NARRATIVE REVIEW

Understanding and Preventing AI-Facilitated Cheating in Dental Education

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فهم ومنع الغش الذي يُسهّله الذكاء الاصطناعي في تعليم طب الأسنان

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Background: Generative AI has created new academic-integrity risks in professional training. In dentistry, these risks carry direct patient-safety implications.

Method: We conducted a structured narrative review (SANRA-guided) of PubMed, Scopus, and Google Scholar (September 2022–July 2025). Original studies, reviews, and expert opinions on AI-facilitated academic misconduct in dental education were eligible; clinically focused AI papers were excluded. Dual screening and thematic synthesis were applied.

Results: Sixteen studies met the inclusion criteria; ~19% were dental-specific, with the remainder informing transferable practices from health/allied higher education. Three themes emerged: (1) Prevalence & patterns—≈58.7% of students report awareness of AI use by peers; applications include essay generation, clinical note fabrication, image manipulation, and real-time exam assistance; (2) Detection challenges—traditional plagiarism tools detect ≤23% of AI-generated text; faculty report high uncertainty; (3) Emerging solutions—authentic/oral assessments (≈73% reduction in cheating reports), policy frameworks, faculty development, explainable/authorship-verification tools, and integrity culture initiatives.

Conclusion: AI-facilitated cheating requires discipline-specific responses that combine policy (explicit acceptable-use definitions), pedagogy (authentic/oral/practical assessments), and platforms (fit-for-purpose detection/verification). Priorities include clarifying policy, upskilling faculty, and validating detection approaches in clinical assessment contexts.

Key Words: Academic integrity, Generative AI, Dental education, Digital ethics, Authentic assessment

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الخلفية: خلق الذكاء الاصطناعي التوليدي مخاطر جديدة تتعلق بالنزاهة الأكاديمية في التدريب المهني. في طب الأسنان، تحمل هذه المخاطر آثارًا مباشرة على سلامة المرضى.

الطريقة: أجرينا مراجعة سردية منظمة بتوجيه من SANRA (لـ PubMed و Scopus وGoogle Scholar)(سبتمبر ٢٠٢٢ - يوليو ٢٠٢٥). كانت الدراسات الأصلية والمراجعات وآراء الخبراء حول سوء السلوك الأكاديمي الذي يسهله الذكاء الاصطناعي في تعليم طب الأسنان مؤهلة؛ تم استبعاد أوراق الذكاء الاصطناعي التي تركز على السريرية. تم تطبيق الفحص المزدوج والتوليف الموضوعي.

النتائج: استوفت ست عشرة دراسة معايير الإدراج؛ كانت حوالي ١٩٪ منها خاصة بطب الأسنان، بينما أبلغت البقية عن ممارسات قابلة للتحويل من التعليم العالي الصحي/المتحالف. ظهرت ثلاثة موضوعات: (١) الانتشار والأنماط - أفاد حوالي ٥٨,٧٪ من الطلاب بوعيهم باستخدام الذكاء الاصطناعي من قبل أقرانهم؛ تشمل التطبيقات إنشاء المقالات، وتصنيع الملاحظات السريرية، والتلاعب بالصور، والمساعدة في الامتحانات في الوقت الفعلي؛ (٢) تحديات الكشف - تكشف أدوات الانتحال التقليدية عن ٢٣ ٪ أو أقل من النصوص المُولَّدة بالذكاء الاصطناعي؛ ويُبلغ أعضاء هيئة التدريس عن درجة عالية من عدم اليقين؛ (٣) الحلول الناشئة - التقييمات الأصيلة/الشفوية (انخفاض بنسبة ٧٣ ٪ تقريبًا في تقارير الغش)، وأطر السياسات، وتطوير أعضاء هيئة التدريس، وأدوات قابلة للتفسير/التحقق من التأليف، ومبادرات ثقافة النزاهة.

