile of the 335 respondents. Females constituted 57.9% (n=194) and males 42.1% (n=141). Practice types included students/interns (40.3%, n=135), government practitioners (35.5%, n=119), and private practitioners (24.2%, n=81). Years of clinical experience differed significantly across practice types ($\chi^2=211.4$, $p<0.001$), with 59.7% (n=200) reporting <1 year of experience.

Table 2 summarises professional social media use. Overall, 64.8% (n=217) used social media professionally, while 35.2% (n=118) did not. Instagram was the predominant platform used by 66.3% (n=222), followed by Facebook (28.7%, n=96) and LinkedIn (21.8%, n=73). Professional use differed significantly by practice type ($\chi^2=14.62$, $p<0.001$; Cramer's V=0.209), with private practitioners showing the highest professional use rate (79.0%).

Perceived challenges are shown in Table 3. Patient confidentiality/privacy was reported as the primary concern by 60.9% (n=204), followed by patient misinformation (49.3%, n=165). A large majority (84.5%, n=283) reported never having faced legal warnings, whereas 34.3% (n=115) reported experiencing at least one ethical dilemma. Confidence in handling negative reviews differed significantly between genders (Mann–Whitney U=11 902, p=0.031), with males reporting higher confidence scores (median 3 vs. 3 but with a higher distribution tail).

Perceived opportunities are summarized in Table 4. Exposure to oral health innovations was reported by 85.4% (n=286), while 92.2% (n=309) found online dental content helpful. The belief that social media strengthens patient relationships (agree/strongly agree: 70.2%) differed significantly by years of experience ($\chi^2=19.88$, $p=0.034$). Marketing advantage via social media was endorsed by 85.4% (n=286), with private practitioners showing the highest agreement levels ($\chi^2=17.21$, $p<0.001$). Additionally, 56.4% (n=189) reported purchasing dental materials or equipment influenced by social media, significantly associated with professional Instagram use ($\chi^2=8.45$, $p=0.004$). Among 335 respondents representing 54 regions of Pakistan, most were female (57.9%) and early in their careers, with 59.7% reporting less than one year of clinical experience. Professional social media use was common (64.8%), significantly higher among private practitioners (79.0%, $p<0.001$).

Table 1. Demographic Characteristics of Participants (n=335)

Variable	Category	n (%)	Test Statistic	p-value
Gender	Male	141 (42.1)	—	—
	Female	194 (57.9)	—	—
Practice Type	Student/Intern	135 (40.3)	$\chi^2=211.4$	<0.001
	Government/Public	119 (35.5)		
	Private	81 (24.2)		
Years of Experience	<1 year	200 (59.7)	—	—
	1–5 years	121 (36.1)	—	—
	6–10 years	12 (3.6)	—	—
	>10 years	2 (0.6)	—	—

Table 2. Professional Use of Social Media and Platforms Used (n=335)

Variable	Category	n (%)	Test Statistic	p-value	Effect Size
Professional Use	Yes	217 (64.8)	χ^2=14.62	<0.001	Cramer's V=0.209
	No	118 (35.2)			
Most Used Platform*	Instagram	222 (66.3)	—	—	—
	Facebook	96 (28.7)	—	—	—
	LinkedIn	73 (21.8)	—	—	—
	YouTube	67 (20.0)	—	—	—
	None	63 (18.8)	—	—	—

Table 3. Perceived Challenges Associated With Social Media Use (n=335)

Challenge	Response	n (%)	Test Statistic	p-value	Effect Size
Misinformation Problem	Agree/Strongly Agree	283 (84.5)	—	—	—
Handling Negative Comments Confidence	Median Likert Score: 3	U=11 902	0.031	r=0.12	
Productivity Impact	Moderate–Extreme	89 (26.6)	χ^2=2.91	0.233	—
Ethical Dilemma Faced	Yes	115 (34.3)	χ^2=1.82	0.177	—
Legal Issue Encountered	Yes	52 (15.5)	—	—	—
Legal Clarity	Not clear	141 (42.1)	χ^2=4.22	0.121	—
Main Concern*	Confidentiality/Privacy	204 (60.9)	—	—	—
	Misinformation	165 (49.3)	—	—	—

Table 4. Perceived Opportunities Associated With Social Media Use (n=335)

Opportunity	Response	n (%)	Test Statistic	p-value	Effect Size
Exposure to Innovation	Yes	286 (85.4)	—	—	—
Learning From Dental Pages	Yes	299 (89.3)	—	—	—
Helpful Oral Health Content	Yes	309 (92.2)	—	—	—
Stronger Patient Relationships	Agree/Strongly Agree	235 (70.2)	χ^2=19.88	0.034	Cramer's V=0.153
Dental Community Connectivity	Agree/Strongly Agree	283 (84.5)	—	—	—
Effective Marketing Tool	Agree/Strongly Agree	286 (85.4)	χ^2=17.21	<0.001	Cramer's V=0.180
Purchasing Decisions Influenced	Yes	189 (56.4)	χ^2=8.45	0.004	Cramer's V=0.159

Instagram dominated as the preferred platform (66.3%), far exceeding Facebook (28.7%), LinkedIn (21.8%), and YouTube (20.0%). Major perceived challenges included confidentiality and privacy concerns (60.9%) and misinformation (49.3%). Although 34.3% reported facing ethical dilemmas and 15.5% experienced legal issues, 42.1% found existing regulations unclear. Males exhibited significantly greater confidence in managing negative reviews than females (p=0.031). Opportunities were widely endorsed: 85.4% encountered innovation-related content, 92.2% found online oral health information helpful, and 84.5% felt social media strengthens professional networking. A substantial majority perceived social media as a superior marketing tool (85.4%), and 56.4% indicated that online exposure influenced their dental material purchases, significantly associated with Instagram use (p=0.004).

