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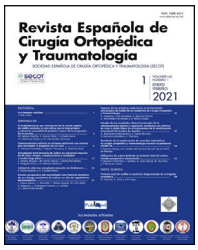

EDITORIAL

[Translated article] Identity crisis in scientific research? More than 10,000 scientific articles withdrawn in 2023: A sad record...

¿Crisis de identidad en la investigación científica? Más de 10.000 artículos científicos retirados en 2023: un triste récord...

In one of the most reputable and prestigious publications in the field of science and technology, the journal Nature, which is downloaded more than 164 million times every year on its website, a news item was published in December about the surprising number of research papers that have been retracted, that has stunned the scientific community.[1]

The author of the news item expresses his concern about this striking increase, which, as of early December, is more than twice the figure for the whole of 2022.

He highlights the fact that almost 8000 of these articles belong to journals published by Hindawi, a subsidiary of the Wiley publishing house specialising in open access journals. The reason alleged for their withdrawal is the «systematic manipulation of the peer review and editorial process.» The scandal provoked by this massive withdrawal, which has even led to the closure of some journals, has forced Wiley to absorb Hindawi's almost 200 journals and integrate them into its portfolio.

The author's analysis identifies, among other factors, inconsistencies in the text as well as superfluous references as the most common causes for retraction. These bogus articles tend to appear in monographic issues, with guest editors, in which the editorial process, and sometimes the ethics, are more lenient. It also distributes these fraudulent articles by country, with Saudi Arabia leading the ranking, a country in which researchers are financially incentivised to publish, followed by Pakistan, Russia, and China.

While some of the retracted papers involve the author's sincere admission of error, most are deliberately intended frauds by the authors and are unfortunately only the tip of the iceberg of all the papers that should have been retracted. Unfortunately, fraud in scientific papers is becoming more and more widespread, and the advent of artificial intelligence (AI) in the form of the well-known ChatGPT is partly to blame for this. On the one hand, authors plagiarise other papers and the tools available to large publishing companies such as Crossref, used in our journal, are circumvented by means of twisted phrases and unusual words to elude plagiarism detectors. Furthermore, illegal organisations have sprung up that act as «paper mills,» offering authorship positions in legal research, when not «custom-made» bogus papers using artificial intelligence, with fabricated data that resemble scientific research, in exchange for large sums of money.[2] Hundreds of advertisements can be found on the internet and researchers who are under pressure to publish, either because of the demands of their professional or university careers or to obtain official grants («publish or perish»), succumb to the temptation of resorting to these services. Business flourishes and the fraud is consolidated, contributing to the growth of «junk-science»!

Urgent action should be taken by publishers to be stricter in their review of papers, publishing and sharing lists of authors identified for «malpractice» with other publishers, and even taking legal action against them. Care must also be taken to ensure that all copies are removed from repositories and databases to avoid potentially serious consequences. While AI-based programmes (ChatGPT or others) can be helpful in scientific publishing, indicating the reference bibliography or providing an almost perfect translation of our articles in a matter of seconds (which is greatly appreciated in a non-English-speaking environment such as ours), measures to prevent cheating must be put in place and urgently implemented. Publishers will have to implement, not only the anti-plagiarism programmes already being used in the editorial process, but also those tools that can detect the fraudulent assistance of AI and that are already available on the market with increasing reliability (ZeroGPT,

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DetectorGPT, etc.). Unfortunately, these programmes are not entirely reliable; they can be circumvented, and experience has demonstrated that AI is outpacing the detectors. OpenAI itself, the company behind ChatGPT, is planning to include a form of invisible digital «watermark» that would make it possible for AI-generated content to be accurately detected in writing. Eventually, publishers will have to unite to effectively fight the threat to science posed by «paper mills.» Both the Committee on Publication Ethics as well as the International Committee of Medical Journal Editors have already advised that not only authors and their tasks in manuscript preparation should be reviewed, but that a signed justification by each author should be required for any inclusion of authors once the paper has been submitted.

Nevertheless, publishers cannot put an end to this increasingly widespread problem unilaterally. All of us together must halt these practices that lead to unfair competition. This is a matter of research ethics and integrity that jeopardises, not only the value of publications, but also scientific knowledge itself. ChatGPT (or any other similar chatbot) cannot yet replace creativity, human judgement, reflection, and the filtering and critique of existing knowledge.[3] This unique task, which only the human mind can perform, is the only guarantee that academic publishing, its authenticity and credibility, has not yet come to an end.

Scientific research cannot be eroded by the shadow of deceit, dishonesty, and misconduct. It is incumbent on all of us to preserve its authenticity, given that it is the basis for decisions that can lead to serious health consequences.

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