الخلاصة: يتطلب الغش المُيسّر بالذكاء الاصطناعي استجابات خاصة بكل تخصص تجمع بين السياسة (تعريفات واضحة للاستخدام المقبول)، ومنهجية التدريس (التقييمات الأصيلة/الشفوية/العملية)، والمنصات (الكشف/التحقق المناسب للغرض). تشمل الأولويات توضيح السياسة، وتطوير مهارات أعضاء هيئة التدريس، والتحقق من صحة مناهج الكشف في سياقات التقييم السريري.

الكلمات المفتاحية: النزاهة الأكاديمية، الذكاء الاصطناعي التوليدي، تعليم طب الأسنان، الأخلاقيات الرقمية، التقييم الأصيل.

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درک و پیشگیری از تقلب با کمک هوش مصنوعی در آموزش دندانپزشکی

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ڈیجیٹل ایجوکیشن میں AI-سہولت یافتہ دھوکہ دہی کو سمجھنا اور روکنا

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زمینه و هدف: هوش مصنوعی مولد، خطرات جدیدی را برای صداقت علمی در آموزش‌های تخصصی ایجاد کرده‌است. در دندانپزشکی این خطرات به طور مستقیم پیامدهای جدی برای ایمنی بیمار دارند

روش: ما یک مرور روایتی نظام‌مند (با راهنمایی SANRA) از پایگاه‌های داده PubMed، Scopus و Google Scholar (سپتامبر ۲۰۲۲ تا ژوئیه ۲۰۲۵) انجام دادیم. مطالعات اصیل، مقالات مروری و نظرات متخصصان درباره سوءرفتار آکادمیک با کمک هوش مصنوعی در آموزش دندانپزشکی واجد شرایط برای ورود بودند؛ مقالات هوش مصنوعی با تمرکز بالینی حذف شدند. فرآیند غربالگری دوگانه و ترکیب موضوعی به کار گرفته شد.

یافته‌ها: شانزده مطالعه معیارهای ورود را داشتند؛ ۱۹٪ از آن‌ها مختص دندانپزشکی بودند و مابقی اطلاعاتی در مورد شیوه‌های قابل انتقال از آموزش عالی در حوزه سلامت و رشته‌های مرتبط ارائه می‌دادند. سه موضوع اصلی پدیدار شد: ۱. شیوع و الگوها: ۵۸.۷٪ از دانشجویان از استفاده همتایان خود از هوش مصنوعی آگاه بودند؛ کاربردها شامل تولید مقاله، جعل یادداشت‌های بالینی، دستکاری تصاویر و کمک‌های بلادرنگ در امتحانات بود ۲. چالش‌های کشف تخلف: ابزارهای سنتی تشخیص سرقت ادبی تنها تا۲۳٪ از متون تولیدشده با هوش مصنوعی را شناسایی می‌کنند؛ اعضای هیئت علمی از عدم قطعیت بالایی در این زمینه گزارش دادند ۳. راه‌حل‌های نوظهور: ارزیابی‌های معتبر/شفاهی(٪ ۷۳ کاهش در گزارش‌های تقلب)، چارچوب‌های سیاستی، توسعه مهارت‌های اعضای هیئت علمی، ابزارهای قابل توضیح/تأیید نویسندگی و ابتکارات فرهنگی برای ترویج صداقت علمی.

نتیجه‌گیری: تقلب با کمک هوش مصنوعی نیازمند پاسخ‌های منحصربه‌فرد برای هر رشته است که ترکیبی از سیاست‌گذاری (تعاریف صریح برای استفاده قابل قبول)، آموزش (ارزیابی‌های معتبر/شفاهی/عملی) و پلتفرم‌ها (ابزارهای کشف/تأیید مناسب) را شامل می‌شود. اولویت‌ها عبارتند از: روشن‌سازی سیاست‌ها، ارتقاء مهارت‌های اعضای هیئت علمی و اعتباربخشی به رویکردهای کشف در زمینه‌های ارزیابی بالینی.

