

CORRESPONDENCE

Science Ethics Education: Part I: Perception and attitude toward scientific fraud among medical researchers

The recent publication in J BUON on scientific fraud is interesting [1]. Vučković-Dekić et al. reported an interesting finding on the possibility of double standard in the punishment of the violators [1]. This is a very important issue. Indeed, many scientific fraud, especially plagiarism and autoplagiarism, are common and can be seen in either senior or junior practitioners [3]. In some underdeveloped countries, no punishment of the violators who have high seniority and power can be expected [3]. Education can be a good way for preventing such phenomena and attitudes. However, the solution of the problem of deep-rooted unethical behavior among some old researchers is a big issue deserving further discussion.

References

1. Vučković-Dekić L, Gavrilović D, Kezić I, Bogdanović G, Brkić S. Sci-

ence Ethics Education: Part I. Perception and attitude toward scientific fraud among medical researchers. J BUON 2011; 16: 771-777.

2. Zaenker KS. The emperor of all academic and cultural maladies in scientific writing: plagiarism and auto-plagiarism (Editorial). *Inflamm Allergy Drug Targets* 2012; 11: 1-2.
3. Wiwanitkit V. Misconduct beyond fabrication, falsification, and plagiarism. Available online at www.nursing-research-editor.com/.../Ite_Wiwanitkit.pdf

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Reply to Drs. Joob and Wiwanitkit

Drs. Joob and Wiwanitkit's letter reflects the deep concern of all honest scientists - how to fight against any kind of fraud, especially plagiarism and autoplagiarism. It was recommended by the Commission on the Professional Safe Regulation in Science that the education is the best preventive measure [1]. Many scientists agree [2-7], and many mandatory educational courses on science ethics were organized worldwide.

Editors of scientific journals also play the role of educators on publication ethics [8-13]. In addition, their duty is to prevent and correct fraudulent literature. Regarding this, they may follow the instructions of The International Committee of the Medical Journal Editors (ICMJE) [14] and the Committee of Publication Ethics (COPE) [15]. The latter organization provides advice on all aspects of publication ethics and, in particular, how to handle cases of research and publication misconduct [16].

There are also other means to detect plagiarism and autoplagiarism both in submitted and already published articles. A high profile affair exploded recently in my surroundings: a recognized scientist was found guilty for multiple plagiarisms, which were detected by a meta-analysis [17-19]. Besides, several tools for prevention and detection of plagiarism were developed recently (eTBLAST, Chimp-sky, CitePlag, CopyTracker, Plagium, SeeSources, The Plagiarism Checker, Plagiarism Detect) [16], all of which were successfully used by the editors of the scientific journals to track possible plagiarized articles [20,21].

Therefore, my answer to Drs. Joob and Wiwanitkit's question "how to solve the problem of deep rooted unethical behavior among some old researchers" would be: Yes, it is a big problem, but something has to be done. Fortunately, keeping in mind the above-mentioned instruments, the honest scientists are now less helpless, even in developing countries, in their struggle against violators, no matter how old and powerful they might be.

References

1. Recommendations of the Commission on the Professional Safe Regulation in Science. Proposals for safeguarding good scientific practice. Available at: http://www.dfg.de/download/pdf/dfg_im_profil/reden_stellungnahmen/download/self_regulation_98.pdf (last visited February 15, 2012).
2. Olson LE. Developing a framework for assessing responsible conduct of research education programs. *Sci Eng Ethics* 2010; 16: 185-200.
3. Rhodes R. The pressing need for postdoctoral research ethics education. *Am J Bioeth* 2002; 2: 1-3.
4. Sharp R. Teaching old dogs new tricks: continuing education in research ethics. *Am J Bioeth* 2002; 2: 50-55.
5. Plemmons DK, Brody SA, Kalichman MW. Student perceptions of the effectiveness of education in the responsible conduct of research. *Sci Eng Ethics* 2006; 12: 571-582.
6. Hren D, Vujaklija A, Ivanišević R, Knežević J, Marušić M, Marušić A. Students' moral reasoning, Machiavellianism and socially desirable responding: implications for teaching ethics and research integrity. *Med Educ* 2006; 40: 269-277.
7. Devlin M. Policy, preparation and prevention: Proactive minimization of student plagiarism. *J Higher Educ Policy Manage* 2006; 28: 45-58.
8. Ray JG. Judging the judges: the role of journal editors. *Q J Med* 2002; 95: 769-774.
9. Vučković-Dekić Lj. The journal's role in scientific misconduct. *Croat Med J* 2004; 45: 104-106.
10. Marušić A. Author misconduct: editors as educators of research integrity. *Med Educ* 2005; 39: 7-11.
11. Katalavić V. Five-year report of Croatian Medical Journal's research integrity editor - policy, policing, or policing policy (Editorial). *Croat Med J* 2006; 47: 220-227.
12. Marušić M. The life of an editor. Zagreb: Medicinska naklada, 2010.
13. Milošević D, Vučković-Dekić Lj. Good scientific practice. IX: Scientific communication - legal and ethical aspects. *J BUON* 2005; 10: 491-493.
14. International Committee of the Medical Journal Editors. Uniform Requirements for Manuscripts Submitted to Biomedical Journals:

- Publishing and Editorial Issues Related to Publication in Biomedical Journals: Corrections, Retractions and "Expressions of Concern". Available from: http://www.icmje.org/publishing_2corrections.html (Last visited February 21, 2012).
15. Code of conduct and best practice guidelines for journal editors. Available at: www.publicationethics.org.uk (Last visited February 21, 2012).
 16. Vučković-Dekić Lj. Plagiarism - How to Deal with It? (Letter to the editor). *Srp Arh Celok Lek* 2012; 140: 122.
 17. Chalmers I. Role of systematic reviews in detecting plagiarism: case of Asim Kurjak. *BMJ* 2006; 333: 594-596.
 18. Godlee F. Plagiarism and punishment. *BMJ* 2007 November 10; 335(7627): 0 DOI: 10.1136/bmj.39392.602523.47.
 19. Cross M. Policing plagiarism. *BMJ* 2007 November 8; 335: 963 DOI: 10.1136/bmj.39388.668773.47
 20. Science publishing: How to stop plagiarism. Marušić A, Petrovečki M. Check all manuscripts. *Nature* 2012; 481 (7379): 21-3. Available at: <http://www.nature.com/nature/journal/v481/n7379/full/481021a.html#ana-marusic-amp-mladen-petrovecki-check-all-manuscripts> (Last visited February 20, 2012).
 21. Baždarić K, Bilić-Zulle L, Brumini G, Petrovečki M. Prevalence of Plagiarism in Recent Submissions to the Croatian Medical Journal. *Sci Eng Ethics* 2011; DOI: h10.1007/s11948-011-9347-2.

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