Retractions by Pakistan Journal of Medical Sciences due to Scientific Misconduct
Shaukat Ali Jawaid and Masood Jawaid

ABSTRACT
Under pressure to publish, academicians and research scientists are increasingly indulging in scientific misconduct leading to retraction of such papers when identified. Other reasons of retraction include scientific error and problems related to ethics. Four published manuscripts (three from Turkey and one from Pakistan) had to be retracted from Pakistan Journal of Medical Sciences from January 2014 to July 2015 due to scientific misconduct. There is a need to search for effective measures which could help reduce the number of retractions and prevent scientific literature from being further polluted, which seems to be increasing every year.

Key Words: Retraction. Scientific misconduct. Scientific error. Ethical issues.

Retraction of a published manuscript is very painful for the editor because it adversely affects the integrity and credibility of the journal. However, once a manuscript has been identified to be tainted, the editor must retract that manuscript. Not only that, it is the responsibility of the scientific community to create awareness among the researchers that such manuscripts are no more cited. Publication of fake and fraudulent data diverts the search that is why the scientific community manages this by publishing retraction.1

A research group at the Institute of Microbial Technology (IMTECH) recently reported that it had retracted three articles from PloS ONE because “there are no data available underlying this study and thus the published results are fabricated.” Four more papers from the group were being retracted because of the findings of the enquiry committee formed in January 2015. It is found that the data accompanying the papers were not supported by raw data in the Lab. The first author has also resigned from IMTECH.2

United States is the only country which has established Office for Research Integrity in 1989 and it has now also notified its regulations.3 Since retraction is the most serious sanction that can be applied to a published manuscript and it is the harshest possible punishment for a scientist, editors must ensure that it is applied fairly.

The authors conducted a study to find out the number of manuscripts retracted by Pakistan Journal of Medical Sciences from January 2014 to July 2015 and the reasons for the retraction. It was found that four papers were retracted.

Case 1: An author from Turkey submitted the manuscript “The effects of 21 and 23 millimeter aortic valve prosthesis on hemodynamic performance and functional capacity in young adults”, with five other co-authors along with Ethics Committee approval. The letter of undertaking was signed by all the listed authors. This manuscript was accepted for publication after peer review and published in Pakistan Journal of Medical Sciences 2014;30(2):322-325. It was retracted on 15th April, 2014 on a request from the authors who stated that “one of the authors copied some portions from an article published in Turkish language, which was detected later”.

Case 2: Another author from Turkey submitted this manuscript “Atrial Septal Defect repair: Our early and mid-phase results”. Interestingly second author of this manuscript was the submitter and correspondence author of the paper in Case No. 1. This manuscript was published after peer review in Pakistan Journal of Medical Sciences 2014;30(2):322-325. The authors retracted this on 15th April, 2014 stating the same reason that “one of the authors copied some portions from an article published in Turkish language, which was detected later”. We suspect that there were some disputes among these authors and since they failed to resolve their differences, they opted for retraction.

Case 3: One of the authors from Turkey, who had earlier retracted one of his manuscripts, submitted his paper “Relationship between atrial fibrillation and coronary artery surgery” with a request for fast track processing. After peer review, this manuscript was accepted and published in May-June 2014 issue of Pakistan Journal of Medical Sciences. In early 2015, he requested for retraction saying that because of a mistake by his assistant, he could not send the final version of the manuscript for publication. He promised to resubmit the manuscript after alteration in the title. Not convinced with these arguments, we refused to concede to his request.
Later, he came out with the real reason for retraction stating that the main problem was that the cases included in this study were operated upon by himself and a few other surgeons as well. Since their names were not there, they were creating problem and his further academic promotion may be affected. He had a conflict of interest with other authors.

Eventually this manuscript was retracted.

**Case 4:** This manuscript from Pakistan “Non-obstructive coronary artery disease in patients admitted for elective coronary angiography” was submitted by a postgraduate trainee as a mandatory requirement for second Fellowship in interventional cardiology. He had some conflict with his supervisor. He submitted the manuscript with four other authors along with Ethics Committee approval leaving the name of his supervisor. After peer review this manuscript was accepted and published in Pakistan Journal of Medical Sciences 2014;30(6):1336-1340. His supervisor complained to the CPSP which debarred him from appearing in the examination. Eventually, he was forced to retract this manuscript. Hence, this was retracted by the main author stating that “they wish to add some more data”.

Reasons for retraction include fraud, like data fabrication or falsification or error, plagiarism, scientific mistake or ethical problems. However, the incidence of fraud is said to be increasing. A Medline search from 1966 to 1997 showed that 235 articles had been retracted and error was the reason cited for 91 articles. The results could not be replicated in 38, misconduct was evident in 86, while no clear reason was given in 20 articles. Enquiries further revealed that of these 235 manuscripts, 190 were retracted by the authors themselves, 45 by organizations or institutions other than the authors. However, these retracted articles were cited 3 or 4 times more after the publication of the retraction notice. This shows that even after retraction, such articles continue to be cited as a valid work, which is a potential problem for biomedical science.

Another study of 742 retracted articles from PubMed between 2000-2010 showed that error was more common (73.5%) than fraud which was responsible for retraction for 26.6% of the manuscripts. Most common reason for retraction was scientific mistake in 234 papers. However, this study also showed that the number of papers retracted annually has increased which means that the level of misconduct appears to be higher than in the past, or it could be because the biomedical journals have started policing the literature more stringently; but generally, it is felt that fraud is increasing more rapidly than scientific mistakes.

The question arises what more should to be done to discourage scientific misconduct and ensure that scientific literature is not polluted further. Cooper ER has suggested that medical libraries should search for retractions and errata and provide that information to the users of the library. Biomedical journals should also include details regarding retraction policy in the “instructions for authors”.

Another suggestion put forward is that Journals should ask the authors to attest that they have checked their manuscripts references list with the National Library of Medicine master list of retracted articles. Since scientific misconduct has become endemic, it is the responsibility of the scientific community to improve its response.

In the UK, the Committee on Publication Ethics (COPE) has published Guidelines on Good Publication Practices. Perhaps, it was the increasing incidence of scientific misconduct which prompted the International Committee of Medical Journal Editors (ICMJE), which revised its Guidelines on Authorship, by adding the fourth criteria holding all the listed authors responsible for the scientific integrity of the work.

Now, the Journal maintains a list of authors who indulge in scientific misconduct. They are blacklisted and debarred from further submissions. Secondly, any change requested in the listed authors after submission is required to be approved by the Ethics Committee of the Institution which had approved the research protocol, hoping that it will eliminate or minimize such incidents in future.

Journal Editors are intensifying their efforts to police the scientific literature, hence we may see more and more retractions in the days to come due to scientific misconduct.

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