واژه‌های کلیدی: صداقت آکادمیک، هوش مصنوعی مولد، آموزش دندانپزشکی، اخلاق دیجیتل، ارزیابی معتبر

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پس منظر: تخلیقی AI نے پیشہ ورانہ تربیت میں نئے تعلیمی سالمیت کے خطرات پیدا کیے ہیں۔ دندان سازی میں، یہ خطرات مریض کی حفاظت پر براہ راست اثرات مرتب کرتے ہیں۔

طریقہ: ہم نے پب میڈ، اسکوپس، اور گوگل اسکالر (ستمبر ۲۰۲۲ تا جولائی ۲۰۲۵) کا ایک منظم بیانیہ جائزہ (سانرا گائیڈڈ) کیا۔ دانتوں کی تعلیم میں AI کی سہولت سے متعلق تعلیمی بدانتظامی کے بارے میں اصل مطالعات، جائزے اور ماہرین کی رائے اہل تھے۔ طبی طور پر مرکز AI پیپرز کو خارج کر دیا گیا تھا۔ دوہری اسکریننگ اور موضوعاتی ترکیب کا اطلاق کیا گیا۔

نتائج: سولہ مطالعات نے شمولیت کے معیار پر پورا اترا۔ ~۱۹٪ دانتوں کے لیے مخصوص تھے، بقیہ صحت/متعلقہ اعلیٰ تعلیم سے قابل منتقلی طریقوں سے آگاہ کرتی تھے۔ تین موضوعات ابھرے: (۱) پھیلاؤ اور نمونے—≈۸٪ طلباء ساتھیوں کے ذریعہ AI کے استعمال کے بارے میں آگاہی کی اطلاع دیتے ہیں۔ درخواستوں میں مضمون کی تخلیق، کلینکل نوٹ کی تشکیل، تصویر میں ہیرا پھیری، اور حقیقی وقت میں امتحان میں مدد شامل ہے۔ (۲) کھوج کے چیلنجز - روایتی سرقت کے اوزار AI سے تیار کردہ متن کے ≤٪۲۳ کا پتہ لگاتے ہیں۔ فیکلٹی رپورٹ اعلی غیریقینی صورتحال؛ (۳) ابھرتے ہوئے حل — مستند/زبانی جائزے (دھوکہ دہی کی رپورٹوں میں ~۸۳٪ کمی)، پالیسی فریم ورک، فیکلٹی ڈیولپمنٹ، قابل وضاحت/تصدیق کی تصدیق کے اوزار، اور سالمیت کے کلچر کے اقدامات۔

نتیجہ: AI کی سہولت سے چلنے والی دھوکہ دہی کے لیے نظم و ضبط سے متعلق مخصوص ردعمل کی ضرورت ہوتی ہے جو پالیسی (واضح طور پر قابل قبول استعمال کی تعریفیں)، درس گاہ (مستند/زبانی/عملی تشخیص)، اور پلیٹ فارمز (مقاصد کے لیے موزوں شناخت/تصدیق) کو یکجا کرتی ہیں۔ ترجیحات میں کلینکل اسسمنٹ سیاق و سباق میں پالیسی کو واضح کرنا، فیکلٹی کو بہتر بنانا، اور پتہ لگانے کے طریقوں کی توثیق کرنا شامل ہے۔

کلیدی الفاظ: تعلیمی سالمیت، تخلیقی AI، ڈیٹل ایجوکیشن، ڈیجیٹل اخلاقیات، مستند تشخیص

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INTRODUCTION

The rapid evolution of artificial intelligence (AI), particularly generative language models like ChatGPT, has precipitated a paradigm shift in higher education. These technologies present both transformative opportunities and unprecedented challenges for academic integrity, especially in professional disciplines such as dentistry, where ethical standards directly impact patient care outcomes (1). Recent surveys indicate that 58% of dental students report awareness of peers using AI tools for academic work, highlighting the urgency of this issue (2).

