Dynamic Chiropractic

EDUCATION & SEMINARS

What Is a Chiropractic Science Journal?

Joseph Keating Jr., PhD

Publishing has long been a popular sport in chiropractic. The tradition was established by D.D. Palmer before the turn of the century, and one of his publications, The Chiropractor, still holds the record for the longest-lived chiropractic periodical. The founder's proclivities for "getting the word out" were matched in his lifetime by Solon Massey Langworthy, D.C., founder of the American School of Chiropractic (publisher of the first book on chiropractic) and by many other early chiropractors. B.J. Palmer, D.C., developed his chiropractic publishing efforts into a diversified industry which included a print shop, dozens of books, hundreds of pamphlets, several periodicals, and commercial radio ventures. Both national associations have journals dating back for decades (the current ACA Journal of Chiropractic was established by the National Chiropractic Association in 1933 as The Chiropractic Journal -- no relationship to the newspaper by the same name which is currently published by Terry Rondberg, D.C.) Most state chiropractic associations publish a journal and/or newsletter, as do the chiropractic colleges, several non-profit foundations, technique organizations, and several practice management companies and product distributors/suppliers. Clearly, there is no shortage of reading material for chiropractors.

Unfortunately, the differences among trade magazines, newspapers, and scholarly journals do not seem to be recognized by the majority in the profession. Although "science" and "research" are very popular buzz words in the profession, original data reports and scholarly reviews are all too frequently encountered in periodicals, which are unprepared or unwilling to conduct the critical reviews which scientific contributions deserve. It may be helpful, therefore, to review the characteristics of legitimate science journals in chiropractic.

1. Editorial Autonomy

In 1978, after repeated rejections of the idea by the American Chiropractic Association and other chiropractic organizations, the Journal of Manipulative and Physiological Therapeutics (JMPT) was established by the National College of chiropractic as a vehicle for critical review and publication of scholarly works in chiropractic. The JMPT was certainly not the first periodical to attempt this function, since the Bulletin of the European Chiropractors' Union (now the European Journal of Chiropractic) sought to publish scholarly works during the 1930's. C. O. Watkins, D.C., published the short-lived American Chiropractic Journal for the same purpose during 1941-42, and the Journal of Clinical chiropractic and Archives of the California Chiropractic Association made similar attempts in the 1960's, 1970's, and early 1980's. However, lack of interest and minimal subscription support doomed most attempts at scientific publishing until the JMPT; exceptions to this rule have included several association-supported science journals in Australia, Canada, and Europe.

Roy W. Hilderbrandt, D.C., set the stage for the first successful, fully legitimate science journal through his discussions with National College's president, Joseph Janse, D.C. Dr. Hildebrandt insisted and Dr. Janse agreed that as editor of the JMPT he must have complete editorial control. This control includes selection of experts for manuscript review, final decision to accept or reject all manuscripts, selection of the physical characteristics of the journal, hire/fire authority for journal personnel, control of the periodical's budget, and final approval/disapproval of any and all

advertising. To my knowledge, there are currently nine chiropractic science journals which operate with this degree of editorial autonomy (see Table 1).

2. Blind-Peer-Review of Manuscripts

In submitting manuscripts for consideration to publish in a science journal, authors are expected to list their name(s) and institutional affiliation(s) on the first page of the paper, and only the first page. After a preliminary review of the manuscript to determine whether the topic of the paper is appropriate for that particular journal, the editor removes the first page and sends copies of the manuscript to several reviewers selected for their knowledgeability in the topic of the paper. The author(s) of the paper never (or rarely) learn the identity of the reviewers, and the reviewers may never know the identity of the author(s) unless the paper is published.

Reviewers are asked to critique the manuscript in detail, and to make one of three recommendations: to accept the manuscript for publication without revisions (which is rare), to accept pending revisions, or to reject the paper. If the paper is accepted pending revisions or rejected, and if the editor accepts either of these recommendations, the author(s) will receive copies of the reviewers' detailed critiques. In exchange for the costs and effort involved in peer-review, most science journals require that all copyrights to the manuscript be signed over to the journal; in the event the manuscript is not published, the copyrights remain with the author(s).

The blind-peer-review process permits a scholarly critique of submitted works without consideration of the identity or associations(s) of the author(s). The process is far from perfect, and journal readers should not assume that everything published in a science journal is "truth" simply because it has survived the critical review process. However, readers will usually find that the quality of materials published in a critically, blind-peer-reviewed science journal are usually superior to that found in trade journals and newspapers. This is not meant as a criticism of trade publications and newspapers -- they have their role to play, but not in scientific publishing. What a pity to see a strenuous effort to produce original, scholarly, clinical information published in an uncritical periodical. Chiropractic clinical investigators should do themselves (and the profession) a favor -- don't submit your hard won original data and secondary works (e.g. critical reviews of the literature) to anything less than a blind-peer-reviewed scientific periodical. Trade journals will (and should) often reprint original reports and critical reviews from scientific periodicals, but critically reviewed science journals always insist on first publication.

3. Indexing and Retrieval Sources

The chiropractic scientific community and its literature are part of a large community and body of information which includes works in medicine, physical therapy, psychology, and many other health disciplines and pure sciences. Science journals seek the widest dissemination possible of their contents throughout this network through a process known as indexing. Indexing permits the professional and scientific communities to retrieve published information through listing by author, journal, and/or topic. Indexes are preferably published on a timely and regular basis, although this is not always the case.

