

Report from the Chiropractic Research Journal Editors Council

Introduction

The Council of Chiropractic Research Journal Editors (CCRJE) was formed to allow editors of the established and developing chiropractic research journals to meet regularly to discuss issues relating to publication ethics, policies and practices. This first report from the Council is designed to provide an historical overview of the origin of the Council, discuss the issues facing the Council, and report upon the results of the first meeting of the Council held on May 10, 1990.

Historical background

The concept of a group of editors in similar discipline meeting to debate issues and help set policy is a direct outgrowth of the concept of the International Committee of Medical Journal Editors (ICMJE). The ICMJE has had a profound impact upon biomedical publishing, with the group being responsible for development and implementation of the "Uniform Requirements for Manuscripts Submitted to Biomedical Journals" accord.¹ It has set policies regulating authorship requirements and retraction of fraudulent research, among other issues.

At the first International Conference on Spinal Manipulation, sponsored by the Foundation for Chiropractic Education and Research (FCER), in May of 1989, editors from several chiropractic research journals were invited to present ten minute discussions regarding the aims and goals they had for their journals. This was the first time that journal editors had been formally brought together.

Correspondence between FCER and these journal editors explored what such a group might do. Ultimately, FCER funding was made available to bring the editors of peer reviewed journals together at the second International Conference on Spinal Manipulation, which was held in May of 1990.

The agenda for the May 1990 meeting included the following items:

- 1 Consideration of uniform requirements for manuscript submission and review;
- 2 Standards for the use of a peer review system (what constitutes peer review, how are reviewers selected, how does an editor handle conflict between and with reviewers, is blinding a necessity, etc.);
- 3 The establishment of a standardized set of chiropractic indexing terms which can be incorporated into the Medical Subject Heading List (MeSH);
- 4 The role and responsibilities of a chiropractic research journal editor;
- 5 The process for applying for indexing status; and
- 6 Coordination among the journals and editors.

While it was not possible to go into great detail on all these topics during the first day-long meeting, the topics provided grounds for spirited debate and led to several recommendations and motions. Participant editors in this first meeting included Thomas Bergmann (Chiropractic Technique), Mary Ann Chance (Journal of the Australian Chiropractor's Association), Wolfgang Gilliar (Journal of Musculoskeletal Medicine), J. Eric Griffiths (DC Tracts), Robert Hazel (Chiropractic Sports Medicine), Roy Hildebrandt (American Journal of Chiropractic Medicine), Dana J. Lawrence (Journal of Manipulative and Physiological Therapeutics), Simon Leyson (European Journal of Chiropractic), Silvano Mior (Journal of the Canadian Chiropractic Association), and Robert Wagnon (Chiropractic: The Journal of Chiropractic Research and Clinical Investigation). Invited guests included Doris Bittler (Spinal Manipulation), Grace Jacobs (Journal of Chiropractic Education), and Reed Phillips (Clinical Chiropractic Reports). Don Peterson (Dynamic Chiropractic) attended; the meeting was moderated by Steve Wolk of FCER.

Issues facing the Council

The process of setting and enhancing standards is occurring in many different areas of health care, from clinical decision-making to selection of subjects for research and into the publication process itself. The

CCRJE established several areas of concern during its first meeting. In essence, these issues touch upon setting standards for the scientific and biomedical publication process.

Membership: One of the first issues to be decided concerned membership in such a group. The CCRJE recognizes that there are a large number of publications within the chiropractic profession, many of which at one time or another publish scientific papers. The list of these journals would include state association journals, specialty council publications, technique entrepreneur publication, trade journals, chiropractic news publications, and research journals proper. They number in the hundreds, and inclusion of all would simply not be an effective way to deal with the issues relating strictly to the publication of science.

The CCRJE viewed the needs of the group as relating to primary source, peer-reviewed publications. The member journals would need to publish scientific information that contributes new knowledge. In particular, this relates to the publication of data reports; those that are considered to be an original publication to chiropractic literature. Thus, the CCRJE saw its membership limited to those journals able to meet the above requirement.

General manuscript criteria: Papers published within member journals need to meet certain criteria, especially those which are data reports. Each paper should be appropriate to the mission of the journal, as defined in its Statement of Purpose. Necessarily, each paper should be well-written. The data presented in the paper should support the conclusions made.

Authorship criteria: The CCRJE recognizes the increasing need for publication by those involved in academia and research. This has led at times to the inflation of authorship on papers and the listing of authors who did not substantially contribute to the published work. While the "Uniform Manuscripts" accord does specify authorship requirements,¹ the CCRJE reserves the right to build upon the foundation provided by the accord, and notes that this has already occurred with member journals in the accord.²

Publication standards: With the newly emergent and robust development of chiropractic research publications, the chiropractic profession is faced for the first time with the possibility of choice in where to submit a manuscript. When a paper is rejected by a journal because it is not appropriate for the mission of that journal, the author of the paper may choose to submit it to a more appropriate forum. In the absence of common publication standards, this carries the potential of causing the author to substantially rewrite and revise the paper in order to meet the new publication requirements of the second journal. Precious time may be lost as a result. By setting common publication standards, a great deal of time and energy is saved, with no reduction in the quality of the paper submitted. In point of fact, this is a major reason that the "Uniform Requirements" exist; in medicine, there are now over 20,000 scientific journals.

Informed consent: It is necessary in all research involving the use of human subjects to obtain informed consent from subjects. Editors of research journals need to make the reading public aware that informed consent was obtained. This issue also relates to risk in human subject research. Risks must be spelled out to subjects in research, who must then be free to reject participation. The Declaration of Helsinki specifies ethical concerns and guidelines for the use of human and animal subjects in clinical and basic research; the CCRJE urges complete adherence to its protocols. While this is not, strictly speaking, an issue that directly involves editors of bioscientific journals, it touches upon an increasingly important issue in research and publication.