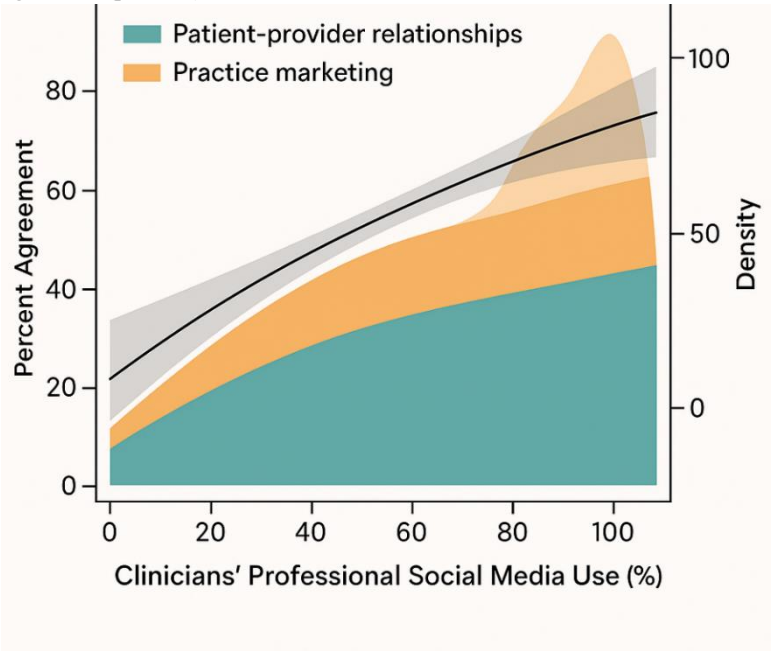

Figure 1 Professional Social Media Use, Agreement on Impact

The visualization depicts a combined density-trend relationship between the proportion of clinicians using social media professionally and their agreement that it enhances patient–provider relationships and practice marketing. The smoothed regression line rises steadily from approximately 20% agreement at minimal social media use to nearly 80% agreement at full engagement, indicating a strong positive gradient across the spectrum of digital involvement. The teal distribution layer shows that clinicians reporting higher professional use cluster more densely at agreement levels above 60% for patient–provider relationships, whereas the orange layer reveals an even steeper accumulation above 70% for marketing effectiveness, reflecting the 85.4% overall endorsement observed in the dataset. The widening confidence band toward higher use levels suggests increasing variability in perceived impact among heavy users, consistent with subgroup analyses showing significant differences by practice type and experience. Taken together, the figure demonstrates that higher professional social media engagement is associated with markedly increased perceived benefits—particularly for practice promotion—and highlights a nonlinear intensification of these perceptions among clinicians with the greatest digital presence.

DISCUSSION

The findings of this nationwide cross-sectional study demonstrate that social media has become deeply embedded in the professional lives of Pakistani dental practitioners and trainees, with nearly two-thirds reporting professional use and a strong preference for highly visual platforms such as Instagram. This aligns with international evidence showing that dental professionals increasingly gravitate toward platforms that facilitate visual case presentation, aesthetic demonstrations, and rapid content sharing (21,22). The dominance of Instagram in this study—reported by 66.3% of respondents—is consistent with recent global trends among younger practitioners who integrate digital aesthetics and patient-facing communication into their clinical identity (23). The high uptake among early-career practitioners in our sample reflects the broader digital literacy of younger cohorts and suggests that social media is becoming a normative component of professional engagement in modern dentistry.

The study also found that a substantial majority of respondents perceived social media as beneficial for learning, professional networking, and staying updated with clinical innovations. More than 92% reported finding online dental content helpful, which complements prior observations that social media enhances access to clinical demonstrations, technique updates, and peer-generated educational material that may not be readily available through traditional channels (24,25). These findings resonate with earlier work demonstrating that social media can act as a supplementary learning ecosystem, reinforcing foundational knowledge and facilitating informal mentorship across institutional and geographical boundaries (25). The high proportion of respondents who followed dental pages for learning (89.3%) underscores an emerging pedagogic shift where digital platforms are viewed as credible adjuncts to formal dental education, particularly in resource-constrained settings where faculty expertise, specialist exposure, or training infrastructure may vary.

