

Open science and artificial intelligence in *Revista Médica Electrónica*

La ciencia abierta y la inteligencia artificial en la *Revista Médica Electrónica*

Santiago Almeida-Campos^{1*}  <https://orcid.org/0000-0002-4351-8817>

¹ Matanzas University of Medical Sciences. Matanzas, Cuba.

* Corresponding author: salmeida.mtz@infomed.sld.cu

Received: 12/08/2023.

Accepted: 12/12/2023.

Open science and artificial intelligence (AI) are two fields that are transforming the way scientific research is conducted. The first seeks to make scientific research more accessible and transparent to all, while the second is revolutionizing the way data are processed and analyzed.

Open science has led to a change in the way research articles are published. They, now, are on line for free and without restrictions. Additionally, data and codex used in the research may be available to those who want to verify and replicate the results. This has led to an increase in the transparency and accessibility of the scientific research.

AI, for its part, has also have a great impact on scientific research. In particular it has revolutionized data processing and analysis. AI can analyze great quantity of data quickly and efficiently, allowing researchers to get valuable information from them. It also helps identify patterns and trends in data which may note evident to humans.



The combination of open science and AI has significant implications for scientific journals. First, it can help improve the quality of research articles: while AI identifies data errors and problems, open science ensures that the data used in the research are available.

Second, it can help speed up peer review process. This is important to ensure the quality of research articles, but can be slow and expensive. AI can help automate parts of the peer review process, which can accelerate the process and reduce costs.

Third, open science and AI can help improve the way the impact of research articles is measured. For example, alternative metrics (altmetrics) provide a more complete view of the impact of research articles, and with the help of AI these data can be analyzed more efficiently.

In line with the above, *Revista Médica Electronica* promotes the openness research data, and for a year now has invited author to publicly place and reference the data they use so that they can be shared and reused, which favors the transparency and credibility of science. In addition, the original article and the brief communication can be accompanied by the analyzed database, which could be uploaded as complementary material—in modifiable format—in Excel (.xlsx o .xls) or SPSS (.sav) at the request of the scientific editor of the journal.

Recently, the possibility was added for data to be previously deposited in SciELO Data, an open data repository that, in specific cases (such as patented data or sensitive data), allows authors to restrict access to selected files. Doing so will prevent the file from being accessed or downloaded, but metadata will be visible. For information on how to prepare data for deposition, please refer to “Research Data Preparation Guide”⁽¹⁾.

The *Revista Médica Electronica* begins, starting in 2024, to use the WAME checklist⁽²⁾. This is a useful tool for authors who wish to submit manuscripts to scientific journals, and it is mandatory to upload it as a complementary document to each article, signed by its authors. By following the checklist, authors can ensure that their manuscript is complete and meets the standards of scientific journals, which increases the chances for their work to be accepted for publication.

The document itself will specify if an AI-based system was used for any part of the work, in which part and if the generated parts were reviewed by the authors for what is expressed in the text. Authors should know that the plagiarism detection systems used by Médica suggest whether they used AI in the preparation of their work.

Scientific journals remain sources of consultation for the research community. They are living species that are created and disappear, and that have evolved to adapt to new trends and technologies⁽³⁾. Changes in them are inevitable, and it is important that authors understand and adapt to them.



REFERENCES

1. SciELO. Guía de preparación de datos de investigación [Internet]. São Paulo: SciELO; 2023 [cited 12/07/2023]. Available from: https://wp.scielo.org/wp-content/uploads/Guia_preparacao_es.pdf
2. WAME. WAME Manuscript Submission Checklist [Internet]. WAME; 2023 [cited 12/07/2023]. Available from: <https://www.wame.org/manuscript-submission-checklist>
3. López-Borrull A. Cambios y tendencias en la publicación de revistas científicas [Internet]. Barcelona: Edicions Universitat de Barcelona; 2017 [cited 12/07/2023]. Available from: <http://hdl.handle.net/10609/76226>

Responsible editor: Beatriz Ferreiro García.

HOW TO CITED THIS ARTICLE

Almeida-Campos S. Open science and artificial intelligence in Revista Médica Electrónica. Rev Méd Electrón [Internet]. 2024. [cited: date of access]; 46: e5498. Available from: <http://www.revmedicaelectronica.sld.cu/index.php/rme/article/view/5498/5751>