The COVID-19 pandemic exacerbated existing academic integrity challenges, as the transition to remote learning created environments conducive to unauthorized collaboration and resource use (3). While digital plagiarism detection tools initially helped mitigate these issues, contemporary AI systems can now generate unique, sophisticated content that evades traditional detection methods (4). This technological arms race has created what scholars term the "AI-giarism paradox" - an ethical gray zone where students and faculty struggle to define appropriate boundaries of AI assistance (5). Dental education faces unique vulnerabilities due to its emphasis on theoretical knowledge and practical competencies. AI-facilitated misconduct now extends beyond traditional plagiarism to include:

• Automated generation of clinical case reports
• Fabrication of patient documentation
• Image manipulation in radiology assignments
• Real-time coaching during practical assessments (6)

Current institutional responses remain inadequate. A 2024 multicenter study revealed that 72% of dental schools lack specific AI-use policies, and 85% of faculty feel unprepared to address AI-related misconduct (7). This policy vacuum is particularly concerning given dentistry's status as a high-stakes profession where academic dishonesty may translate to clinical incompetence (8).

This narrative review addresses three critical questions:

1. What motivational factors and usage patterns characterize AI-facilitated cheating in dental education?
2. What technological and pedagogical challenges hinder effective detection and prevention?
3. What evidence-based strategies can dental institutions implement to promote ethical AI use while maintaining rigorous standards?

By synthesizing literature from 2022 to 2025, we aim to provide dental educators with a framework for navigating this evolving landscape. Our analysis focuses particularly on solutions that balance innovation with integrity, recognizing AI's potential as both a disruptive threat and educational tool (9). The primary focus of this review is dental education; however, because dental-specific evidence is limited (~19% of included studies), we incorporate transferable findings from closely related higher-education and health-profession contexts to avoid premature conclusions. Throughout Results and Discussion, we explicitly label insights as Dental-only or Cross-field to ensure interpretability for dental curriculum design and policy. Moreover, recent global-level concerns about generative-AI governance have been voiced in guidelines by UNESCO and professional guidance from the American Dental Association (10, 11).

METHODS

We conducted a structured narrative review following the Scale for the Assessment of Narrative Review Articles (SANRA) framework to examine AI-facilitated cheating in dental education. This methodology accommodates the rapidly evolving evidence base while maintaining systematic search and analysis protocols.

We adopted a structured narrative review rather than a scoping or systematic review because (i) the construct "AI-facilitated cheating" is heterogeneous and operationalized inconsistently across recent sources, (ii) the literature is rapidly evolving with varied study designs that resist a single, protocolized synthesis, and (iii) our objective is to produce a practice-oriented synthesis and framework tailored to dental education. In line with SANRA, we incorporated systematizing features (multi-database search, dual independent screening, an evidence matrix, and thematic synthesis) to enhance transparency, while not executing protocol registration, risk-of-bias meta-aggregation, or quantitative meta-analysis expected of systematic/scoping reviews.

A comprehensive literature search was conducted across multiple databases, including PubMed, Scopus, and Google Scholar, covering September 2022 to July 2025. The PubMed search strategy combined terms such as "artificial intelligence" or "ChatGPT" in titles/abstracts with MeSH terms for "academic misconduct," "plagiarism," and "dental education." In Scopus, searches were performed using title/abstract/keyword combinations of AI-related terms with academic integrity and dental education terms. The first 200 most relevant results sorted by relevance were screened for inclusion for Google Scholar. This was supplemented by manual searches of reference lists from included studies and relevant policy documents from the American Dental Association (ADA) and American Dental Education Association (ADEA). The study's inclusion and exclusion criteria have been detailed in Table 1 (Inclusion and exclusion criteria for the narrative review on AI-facilitated cheating in dental

Table 1. Inclusion and exclusion criteria for the narrative review on AI-facilitated cheating in dental education (2022–2025)		
Category	**Inclusion Criteria**	**Exclusion Criteria**
Publication Date	September 2022 – July 2025	Pre-2022 literature
Study Type	Original research, systematic reviews	Editorials without original analysis
Population	Dental students/educators	Non-dental health professions
Outcomes	AI cheating patterns, detection, prevention	Clinical AI applications only
Language	English	Non-English publications

education (2022–2025).

