Peer Review in Medical Journalism

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Nowadays, up-to-date sources are produced by researchers worldwide and published in various biomedical journals. Sharing the results of a study in a reputable journal is both a demanding and an exciting process. It is a form of mental exercise and has to be written in a well-organized manner to present logical flow and should respect the accepted international principles; otherwise the paper's rejection rate will be increased either by the editors or peer reviewers.1

Up to 2002, more than 4500 medical journals, mostly in English (88%) have been indexed in MEDLINE.2 Currently, in Iran more than 80 medical journals are published.3

At present time, peer review is regarded as a fundamental step for biomedical publications. The peer review system has been truly institutionalized since the 1940’s2 and is a comprehensive review of scientific papers by qualified specialist(s). These specialists analyze the submitted manuscript and evaluate its findings and respond to specific questions asked by the referral source, usually editors of the medical journals. Peer reviewer then gives useful comments on the importance, originality, presentation, validity, ethical aspects, and other features of the study.

Besides scientific conferences, several papers and books are published on peer review system, among which, is the second edition of an authoritative book entitled “Peer Review in Health Sciences” that was authored by experts and published in 2003. The book discusses extensively the known effects and defects of peer review in health sciences including in medical journalism and grant applications of research projects.

The editors, Dr. F. Godlee, Head of British Medical Journal (BMJ) Knowledge, BMJ Publishing Group, and T. Jefferson, have pointed out the objectives of the book in its preface as:

1) To give the readers a general idea on peer review including its development, known effects, and defects; 2) Providing the reader a practical guide on how to review manuscripts; and 3) Discussing the ways of improving current peer review system and its possible alternatives.2

This 367-page book contains 24 chapters, each with useful key points and up-to-date references written by expert authors. The chapters cover various aspects of peer review. Some of the most interesting topics are:

- The development, rationale, and effectiveness of journal peer review;
- Peer review and pharmaceutical industry;
- How to set up a peer review system;
- The evaluation and training of peer reviewers; and
- Peer review on the Internet.

The book has also three useful appendices including:

- The International Committee of Medical Journal Editors (The Vancouver Group);
- The World Association of Medical Editors (WAME); and
- The Committee on Publication Ethics (COPE).2

In these three appendices, the brief history of the foundation of the Vancouver Group, WAME,
and COPE as well as their efforts for promotion of the quality of biomedical publications are discussed.

The following important points on peer review are directly quoted from the book:

- “Journal peer review is the formal expression of the principle that science works best in an environment of unrestrained criticism.
- The ethical bases for peer review practices are: fairness, confidentiality, conflict of interest, and full disclosure.
- All reviewers can improve their critical appraisal skills by putting themselves in a position where they must examine a research report in depth and by receiving the comments of other reviewers and editors who have also examined the same manuscript carefully.
- Peer review appears to account for about 2.6% to 7.5% of the total journal costs.”

In summary, according to the journal of Science Editor, “Peer Review in Health Sciences” offers practical suggestions that will be helpful to editors, journal staff, authors, reviewers, or anyone else who is or might become involved in some aspects of peer review. Therefore, it can be also highly recommended to those colleagues involved in biomedical publication in our country.

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References