Peer review: Peer review is considered one of the hallmarks of a scientific journal. It provides a means for critical review of manuscripts prior to publication in an effort to ensure that the material published is free from bias, is well designed, is factually accurate, and is properly statistically analyzed. In its most simple form, peer review simply involves sending a paper to a select reviewer, who then provides information about his or her perception of the paper. However, many journals utilize a peer review system yet are not scientific research publications. The use of peer review, in and of itself, does not make a journal scientific. The CCRJE will need to grapple with what constitutes proper peer review.

There are a great number of questions regarding the peer review process. What are the criteria for accepting a manuscript for review? How many people should a manuscript be sent to for review? Should each manuscript be blinded, and if so, what should be the hierarchy of blinding (how much information should be blinded in the paper)? How does an editor handle conflict between reviewers and with reviewers? Should reviewers be made aware of the results of review prior to a paper's publication? Are there times when it would be appropriate to edit comments from reviewers prior to sending the results to the author? All these topics deserve discussion.

Indexing: Indexing is the process by which a journal places its information onto a database. By so doing, the journal ensures that its information reaches a larger number of interested individuals; this allows for additional review by peers. Indexing reduces the possibility of duplication of research, since interested researchers will likely search the literature prior to initiating their project. Indexing is critically important to the chiropractic profession, since it allows chiropractic research to be reviewed by people from all over the globe. Major indexes include the National Library of Medicine's *Index Medicus* and the Institute for Scientific Information's *Current Contents*. Other indexing databases also exist. Currently a handful of chiropractic publications have achieved indexing with various databases outside the chiropractic profession. The Journal of Manipulative and Physiological Therapeutics is included in *Index Medicus*, *Current Contents*, the Soviet State Academy of Science, *Biosis* and *Excerpta Medica* (an abstracting service); the Journal of the Australian Chiropractor's Association is included in the Australian regional Australasian Medical Index, the American Journal of Chiropractic Medicine is included in the Soviet State Academy of Science; Chiropractic Sports Medicine is included in *Excerpta Medica* and *Physical Therapy Abstracts* (both abstracting services); and Chiropractic History is included in the archival section (history of medicine) of *Index Medicus*.

How is a journal selected for indexing status? First, prior to a journal's submission for consideration, there must be proof that the profession itself is searching its own literature. It is apparent from communication with indexing agencies that the chiropractic profession is not using its own literature as effectively as it might. For example, few chiropractors subscribe to *Current Contents*.

A journal to be indexed must regularly be publishing material that makes a substantive contribution to new knowledge. This can be demonstrated by tracking citations from that journal in other papers, the *Science Citation Index* is but one means of providing this proof. In addition, the journal must be read by many others, by having a subscription base. It must adhere to a regular publication schedule. It must have an editorial board made up of known experts in a field. It must follow ethical guidelines for publication governing all components of operation. It must have an editor. It must design its first page of each article in a specified fashion. The CCRJE will continue to pursue indexing for its member journals in major indexes.

We will examine the possibility of creating a chiropractic subdatabase which can be used with *Index Medicus*, as other professions have done. The CCRJE notes that efforts are already underway regarding this, both from the private sector and from within the academic community (the Chiropractic Library Consortium has been long working on a chiropractic database, the *Index to Chiropractic Literature*). Liaison to such groups may be desirable.

Subject headings: Relative to the above, the CCRJE needs to see that subject headings appropriate for the chiropractic profession be developed. The *Medical Subject Headings List (MeSH)* is the document containing key terms used by *Index Medicus*, and is quite comprehensive. It does not, however, contain key chiropractic terms such as adjustment, spinal fixation or chiropractic manipulation. Coordination with others in the chiropractic profession will be necessary to accomplish this goal. The Chiropractic Subject Headings list is now in development through the Chiropractic Library Consortium (CLIBCON); the editors will work with this group to complete the list.

The role and responsibilities of the editor: The CCRJE will explore the role of the editor and will bring to the public eye its conception of an ethical editor of a chiropractic research journal. As well, the group will work to improve communication among its members and with those in other publications seeking information.

Decisions from the first meeting

Uniform Requirements

The CCRJE, by motion and unanimous vote, will accept the use, within the dictates of a particular journal's editorial policies, of the "Uniform Requirements for Manuscripts Submitted to Biomedical Journals". Copies of this have already been published in some of the member journals, and are available from any editor of the group.

Peer review

The CCRJE, by motion and unanimous vote, adopted the following policy regarding the peer review system: Papers submitted to a chiropractic research journal will be sent for review by peer(s). This review may encompass examination of originality, research design, statistical analysis, appropriateness of literature citation, grammar and syntax, use of human or animal subjects, clinical information, and other criteria specified by the editor of the journal. It is important to note that the editor maintains the prerogative of deciding when and how to seek input prior to making a decision.

Indexing

The CCRJE, by motion and unanimous vote, recommended that the FCER bring together all groups involved in indexing chiropractic literature with the idea of developing a comprehensive index.

Future decisions

The process initiated in this initial meeting of the CCRJE will continue on a regular basis, with at least one meeting to be held in conjunction with the International Conference on Spinal Manipulation. Policies regarding a wide variety of subjects still require development, including consideration of how to deal with publication fraud, how to retract such information, definition of authorship criteria, statements on questions of financial interest in research relative to publication, refinement of peer review, and refinement on use of human and animal subjects in research. Any developments will be published in all member journals, the profession will be kept aware.

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References

- 1 International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals. *Ann Intern Med* 1986; 108:256-265.
- 2 Lundborg GD, Flanagan A. New requirements for authors: signed statements of authorship responsibility and financial disclosure. *JAMA* 1989; 262:2003-2004.