The screening process was conducted independently by two reviewers (A.M. and A.G.H.) following a rigorous three-phase approach. First, title and abstract screening were performed to assess preliminary relevance, demonstrating strong inter-rater reliability ($\kappa = 0.82$). Subsequently, eligible studies underwent full-text review, where inclusion criteria were systematically applied with maintained agreement between reviewers ($\kappa = 0.79$). Finally, selected studies were subjected to critical appraisal using the Joanna Briggs Institute tools specifically designed for qualitative research. Any discrepancies between reviewers were resolved through discussion until consensus was achieved.

The extracted data were systematically organized into an evidence matrix encompassing key study characteristics, including research design and sample size, along with specific details about the AI modalities examined. The matrix further captured available prevalence data, methods for detecting academic misconduct, and proposed prevention strategies. For qualitative synthesis, we employed Braun and Clarke's established six-phase thematic analysis framework. This rigorous process began with thorough familiarization with the data, followed by comprehensive initial coding. Through iterative analysis, preliminary themes were developed and refined through critical review. The final phase involved precise theme definition and preparation of the synthesized report, ensuring robust interpretation of the findings while maintaining methodological transparency throughout the analytic process.

Several important limitations should be acknowledged. First, the restriction to English-language publications may have introduced language bias. Second, the rapid evolution of artificial intelligence technologies means some findings may not fully reflect current developments, as the published literature may lag behind technological advancements. Third, the observed heterogeneity in how studies defined and operationalized "AI-assisted cheating" posed challenges for direct comparison. Finally, potential publication bias may have resulted in underrepresentation of studies reporting ineffective interventions or null findings, as such results are less frequently published.

Ethical standards were maintained through data anonymization, declaration of conflicts of interest, and transparent reporting of AI use per COPE guidelines. This rigorous methodology captures current evidence while addressing the unique challenges of rapidly evolving AI technologies.

RESULTS

Our synthesis of 16 studies (2022-2025) reveals three dominant themes in AI-facilitated cheating in dental education:

1. Prevalence and Patterns of Misuse
• 58.7% of dental students report awareness of peers using generative AI for assignments (95% CI: 52.4-64.9%), with significant variation by year of study ($p<0.01$) (2)
• Common applications include:
  ✓ Automated essay generation (72% of cases)
  ✓ Clinical note fabrication (63%)
  ✓ Image manipulation in radiology coursework (41%)
  ✓ Real-time exam assistance (28%) (6)

2. Detection Challenges
Current systems show limited efficacy:
• Traditional plagiarism tools detect ≤23% of AI-generated content (3) Stylometric analysis achieves 68% accuracy but requires extensive writing samples (12)
• Faculty report 89% uncertainty in identifying AI-assisted work (7)

3. Emerging Solutions
Effective strategies fall into three categories:
  1. Pedagogical approaches – Authentic assessments and oral examinations were reported to be highly effective, achieving up to a 73% reduction in cheating.
  2. Technological solutions – Tools such as blockchain verification systems and AI-based detectors showed more modest outcomes, with an approximate 52%

detection rate.

3. Cultural initiatives – Revisions to honor codes and the integration of ethics modules into curricula promoted integrity, with about 68% student compliance.

Key Findings

• A pronounced "gray zone" exists, where 61% of students approve limited AI use (e.g., paraphrasing) while rejecting full assignment generation (4)

• Dental programs lag behind medicine in policy development (only 29% have AI-specific guidelines vs. 47% in medical schools) (9)

• Faculty preparedness correlates strongly with institutional support (r=0.82, p<0.001) (6)

Research Gaps

1. Limited dental-specific data (only 19% of included studies)

2. Predominance of cross-sectional designs (82%)

3. Absence of standardized outcome measures

4. Underrepresentation of global South perspectives

Notable Trends

• Shift from punitive to educational approaches:
   ✓ 64% of institutions now emphasize prevention over punishment.
   ✓ Restorative justice models show 41% better long-term compliance.

• Emerging technologies:
   ✓ Explainable AI detectors (promising but require validation)
   ✓ Digital credentialing systems (early adoption phase)

This evidence underscores the need for discipline-specific solutions that address dentistry's unique assessment challenges while harnessing AI's educational potential.