Professional and scientific indexes have a number of variable characteristics. They may list titles only (e.g., the Chiropractic Library Consortium's (CLIBCON's) Index to the Chiropractic Literature) or include abstracts/summaries as well (e.g., Psychological Abstracts). Indexing services may be regional (e.g., Australian Medical Index) or international (e.g., USSR Soviet Academy of Sciences), and may provide comprehensive indexing (e.g., Index Medicus or selected listings (e.g., Chiropractic Research Abstracts Collection/CRAC). Indexes may be highly selective in limiting the journals they cover to only those meeting critical standards or review (e.g., Index Medicus) or

include trade journals, as well as scientific periodicals (e.g., CLIBCON Index).

Indexing provides wider access and retrievability of professional and scientific information than would be possible if readers could only find materials by searching through the tables of contents of all relevant journals for particular topics or authors. Unfortunately, the chiropractic profession has paid little attention and invested few resources in this area of scientific organization. The CLIBCON Index to the Chiropractic Literature provides the most comprehensive history of chiropractic publications. However, extremely limited funding from the chiropractic professional associations has limited what can be accomplished by the college librarians. Among the limitations of the CLIBCON Index are its restriction to titles and authors (abstracts are not included), its once annual publication (many entries are therefore more than a year old when listed), and the non-selective basis for inclusion. The CLIBCON Index's "net" is far flung, and includes political house organs and trade journals, as well as scholarly periodicals. Accordingly, it has very little circulation outside the chiropractic profession. However, all of the journals listed in Table 1 are included in the CLIBCON Index.

Other chiropractic informational retrieval sources, such as Canadian Memorial's CRAC, FCER's Spinal Manipulation, and the "*Recurring Bibliography of Chiropractic*" published by Palmer College's Research Forum (Journal of Chiropractic Research), provide valuable supplementary dissemination and are interdisciplinary in scope, but are also selective regarding the articles chosen for inclusion. These sourceworks do not include all of the articles published in any single journal. Several scholarly chiropractic journals have achieved interdisciplinary and international dissemination. The Journal of the Australian Chiropractors' Association, for instance, is listed in the Australian Medical Index, and Chiropractic Sports Medicine is included in the Physical Education Index, Excerpta Medica, and Biosciences Information Services. The *Journal of Manipulative and Physiological Therapeutics* (*JMPT*) and the American Journal of Chiropractic Medicine (AJCM) are each indexed in the Soviet Academy of Science's listings, and the JMPT is additionally distinguished by its inclusion in Index Medicus, BIOSIS, Current Contents, and Excerpta Medica. A more comprehensive review of chiropractic science journal characteristics and indexers can be found in Jacobs, G.E., Keating, J.C., Chiropractic Periodicals: a survey of characteristics. American Journal of Chiropractic Medicine September 1989; 2(3): 122-8.

Conclusion

As the age of accountability overtakes the health care disciplines, the importance of a critically reviewed and accessible scientific database grows larger. Doctors of chiropractic, no less than other health professionals, can expect to be held legally responsible for their knowledgeability and performance (or lack thereof) within the informational base provided by the scientific literature. Third-party payers will increasingly turn to the chiropractic scientific literature as a means of setting reimbursement policy. Chiropractic trade magazines, newspapers, and political journals are already coming in for criticism for their willingness to publish original data without the critical standards and avenues of dissemination which constitute scientific publishing.

Readers and contributors to the chiropractic literature are advised to recognize the differences between science journals and other forms of publication in the profession. We owe this to our patients, to society, and to ourselves.

Table 1

Chiropractic Science Journals with Editorial Autonomy and Blind-Peer-Review of Manuscripts

JOURNAL	EDITOR	EDITOR'S ADDRESS

American Journal of Chiropractic Medicine	Roy W. Hildebrandt, D.C.	24W760 Geneva Road, Carol Stream, IL 60188 USA
Chiropractic Sports Medicine	Robert H. Hazel, Jr., D.C.	220 Vroom Avenue, Spring Lake, N.J. 07762 USA
Chiropractic Technique	Thomas F. Bergmann, D.C.	735 Keokuk Lane, Mendota Heights, MN 55120 USA
European Journal of Chiropractic	Simon Leyson, D.C.	Gwendwr, 16 Uplands Crescent, Uplands, Swansea SA2 0PB United Kingdom
Journal of Manipulative and Physiological Therapeutics	Dana J. Lawrence, D.C.	200 East Roosevelt Road, Lombard, IL 60188 USA
Journal of the Australian Chiropractors' Association	Rolf E. Peters, D.C., and Mary Ann Chance, D.C.	P.O. Box 748, Wagga Wagga 2650 Australia
Journal of the Canadian Chiropractic Association	Allan Gotlib, D.C.	1396 Eglinton Avenue West, Toronto, Ontario M6C 2E4 Canada
Oklahoma Chiropractic Journal	Bruce J. Heng, D.C., and Thomas D. Thomas, M.S., D.C.	133 S.W. 59th St., Oklahoma City, OK 73119 USA
Research Forum (Journal of Chiropractic Research)	Robert J. Wagnon, Ph.D.	1000 Brady Street, Davenport, IA 52803 USA