

# Medical publication and role of Artificial Intelligence

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## ABSTRACT

Artificial Intelligence (AI) is transforming the way medical knowledge is created and shared, making it crucial for journals to utilize it responsibly, with transparency, oversight, and safeguards to ensure fairness and accountability. AI is already assisting with tasks such as plagiarism checks, data verification, and workflow management, which accelerates decision-making but also introduces integrity risks if not adequately supervised. Current guidelines emphasize that AI cannot be listed as an author, and any AI assistance should be clearly disclosed and attributed to the human author. In editorial processes, AI can assist with organizing literature, verifying figures and tables, enhancing language clarity, identifying duplicates, analyzing images, and detecting anomalies, thereby freeing up reviewers to focus on the clinical significance. Ethical policies should require clear disclosure of AI tools and their roles, protect data confidentiality, and maintain human responsibility for accuracy and originality. Due to risks such as AI-generated hallucinations and fake citations, journals should restrict submissions generated by AI, require detailed disclosures from authors, and combine automated checks with human review and audit trails.

**KEYWORDS:** Artificial intelligence, Authorship, Chat GPT, Editorial policy, Generative AI, Publication

## INTRODUCTION

Artificial intelligence (AI) is transforming the processes by which medical knowledge is generated, analyzed, and disseminated. Scholarly journals bear an obligation to supervise their application within the publishing ecosystem in a manner that is responsible, transparent, and equitable. To advance the application of artificial intelligence, publishers are required to leverage their efficiency in editing and content curation, whilst ensuring human oversight. This necessitates maintaining human accountability and transparency, as well as implementing robust safeguards against bias and misconduct.

### Why does this matter?

Across academic journals, AI is increasingly adopted for tasks such as plagiarism detection, data verification, and workflow triage [1]. This adoption accelerates decision-making processes but also introduces new integrity risks when utilized without proper oversight. As policies continue to evolve, a broad consensus has emerged: AI tools cannot be designated as authors, and any AI assistance must be transparently disclosed and attributed to human contributors [2,3].

### Opportunities in the workflow

AI can assist in literature mapping, validation of figures and tables, and enhancing language clarity. Such support aids authors and editors in identifying gaps and standardizing reporting processes, all without substituting methodological approaches for rigor [4].

Algorithmic screening for duplication, image manipulation, and statistical anomalies flags concerns early, letting reviewers focus on clinical relevance and inference quality [4].

AI-enabled synthesis, such as topic clustering, citation surveillance, and guideline crosswalks, can improve discoverability and facilitate educational translation for clinicians and trainees [4].

### Ethical issue

**Authorship and accountability:** International guidance from COPE, WAME, ICMJE, and leading publishers affirms that AI tools cannot be credited as authors; human authors must assume responsibility for integrity, accuracy, and originality[5].

**Disclosure and documentation:** Journals should mandate clear statements specifying the tools used, the tasks they were applied to, and the verification procedures followed. Failing to disclose AI-generated text or images can lead to misrepresentation and accusations of plagiarism [1,3].

**Data protection and confidentiality:** Uploading manuscripts or patient-related content to external tools may compromise confidentiality; editors and reviewers are required to avoid disclosing identifiable information and should utilize only those tools authorized by their institution's systems.

### Risks to anticipate

Generative systems are capable of producing plausible yet inaccurate text, references, and images, thereby elevating the risk of subtle falsification that may evade conventional screening methods [1,6].

Technology advances more rapidly than editorial standards; academic journals must continuously update their guidelines and allocate resources toward staff training and detection tools to prevent the disparity between resource-rich and resource-limited organizations from widening in publications [3].

### Practical policies for adoption

Prohibit AI authorship; mandate disclosure of tool names, versions, prompts, and human verification; clarify unacceptable uses (e.g., undisclosed text generation, fabricated citations) [7]. Incorporating automated screening mechanisms for text similarity, image, and reference validity, complemented by human adjudication and comprehensive audit trails [4]. Encourage targeted AI-assisted checks that preserve privacy, while ensuring reviewers document any tool use and maintain manuscript confidentiality [7].

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Date of Submission: Aug 29, 2025

Date of Acceptance: Sept 1, 2025

Date of Publication: Sept 10, 2025

DOI: <https://doi.org/10.61814/jkshs.v8i2.1040>

### Way forward

The imminent future promises the development of integrated editorial platforms that incorporate provenance tracking, citation validation, and risk scoring. These advancements will diminish the time required for decision-making while enhancing transparency. Ethical publishing in the era of AI will rely less on prohibitions against tools and more on the implementation of enforceable norms concerning disclosure, accountability, and bias mitigation, all grounded in international standards and adapted to local contexts.

The Journal of Karnali Academy of Health Sciences (JKAHS) is also formulating guidelines regarding the use of AI in the editorial process and preparing manuscripts for scientific work in the near future, so that the positive aspects of AI can be utilized for a better publication workflow.

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