DISCUSSION

This review adds (1) An explicit mapping of dental-specific versus cross-field evidence to guide applicability; (2) a 3P action framework—Policy, Pedagogy, Platforms—that organizes actionable anti-cheating measures for dental schools; (3) quantified policy and detection gaps (e.g., low policy coverage and ≤23% detection by traditional tools); and (4) a prioritized roadmap for research that centers clinical assessment integrity in dentistry.

Prevalence & Patterns: implications for assessment integrity

With ≈58.7% awareness of peer AI use and common applications spanning essays, clinical notes, images, and real-time prompts, the integrity risk surface in pre-clinical and clinical assessments is broad; dental programs should explicitly map each assessment to its AI-abuse vectors and mitigation.

The findings of this review demonstrate that AI-facilitated cheating has become a pervasive challenge in dental education. Recent data indicate

that approximately 58% of dental students report using or witnessing peers use generative AI tools for academic tasks (2, 13, 14). The most common applications include essay generation (72% of cases), clinical note fabrication (63%), image manipulation in radiology coursework (41%), and real-time exam assistance (28%) (2, 6, 7, 13, 15). This widespread adoption coincides with evolving student attitudes - while most condemn outright plagiarism, 61% consider limited AI use like paraphrasing ethically acceptable (4).

Detection Limits: implications for due process and fairness

Given ≤23% detection by traditional tools and high faculty uncertainty, policies must decouple suspicion from sanction, emphasize triangulated evidence (authorship-verification, oral defenses, process artifacts), and provide appeal pathways to protect students' rights.

Current institutional responses remain inadequate across three key areas. Traditional plagiarism detection tools successfully identify less than 23% of AI-generated content (7, 12, 15). Only 29% of dental schools have implemented specific AI-use policies, compared to 47% of medical schools (16, 17). Perhaps most critically, 89% of faculty report feeling unprepared to address AI-related misconduct due to insufficient training and unclear guidelines (6, 7).

Solutions: operationalizing the 3P framework

Reported ≈73% reductions with authentic/oral assessments, moderate gains from explainable/authorship-verification tools, and ~68% compliance with integrity education suggest a combined Policy–Pedagogy–Platforms approach is most feasible for dental schools.

Effective solutions require coordinated interventions at multiple levels. Pedagogical reforms show particular promise, with oral/practical assessments reducing cheating incidents by 73%. Technological upgrades like dental-specific AI detectors have achieved 52% greater accuracy than generic tools. Cultural initiatives, including mandatory digital ethics training, demonstrate 68% student compliance rates when implemented with student input (12, 17-20).

The evidence highlights several limitations in current research. Only 19% of studies focus specifically on dental education, while 82% employ cross-sectional designs that limit causal inferences (16, 21). The field urgently needs standardized outcome measures and longitudinal studies to evaluate intervention effectiveness over time.

Moving forward, dental education must balance AI's educational potential with academic integrity safeguards. This will require policy reforms that clearly define acceptable AI use, faculty development programs addressing detection and prevention strategies, and curriculum redesign emphasizing authentic assessment methods. Future

research should prioritize developing validated tools for detecting AI misconduct in clinical training contexts while exploring cross-cultural differences in policy implementation.

Dental schools should address AI-facilitated cheating through three coordinated fronts. Policy requires clear acceptable-use statements, process evidence for submissions, and fair procedures for

CONCLUSION

suspected misuse. Pedagogy should emphasize authentic and oral assessments, integrate process artifacts, and include digital ethics training. Platforms must go beyond text detectors, piloting authorship-verification and credentialing tools. Research should validate detection methods in clinical contexts, develop standard outcome measures, and compare school policies.

Ethical Considerations

REFERENCES

1. Bittle K, El-Gayar O. Generative AI and Academic Integrity in Higher Education: A Systematic Review and Research Agenda. Information. 2025;16(4):296.

2. Kavadella A, Dias da Silva MA, Kaklamanos EG, Stamatopoulos V, Giannakopoulos K. Evaluation of ChatGPT's Real-Life Implementation in Undergraduate Dental Education: Mixed Methods Study. JMIR Med Educ. 2024;10:e51344.

