



## EDITORIAL

## Falsification and fabrication of data in biomedical research: Evidence is quite evident

Research has advanced biomedical science exponentially in the last century. The human civilization should be highly grateful to scientists for this development. However, fraud in biomedical research has polluted its purity. Falsification and fabrication (along with authorship violation and plagiarism) are cardinal sins in biomedical research. These are basically manipulation or cooked-up data to satisfy the researchers' purpose.

"Falsification essentially involves manipulating or changing data, research materials, processes, equipment and results. Fabrication, on the other hand, is more about making up research results and data, and reporting them as true."<sup>1</sup> Both are serious forms of misconduct<sup>2</sup> because these may cause harm to the society. Unfortunately, these fraudulent activities are on the rise.<sup>3</sup> Therefore, punitive measures are suggested and being executed. These include withdrawal of manuscript during the review or production process and retraction of papers after publication. Temporary or permanent bans on authors are imposed. Funding agencies can deny funding, and the employers of the researchers can impose more difficult sanctions.

A meta-analysis of self-reported studies estimated a 4% prevalence of fabrication and 9.7% falsification of data.<sup>3</sup> A survey conducted among 229 corresponding authors of 12 general radiology journals reported witnessing or suspecting 5.9% fabrication and 13.6% falsification.<sup>4</sup> Reports about such misconduct in randomised controlled trials are increasingly visible, damaging clinical or public health practices. This erodes the trust of people and practitioners, which warrants regulatory measures.

Bangabandhu Sheikh Mujib Medical University Journal follows the policies of the Committee on Publication Ethics<sup>5</sup> to deal with research misconduct. According to the Committee on Publication Ethics, manuscripts

should be withdrawn or rejected, or expressed concerns, or reported to the authors' authorities. If such misconduct is detected after publication, the article is retracted with a clarification so that readers know about the authors' fraudulent nature. The Bangabandhu Sheikh Mujib Medical University Journal and the Department of Public Health and Informatics conduct courses on research ethics focusing misconduct to help strengthen research governance at Bangabandhu Sheikh Mujib Medical University.

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I do not have any conflict of interest.

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