



## **Breaking off the Science Misconduct; Responsibilities of the International Associations**

***Fatemeh HEIDARY<sup>1</sup>, \* Abolfazl RAHIMI<sup>2</sup>, Reza GHAREBAGHI<sup>3</sup>***

1. *School of Medicine, Shahid Beheshti University of Medical Sciences, Tebran, Iran*
2. *Dept. of Ophthalmology, Tebran Medical Branch, Islamic Azad University, Tebran, Iran*
3. *Editor, Medical Hypotheses, Discovery and Innovation Ophthalmology Journal*

**\*Corresponding Author:** Tel: +98-21-88775508 Email: rahimi@rahimidr.com

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### **Dear Editor-in-Chief**

Few months ago, Dr Poorolajal et al. published a comprehensive article in *Iranian J Publ Health* entitled “Construction of Knowledge, Attitude and Practice Questionnaire for Assessing Plagiarism”. They had established a questionnaire as a standard tool in order to evaluate perception of subjects concerning plagiarism and to estimate the prevalence and the type of plagiarism commission (1). Although these types of standardization are extremely imperative but we would like to emphasize toward inevitability of international specialized academic regulations against science misconduct.

### **Development through honestly**

In recent years, developing countries have made substantial progress in the basic and clinical sciences. These advancements are mainly due to the scientists and researchers who conducted leading edge studies and published their results in reputable acclaimed journals. Numerous universities have become established and subsequently been accredited as research universities with the apex status. The speed of scientific growth has been spectacular and has received the attention of from senior academic officials from all over the world.

Concurrently, countries are attempting to present their country’s academic institutions as an esteemed destination for higher learning of foreign graduate students in particular and are working to establish good academic policies to that end. As the number of students in postgraduate and graduate programs increase, the countries will upsurge their body of medical research, as a requirement of their graduation is to publish papers in academic journals. This debauched development may face several opportunities as well as abundant threats.

### **Call for quality control assurance**

Generally, publications can be considered academic products and like every other product, these bodies of work require some measure of appropriate quality control assurance. There are always some impediments in the path of progress. Although most researchers are typically truthful and knowledgeable people, there appears to be a small number of people who are predisposed to take advantage of the burgeoning academic body. Therefore, it is necessary to develop strategic and unambiguous strategies and procedures to deal

with academic scientific misconduct, fraud and plagiarism in research.

The role of ethics is universally an important issue but even more so in the context of research and publication. Human nature is such that it is tempting to cheat to earn academic acclaim, but the bottom line is that any degree of fraud in research is unacceptable. Science misconduct can be a difficult crime to prove and even trickier to punish hence the general notion that departments and institutions take up the gauntlet for monitoring and controlling these kinds of crimes (2, 3).

When conducting studies, scientists must ensure they are acting in the patient's best interest and that research they participate in is ethically conducted. Both physicians and scientists alike should be well aware of the rules and ethics governing research and publication, and each scientific endeavor must be reviewed and endorsed by the appropriate supervisory bodies (4).

### Think globally, act locally

The World Association of Medical Editors (WAME) and the Committee on Publication Ethics (COPE), as general international regulatory bodies, have issued clear guidelines regarding scientific misconduct especially in the field of biomedical sciences as had the US Office of Research Integrity (ORI) and the other national agencies. Although definitions are slightly different but the message is the same. Fraud in research usually involves reporting data for which no records of experiment has been existed. Misconduct also includes manipulating research materials, equipment, or procedures to arrive at a desirable result or by adding, changing, or omitting results, typically, the fraudulent individual is looking to support a hypothesis that the research intends to examine. There are also other individuals guilty of incorporating ideas, statements, and procedures of others' work without giving credit to the original statement (5). Although precautions can be taken to reduce fraud and plagiarism, it is necessary to develop clear strategies and procedures to deal

with academic misconduct at the institutional and national levels. As well, scientists themselves must be self-policing and resolutely guard against any fraud within their community. Those convicted of such a crime must be publicly 'outed' so that there is another deterrent against publishing work that has been manipulated or is not their own.

If these strategies can be implemented by both institutional and international associations, the world of science will have made great advances in the eradication of fraud in academic research.

In sum, the international societies may act as the pioneer of such a specialized association in order to establish enforceable regulations against misconduct in their fields. This may be accomplished by instituting polices and strategies to cover all aspects of basic and clinical sciences.

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