

### Case reports: an important contribution to chiropractic literature

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How many of you have treated these conditions?

Sciatica, mechanical low back pain, headache, thoracic outlet syndrome, neck pain, costo-vertebral pain, whiplash, TMJ, shoulder pain, hip pain, knee pain. ....

The list could go on and on but you get the point. As chiropractors, we treat these conditions every day. Not everyone knows this. Neither do other professionals, nor

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the scientific community, understand what chiropractors do. This is because, as chiropractors, we keep it a secret and do not write about our successes. If every chiropractor in Canada would write about a case that they have successfully treated, we would add approximately 10,000 articles to the library pool of scientific literature.

Chiropractors appear to have a form of apathy, not necessarily apathy toward their practice nor patients but toward their profession. According to Wikipedia, apathy is a psychological term for a state of indifference.<sup>1</sup> Most people are familiar with the concept of "couch potato." According to Dr. D.P. Towle, "one serious problem for both chiropractic and homeopathy is the number of 'office potatoes' we have. The office potato puts in his time for his patients and then goes home. There is no reinvestment of time or energy into the profession."<sup>2</sup> An easy way to reinvest in the profession is to write and publish a case study or case report.

Case reports are published because they support findings in previously published cases or because they are useful reminders of an important point in diagnosis or treatment and will add to medical knowledge. The terms case study and case report are often confused. The case study is a more extensive form of a case report.<sup>3</sup> Wikipedia defines the case report as a detailed report of the diagnosis, treatment, and follow-up of an individual patient. Robert Yin suggests that the case study is a research strategy. It involves an in-depth, longitudinal examination of a single instance or event: a case.<sup>4</sup>

The case report is one of the oldest forms of medical reporting.<sup>5</sup> According to Iles, most case reports are on one of five topics.

An unexpected association between *diseases* or *symptoms*.

An unexpected event in the course of observing or treating a patient.

Findings that shed new light on the possible *pathogenesis* of a disease or an adverse effect.

Unique or rare features of a disease.

Unique therapeutic approaches.<sup>3</sup>

In recent years, with the emphasis on evidence based medicine and treatment, the case report appears to have become less valued in scientific literature. Peer-reviewed journals are still printing case reports. MEDLINE listed 250,000 case reports between 1997 and 2002.<sup>6</sup> Recently, case reports have become such a big part of literature that BioMed Central has launched a journal devoted only to case reports. According to JP Vandenbroucke, clinical case reports and case series play an important role in evidence-based medicine. They are necessary for detecting new ideas, new diseases, and new treatment.<sup>7,8</sup> "They will continue to be necessary in the context of discovery. Moreover, they can provide convincing clinical evidence."<sup>8</sup>

Interestingly, the case report or study is a simple and effective way to expand the positive results of chiropractic care. Yet, as a profession, we tend to ignore it. Every chiropractor has the opportunity to add to the body of scientific literature by writing and publishing a case report. Each of us can add to the pool of scientific literature with the publication of one case. By publishing case reports, we can let others know what we know, that chiropractic works and it works for many different conditions. Chiropractors understand this, but a large portion of the world does not know what we can do. This expansion of knowledge will lead to referrals and a friendlier relationship with other health care professions. Every chiropractor has the opportunity to document the results of treatment successes. Many times, doctors will say, "Why should I do this?" or "This will take too much time." or "It has been written about before." These are poor excuses. We need to write case reports to help legitimize what we do in scientific literature and help educate the scientific community to the benefits of chiropractic care. How much time and energy do we spend trying to advertise the chiropractic product? Publishing one case report is both a time efficient and cost effective way to advance chiropractic. If several case reports support each other, we have produced scientific data that could not be ignored by healthcare professions. This could help educate other professionals, patients, and government officials and may lead to further

research.<sup>9</sup> It is easier to ignore one case report than it is to ignore several on the same topic.

What I like most about case reports is that they are written by clinicians for other clinicians to read. They are not long and are quite easy to write. The case report will often lead to further research, or may change the standard of care.<sup>10</sup> For the novice writer there are several good aids. On the Internet there are many articles and several web sites that are helpful when writing a case report. Two of these sites are [www.medwriting.com](http://www.medwriting.com) and [www.studentbmj.com](http://www.studentbmj.com) and there are many more.<sup>11</sup> Another excellent resource is Robert Iles 'Guidebook To Better Medical Writing.' Dr Gleberzon's commentary 'A Peer-Reviewer's Plea' in JCCA 2006 also has some good advice.<sup>12</sup> Reading published case reports is also a good resource, and gives information on the format that a journal uses.

The peer-review process aims to make authors meet the standards of their discipline, and of science in general. During this process, the role of the referees is advisory, and the editor is under no formal obligation to accept the opinions of the referees. Showing work to others increases the probability that weaknesses will be identified, and with advice and encouragement, fixed.<sup>13</sup> The peer-review process helps to improve the quality of published articles.

I would like to share my limited experience as an author dealing with peer-review. My experience involves two case presentations and four reviewers (referees). In the first case report, reviewer number one accepted the manuscript as it was first submitted. His comment was that it was a good paper from a field practitioner. Reviewers number two and three gave constructive criticism in a helpful manner that helped improve the article. The last reviewer's comments were harshly worded and made me feel that the manuscript was not good enough to be published. At this point only the encouragement of the editor and my daughter kept me from quitting. The rewrite contained some, not all, of the changes suggested by the second and third reviewers and was resubmitted and published. It is easy to put more emphasis on the harsh review than on the helpful review. Do not be afraid of criticism; one person's opinion is just one person's opinion. The second case report came back with almost the same reviews. In the end, it was accepted by three of the four reviewers and rejected by one. Most writers have

had papers rejected, so you are in good company. Don't get discouraged.

Dealing with reviewers' comments can be stressful for new authors. Don't take comments personally. Use comments as a guide to improve your manuscript. Explain to the editor why any of the reviewer's comments have not been addressed. I encourage reviewers to be constructively critical and not harshly critical. Authors should be encouraged to publish case reports and add to the pool of chiropractic literature. An encouraging review will accomplish more than a harshly worded one and the reviewer's suggestions will be more easily accepted and incorporated into the rewrite. I would like to thank all the reviewers that spend time reviewing manuscripts. This is an important part of the publishing process, which helps improve the quality of the published literature.

Remember that acceptance rates by Journals are often less than 20%, so don't get discouraged.<sup>14</sup> According to Colin Powell, there are no secrets to success. It is the result of preparation, hard work and learning from failure. This is excellent advice when writing a case review for publication.

I would like to encourage every chiropractor to take one interesting case and prepare a case report and submit it to a research journal. If we all did this, chiropractic would accumulate a large positive database that would

support chiropractic. This would help to advance chiropractic within the scientific community.

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