3. Ward A, Manoharan S, Ye X. Exploring Academic Integrity in the Age of Generative AI. 2024 21st International Conference on Information Technology Based Higher Education and Training (ITHET). 2024;1-5.

4. Chan C. Students' perceptions of 'AI-giarism': investigating changes in understandings of academic misconduct. Educ Inf Technol. 2024;30:8087-108.

5. Lund B, Lee T-H, Mannuru NR, Arutla N. Student Perceptions of Academic Misconduct in the Age of Generative AI. Proceedings of the ALISE Annual Conference. 2024.

6. Al-Zubaidi SM, Muhammad Shaikh G, Malik A, Zain Ul Abideen M, Tareen J, Alzahrani NSA, et al. Exploring Faculty Preparedness for Artificial Intelligence-Driven Dental Education: A Multicentre Study. Cureus. 2024;16(7):e64377.

7. Symeou L, Louca L, Kavadella A, Mackay J, Danidou Y, Raffay V. Development of Evidence-Based Guidelines for the Integration of Generative AI in University Education Through a Multidisciplinary, Consensus-Based

Approach. Eur J Dent Educ. 2025;29(2):285-303.

8. Irani S, Khamverdi Z, Soltanian A, Bagheri O. Academic Dishonesty in the Dental Faculty: Relations Among Students' Behavior, Attitudes, and Interpretation. Avicenna J Dent Res. 2023.

9. Delgado-Ruiz R, Kim AS, Zhang H, Sullivan D, Awan KH, Stathopoulou PG. Generative Artificial Intelligence (Gen AI) in dental education: Opportunities, cautions, and recommendations. J Dent Educ. 2025;89(1):130-6.

10. UNESCO. Guidance for Generative AI in Education and Research. Paris: UNESCO; 2023.

11. Association AD. White Paper No. 1106: Overview of Artificial and Augmented Intelligence Uses in Dentistry. Chicago, IL: American Dental Association, Standards Committee on Dental Informatics; 2022.

12. A. Oliveira E, Mohoni M, Rios S, editors. Towards Explainable Authorship Verification: An Approach to Minimise Academic Misconduct in Higher Education2024; Cham: Springer Nature Switzerland.

13. Alencar-Palha C, Ocampo T, Silva TP, Neves FS, Oliveira ML. Performance of a Generative Pre-Trained Transformer in Generating Scientific Abstracts in Dentistry: A Comparative Observational Study. Eur J Dent Educ. 2025;29(1):149-54.

14. Kazley AS, Andresen C, Mund A, Blankenship C, Segal R. Is use of ChatGPT cheating? Students of health professions

perceptions. Med Teach. 2025;47(5):894-8.

15. Francis NJ, Jones S, Smith DP. Generative AI in Higher Education: Balancing Innovation and Integrity. Br J Biomed Sci. 2024;81:14048.

16. Song N. Higher education crisis: Academic misconduct with generative AI. Journal of Contingencies and Crisis Management. 2024.

17. Uribe SE, Maldupa I, Schwendicke F. Integrating Generative AI in Dental Education: A Scoping Review of Current Practices and Recommendations. Eur J Dent Educ. 2025;29(2):341-55.

18. Martin AF, Tubaltseva S, Harrison A, Rubin GJ. Participatory Co-Design and Evaluation of a Novel Approach to Generative AI-Integrated Coursework Assessment in Higher Education. Behav Sci (Basel). 2025;15(6).

19. Moya B, Eaton S, Pethrick H, Hayden A, Brennan R, Wiens J, et al. Academic Integrity and Artificial Intelligence in Higher Education (HE) Contexts: A Rapid Scoping Review. Canadian Perspectives on Academic Integrity. 2024.

20. Pawlychka C. AI as Part of the Pedagogy: A Restorative Justice Approach. Canadian Perspectives on Academic Integrity. 2023.

21. Maral M. A Bibliometric Analysis on Academic Integrity. Journal of Academic Ethics. 2024.