

Perspectives on the RAND Report -- A Reply

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In a recent "Ivory Tower Review,"¹ Dr. Joseph Keating decried my "extreme and unwarranted" reaction to the RAND report in a recent publication of mine.² Of great concern to Dr. Keating was the importance I placed on descriptive research; he evidently feels that reasonable opinions can only be based on the "anchor" of controlled experimental research. This is a rather new position for Dr.

Keating: In the recent past, he has praised descriptive research.³

Whether you happen to side with my fellow "extremists" or with those comfortably arranged on Dr. Keating's "anchor," is of little importance at the moment. However, the current dispute does raise a larger issue: the role of descriptive research in the science of chiropractic.

Much of the clinical literature within our profession consists of case studies and case series -- descriptive research. In research of this sort, there is no control group, no blinded assessment, no formal experimental design. Is this sort of thing scientific research? Yes, it is. Repeatable observation is the essence of science. Controlled experiment is only one way to arrive at repeatable observation. If you read a case study that contains sufficient descriptive detail, you can replicate the investigator's adjusting procedure when a similar case presents at your office. By carefully observing and recording the clinical outcome, you can support or refute the findings of the previously published study. This sort of thing is not controlled experiment, but it's science for sure.

In fact, there are entire sciences largely (or mostly) based on descriptive research. In the social sciences, there are economics, anthropology, archeology, and social psychology. In the physical sciences, there are geology, astronomy, oceanography, and meteorology. In the life sciences, there are botany and zoology.

By the way, how would you like to rely on an anatomy text which only contained information verified by controlled experiment? It would certainly be easy to carry, because anatomy is largely a descriptive science in all of its branches -- gross anatomy, comparative anatomy, histology, etc.

This brings me to the crux of my disappointment with the RAND report (actually, my publication was a review of a paper in the Annals of Internal Medicine, which summarized the findings of Part 1 of the RAND study).⁴ At the time that the RAND experts conducted their search of the literature, there were excellent descriptive studies of chiropractic intervention for low-back patients with sciatic

involvement, disc involvement, chronicity, and organic complications.⁵⁻⁹ None of these studies appeared in the reference section of this RAND paper. There are many other relevant descriptive studies, but the decision was made to focus on controlled, clinical research. However sincere the intent, this decision had the effect of sanitizing the RAND study of much of the evidence that chiropractic adjustments in particular, and spinal manipulative therapy in general can be effective beyond the arena of uncomplicated low-back pain of three weeks' duration or less.

The RAND group's insistence on controlled experimental evidence also begs this question: Is there a huge body of double-blind, controlled clinical trials supporting surgery for disc herniation patients, analgesics for sciatic neuropathy patients, and ultrasound for chronic low-back pain patients? If Dr. Keating's "anchor" is good for chiropractic low-back patients, why isn't it equally good when those patients turn to medical or physical therapy alternatives?

I would like to conclude by noting that Dr. Keating is a fellow ICA member. As you can see, there is room in this organization for a wide variety of viewpoints. As we say in Virginia, "Y'all come! Bring your friends."

References

1. Keating JC: Ivory Tower Review: Perspectives on the RAND report. *Dynamic Chiropractic*, 44-45, May 21, 1993.
2. Masarsky CS: Tunnel vision at RAND. *ICA Review of Chiropractic*, 49:55, Jan/Feb 1993.
3. Keating JC: Descriptive Clinical Design. *Toward a Philosophy of the Science of Chiropractic: A Primer for Clinicians*, Ch. 12, Stockton Foundation for Chiropractic Research, Stockton, CA., 1992.
4. Shekelle PG, Adams AH, Chassin MR, Hurwitz EL, Brook RH: Spinal manipulation for low-back pain. *Annals of Internal Medicine*, 117:590-598, 1992.
5. Cox JM: Lumbosacral disc protrusion: A case report. *JMPT*, 8:261-266, 1985.
6. Cox JM, Shreiner S: Chiropractic manipulation in low-back pain and sciatica: Statistical data on the diagnosis, treatment, and response of 576 consecutive cases. *JMPT*, 7:1-11, 1984.
7. Quon JA, Cassidy JD, O'Connor SM, Kirkaldy-Willis WH: Lumbar intervertebral disc herniation: Treatment by rotational manipulation. *JMPT*, 12:220-227, 1989.
8. Falk JW: Bowel and bladder dysfunction secondary to lumbar dysfunctional syndrome. *Chiropractic Technique*, 2:45-48, 1990.

9. Browning JE: Chiropractic distractive decompression in treating pain and multiple system pelvic organic dysfunction. JMPT, 12:265-274, 1989.

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