



INVITED EDITORIAL

Emerging research and publication concerns

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Honesty, transparency, and adherence to high ethical standards are essential to guide the development and execution of research projects.¹ Breaches in research integrity as well as scientific misconduct are periodically reported. In one recent incident, evidence of apparent image tampering was identified in a research paper by Lesné, *et al.* that had been published in *Nature* in 2006. This paper described findings that addressed the relationship between amyloid beta-protein and memory loss in Alzheimer's disease. Therefore, this paper provided support for the amyloid hypothesis of Alzheimer's disease.² Extended investigation of this incident revealed possible data tampering concerns in more than 20 papers authored by Lesné.³ This incident remains under investigation.

Plagiarism is an important cause of scientific misconduct. While text similarity may in part be tolerated in the introduction and methods sections of a research manuscript, it is not acceptable in the results

section where the findings of the current study are described. Furthermore, the discussion section of a manuscript should focus on the interpretation of the research results as well as the strengths and limitations of the study, thus avoiding or limiting text similarity with manuscripts that are already in existence.⁴ The introduction of artificial intelligence (AI) tools such as ChatGPT has the potential to improve writing efficiency and the quality, organisation and comprehensiveness of a scientific manuscript.^{5,6} However, utilisation of AI tools in scientific publications has ignited ethical concerns and debate regarding whether authorship should in part be attributed to these tools.⁶ Furthermore, the output of these tools should be carefully reviewed and edited to ensure that the resultant manuscript is original and avoids plagiarism. Interestingly, over-and-above the use of traditional software to conduct plagiarism checks such as iThenticate, AI tools such as ChatGPT can also be used to detect plagiarism.⁵

A recently identified trend is the huge increase in the number of extremely productive authors who publish more than 60 papers per annum or at least one paper every five days. In a yet to be peer-reviewed preprint that evaluated extremely productive authors during a recent 22-year period, when authors in the physics disciplines were excluded, the highest concentration of extremely published authors worked in clinical medicine. Furthermore, between 2016 and 2022, the largest increase in non-physics based extremely published authors occurred in Thailand, Saudi Arabia, Spain, and India. Although the researchers did not explore whether these extremely published authors complied with acceptable authorship criteria, they questioned whether unethical behaviour such as paying for authorship may in part be contributing to this trend.⁷

The review by Zhaksylyk *et al.* provided practical guidance for avoiding or preventing scientific misconduct, including comment on appropriate education and the role of ethics committees and peer review.¹ Authors, reviewers and editors collectively have a stake in maintaining the integrity of academic journals. As we continue to develop the *Journal of the African Society for Infectious Diseases (JASPID)*, let us adhere to acceptable ethical and publication standards so that our journal prospers and becomes a reliable and trustworthy resource for paediatric infectious diseases in Africa.

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