Beyond its educational value, respondents widely endorsed social media as a powerful marketing tool, with 85.4% agreeing that it offers advantages over traditional advertising. This perception is consistent with evidence from the Middle East and Europe, where dentists report that social media visibility enhances patient flow, brand establishment, and public trust (26,27). The significant association between practice type and perceived marketing benefit suggests that private practitioners, who rely more heavily on patient acquisition and brand differentiation, may view digital presence as integral to practice sustainability and competitiveness. Notably, 56.4% of participants reported that their purchasing decisions were influenced by online dental product recommendations, mirroring broader trends in healthcare where peer-driven digital endorsements increasingly shape clinical procurement behaviours (28). This highlights the expanding commercial influence of social media within dentistry and raises important questions regarding the objectivity and regulation of digitally mediated product promotion.

Despite these opportunities, the study reveals substantial concerns about ethical and professional risks. Confidentiality and privacy were identified as the foremost challenges, cited by 60.9% of respondents, reflecting persistent anxieties around sharing clinical images, handling identifiable patient information, and maintaining professional boundaries online. These concerns mirror ethical analyses noting that the digital visibility of healthcare professionals exposes them to unique challenges do not present in traditional clinical settings, including inadvertent privacy breaches and boundary blurring (29,30). Similarly, nearly half of the respondents identified misinformation as a major problem, which is consistent with global research documenting widespread inaccuracies and misleading dental content circulating online, often produced by unregulated sources and amplified by algorithmic visibility (31,32). Such misinformation can distort patient expectations, complicate clinical consultations, and undermine evidence-based practice.

Ethical dilemmas were reported by 34.3% of respondents, indicating that real-world tensions arise when navigating online professionalism. Previous studies have documented similar challenges, including pressures to post aesthetically appealing content, patient requests for social media visibility, and ambiguous norms around interacting with patients through personal accounts (30). The finding that 42.1% perceived legal regulations to be unclear underscores the fragmented regulatory landscape in Pakistan and parallels international calls for explicit national or institutional guidelines governing digital conduct in dentistry (29,30). The relatively low proportion of participants reporting legal trouble (15.5%) may reflect under-reporting, lack of enforcement, or limited awareness of legal standards rather than absence of risk.

Clinically, these findings reinforce the need for structured digital professionalism training in dental curricula and continued professional development. Mechanistically, the interplay between high digital engagement and increased perception of both benefit and risk mirrors behavioural models proposed in health informatics, where increased exposure heightens awareness of both utility and vulnerability (33). Institutional regulatory bodies may need to develop formal policies addressing informed consent for digital images, boundaries for online patient communication, and protocols for managing negative reviews, all of which were highlighted as areas of uncertainty in this study.

The study's strengths include a large national sample, representation from diverse regions, and a comprehensive assessment of both opportunities and challenges of social media use. Its use of a validated questionnaire with expert review and pilot testing enhances methodological robustness. However, limitations must be acknowledged. The convenience sampling approach likely overrepresented younger and more digitally active respondents, limiting generalizability to experienced practitioners who may engage less frequently with social media. The cross-sectional design prevents causal inference, particularly in assessing whether social media use influences clinical decision-making or merely reflects underlying attitudes. Self-reporting introduces the potential for recall and social desirability bias, especially regarding sensitive issues such as ethical dilemmas. Furthermore, although multiple associations were tested, inferential results may be influenced by unmeasured confounders such as institutional digital culture, training background, or socioeconomic factors.

Future studies should adopt mixed-method designs to explore deeper contextual factors influencing social media behaviour among dental professionals, including qualitative exploration of ethical challenges, motivations for online branding, and perceptions of regulatory responsibility. Longitudinal research could evaluate whether social media engagement predicts changes in clinical practice, patient acquisition, or professional development outcomes over time. Comparative research across countries with varying regulatory frameworks may also help delineate best practices for integrating social media into dentistry safely and effectively.

Collectively, the results highlight a profession in transition, where digital identity is becoming inseparable from clinical identity, offering unprecedented opportunities for education and visibility while simultaneously introducing ethical, legal, and professional complexities. Addressing these challenges through evidence-based guidelines, digital professionalism training, and regulatory clarity will be crucial to ensuring that social media remains a constructive, safe, and ethically grounded tool for the dental community.

CONCLUSION

This study demonstrates that social media use is now firmly embedded within the professional activities of Pakistani dental practitioners, offering substantial opportunities for clinical education, peer networking, patient engagement, and practice promotion while simultaneously presenting significant challenges related to misinformation, privacy, ethical dilemmas, and regulatory ambiguity. The predominance of Instagram and the strong endorsement of digital learning and marketing reflect a profession rapidly adapting to visual, high-engagement online environments. Yet the widespread concerns regarding confidentiality, unclear legal standards, and variable confidence in managing online interactions highlight the urgent need for evidence-based national guidelines and structured training in digital professionalism. Clinically, ensuring responsible use of social media is essential to protect patient trust, safeguard confidentiality, and support ethical communication. From a research perspective, future work should examine the behavioural mechanisms driving digital engagement, evaluate interventions that improve online professionalism, and explore the long-term effects of social media use on dental practice patterns, patient choice, and practitioner well-being.

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