

## Transparency gap in AI-assisted medical writing and its implications for research integrity

Vita Widyasari\*<sup>1</sup>

<sup>1</sup>Department of Public Health, Faculty of Medicine, Universitas Islam Indonesia, Yogyakarta, Indonesia

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### \*Corresponding author:

[vita.widyasari@uui.ac.id](mailto:vita.widyasari@uui.ac.id)

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Editorial

The integration of artificial intelligence (AI) into scientific writing has introduced significant challenges related to transparency, ethics, and research integrity. The rapid advancement of AI has not been matched by a corresponding level of transparency among authors in explicitly declaring its use within the writing process. Notably, only 0.1% of papers published since 2023 have explicitly disclosed the use of AI, despite the fact that approximately 70% of journals have established policies mandating such disclosure.<sup>1</sup> This raises a more troubling question: if authors are not transparent about AI use, what else in the manuscript remains undisclosed?

Artificial intelligence systems are inherently prone to generating inaccurate or fabricated content, including spurious citations and inappropriate references. Such outputs pose a direct threat to the validity of scientific manuscripts, as they may not be grounded in verifiable and accountable sources.<sup>2</sup> Empirical studies comparing human-written text and AI-assisted writing further demonstrate that existing AI detection tools struggle to reliably distinguish between the two.<sup>3,4</sup> This limitation significantly complicates efforts to ensure transparency and accountability in scientific writing.

At the same time, the use of AI introduces new questions regarding authorship, intellectual contribution, and ownership. Current guidelines remain fragmented and insufficient, failing to provide a consistent framework for documenting AI contributions across journals. These should include explicit reporting of the extent of AI involvement, the specific tools used, their versions, and other relevant parameters. Equally important is the role of human authors in maintaining full accountability for the integrity, accuracy, and credibility of the manuscript.<sup>5-7</sup>

It is undeniable that AI can enhance efficiency and clarity in scientific communication. However, to ensure that its use remains aligned with the principles of rigorous scholarship, several considerations should be emphasized. First, researchers should independently and in sufficient detail develop and articulate their research ideas before employing AI tools for drafting or refinement.<sup>8</sup> Second, structured training and awareness programs on the ethical use of AI in academic writing are essential for students, academics, and researchers alike.<sup>9,10</sup> Third, journal policies on AI use should be revisited and strengthened, with a clear emphasis on meaningful transparency rather than formal compliance.<sup>1</sup> Finally, AI-generated outputs must always be subject to thorough human oversight, with authors bearing full responsibility for verifying and validating all content.<sup>3</sup>

Ultimately, the integration of AI into scientific writing requires clear and enforceable standards for transparency and accountability. Failure to address the current transparency gap may compromise the validity of published evidence, with potential downstream consequences for clinical decision-making and public health policy.

## April 2026 Issue

The April edition presents a diverse collection of articles that emphasize clinical prediction models, emerging modern risk exposures, advances in biotechnology-based therapies, and complex case reports in medical practice. Collectively, this issue highlights the importance of integrating predictive, preventive, and innovative approaches to enhance the quality of healthcare delivery.

The opening article addresses a neurological emergency by developing a prognostic scoring model for patients with traumatic intracerebral hemorrhage. The study demonstrates that systematic identification of predictive factors can help clinicians estimate outcomes and guide early management decisions, reinforcing the role of data-driven approaches in acute care settings.

Two subsequent articles explore increasingly relevant exposures in modern lifestyles. A study on facial cosmetic usage among female medical students reveals an association with the incidence of sensitive skin, underscoring the need for improved awareness of safe dermatological practices. Meanwhile, an experimental study in pregnant Balb/c mice suggests potential adverse effects of mobile phone radiation on cerebellar Purkinje cells, offering preliminary insights into how technological exposure may influence neurodevelopment.

In the domain of metabolic disorders, research examining the MC4R genotype identifies its association with body fat percentage as an indicator of obesity in adults. These findings reinforce the contribution of genetic factors to obesity risk and point toward more personalized approaches in prevention and management strategies.

Therapeutic innovation is further highlighted in a study investigating exosome therapy derived from hypoxia-preconditioned mesenchymal stem cells. The results demonstrate anti-inflammatory effects, evidenced by reduced expression of IL-1 $\beta$  and TNF- $\alpha$ , alongside anatomical improvement in third-degree burn models. This approach represents a promising direction in regenerative medicine.

From a public health perspective, a study on post-Hajj acute respiratory infections among pilgrims examines both the proportion and determinants of disease occurrence. The findings emphasize the importance of preventive and promotive strategies in the context of large-scale population mobility associated with religious gatherings.

Another clinical study presents the profile and outcomes of atypical progressive acute kidney injury in children. The study highlights the diagnostic challenges and clinical variability of kidney disorders in pediatric populations, calling for heightened vigilance in clinical practice.

This issue also includes a systematic review evaluating the efficacy and safety of 100% TCA CROSS in managing atrophic acne scars. The review suggests that this technique remains a viable and effective option, with an acceptable safety profile in dermatological practice.

Advances in interventional procedures are illustrated through a case series describing the use of bronchoscopy with cryobiopsy and argon plasma coagulation at a national referral hospital. This report reflects the growing adoption of advanced diagnostic and therapeutic technologies in the management of lung cancer.

The remaining case reports present a spectrum of rare and complex clinical conditions, including Harlequin ichthyosis beyond the neonatal period, fulminant Fournier's gangrene in a patient with poorly controlled diabetes mellitus, and the management challenges of blowout fractures. Additional cases, such as jejunal invagination caused by metastatic melanoma and blast injury of the hand in a pediatric patient, further demonstrate the necessity of multidisciplinary approaches in handling highly complex medical scenarios.

Overall, the April edition conveys that progress in healthcare is not solely dependent on cutting-edge technology, but also on the effective integration of clinical evidence, environmental risk awareness, and emerging biological therapies. Strengthening predictive capabilities, addressing modern exposures, and adapting innovations within local healthcare contexts remain essential strategies for improving health outcomes.

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