

## Karaoke Research: Singing along with the Juggernaut

Anthony Rosner, PhD, LLD [Hon.], LLC

At first blush, research is intended to stimulate inquiry and debate. Sometimes, however, the process "heads south." The operation becomes unwieldy, uncontrollable, and even politicized. In so doing, it can lull an unsuspecting populace into passive acceptance. At its worst, it could seduce us (as a nightclub MC might envision) into singing along with the leader. Thus, I would like to introduce the term "karaoke research."

Karaoke research is perhaps most evident when an original clinical research finding becomes overwhelmed in what is supposed to be a more definitive experiment. In truth, the more high-powered research followup may be dictated by parties who seem to bear no interest (or even a negative one) in the primary observations. In no place is this more chillingly apparent than in David Hess's description of what happened when pilot studies reporting high rates of remission in patients using a protein preparation (called "antineoplastons") were ostensibly to be repeated by the National Cancer Institute (NCI) or the Memorial Sloan-Kettering Institute (MSKI). In this instance, the NCI or the MSKI admitted patients with larger and more advanced tumors than the ones originally tested by Stanislaw Burzynski in the pilot studies. Rather than "sing along" with this new design, Burzynski offered to help recraft the trials so that they were more in keeping with his original protocol. He also asked that these sicker patients be provided with more complete informed consent since their therapy was more likely to be more ineffective in these more advanced cases. The response of the NCI to these requests was to cancel the trials altogether. Similar shenanigans (obfuscating positive preliminary clinical findings) have been encountered in designing "more advanced" clinical trials using vitamin C and hydrazine sulfate.<sup>1,2</sup>

This raises the issue of collaborations in research that are productive versus those that are based upon reputation alone, taking care to avoid being seduced and intimidated simply by what is "on the boilerplate." The point of this discussion thus far is to raise the possibility that collaborations without appropriate precautions can sometimes lead to disappointing and unproductive results. In this morality tale, there is much to learn from in any emerging clinical area of health care intervention, including chiropractic. Indeed, this was the entire topic of discussion at a special forum held at our International Conference on Spinal Manipulation in Bloomington, Minnesota, on September 24 of last year - at which David Hess himself spoke in addition to Robert Houston (a key contributor to Hess' book); Niels Nilsson; Meridel Gatterman; and myself (We expect to submit manuscripts of our talks to an indexed journal early this year.).

Looking into other research sing-alongs which raise a discordant note or two, I am dismayed by a recent study published in the *Canadian Journal of Neurological Sciences* which discusses "possible links" between the onset of vertebral artery dissection and chiropractic maneuvers.<sup>3</sup> A closer look at the methodology of this investigation reveals that it is based upon the recollections of the previous experiences over an undefined period of 14 patients with vertebral artery dissections. Among the recalled events would be encounters with the chiropractor. What is odd in this study is that the authors presumably and systematically excluded patients with traumatic arterial dissection

- supposedly those who would have been expected to report a traumatic event at the chiropractor's office. Who would be left to enroll? Presumably those with cumulative events that could have precipitated the dissection. We know from other sources that no less than 68 daily activities have been implicated in disrupting cerebral circulation,<sup>4,6</sup> and that among those activities listed, 18 have actually been associated with vascular accidents but are decidedly nonmanipulative.<sup>6</sup>

In studies implicating chiropractic as a causative agent for vertebral artery dissections and/or stroke, one has to immediately raise the question whether these events followed manipulation by a licensed *chiropractor*. The number of iatrogenic complications specifically ascribed to chiropractic in various research studies has been shown to be significantly overestimated due to the fact that the practitioner involved was, in many cases, a nonchiropractor.<sup>7</sup> More recently and more outrageously, a study published just within the past year presumably chronicles in a cohort of 10 patients "stroke following chiropractic manipulation of the cervical spine." It is only on page two of the paper that we are informed that the manipulations were not performed by any chiropractors, but rather a smorgasbord of stand-ins (orthopedists for seven patients, a physiotherapist for one, and "health practitioners who were not physicians" for two). Furthermore - and here is where the singing really goes off-key - the authors state: "the chiropractic [sic] maneuver type was described by the patients (emphasis mine), since medical documentation of it was not available in any case."<sup>8</sup> With all due respect to the patients, isn't this a perfect example of having the inmates run the asylum? In these two instances regarding possible postmanipulation events, I would submit that not only are we being asked to sing along with research protocols of dubious design, but in the latter case there might not even be a conductor. (Then again, in karaoke singing, there is no conductor, but rather a machine.).

Finally, I am troubled by passage in another research study that indicated that sham-treated and manipulated asthma patients did not differ significantly in their clinical responses to treatment (although both groups improved in symptoms and quality of life with regard to baseline values). Here we are presented with a satisfaction survey with responses to 12 questions at its end, including "questions related to the attention subjects received from the chiropractor; the explanations of procedures; communication; feeling at ease; the skill and ability of the chiropractor; and overall quality of care."<sup>9</sup> Fine, but let's look between the lines. The patients were 7-16 years of age.<sup>9</sup> Unless we are looking at a cohort of "Science Talent Search" winners, or castoffs from the "GE College Bowl" (I'm dating myself), there's no way that I could be convinced that the kids in this study without parental aid could have provided answers to this questionnaire to the level of sophistication required.

This by no means should lead us to reject research for what it has accomplished for health care and for chiropractic in particular. It does, however, give us reason to reflect upon the tempered passions of Larry Dossey, the editor of an indexed journal in alternative medicine:

"Science teased and seduced me, adorning herself with layers of paint and glitter that concealed flaws I never suspected. Her emissaries, sent ahead to make introductions, lied out of their teeth. They exaggerated her dowry, inflating what she had to contribute to our arrangement. I could have endured a few lies; it was when the actual abuse set in that I began to wake up.

Don't misunderstand me. I haven't given up. I'm still terribly attracted to her and I'm sure I always will be. I keep hoping she'll change. If she does, there's a chance our love might rekindle. But even if we do make up, things could never be the same. I would set conditions. For one thing, I'd require that she listen to me for a change."<sup>10</sup>

So where does this leave us? A bit wiser, more skeptical and resistant to blindly follow the research juggernaut without more careful inquiry: in other words, we refuse to sing along unless we're given the score, or at least the lyrics.

### References

1. Hess DJ. *Evaluating Alternative Cancer Therapies: A Guide to the Science and Politics of an Emerging Medical Field*. Piscataway, NJ: Rutgers University Press, 1999, p. 216.
2. Burzynski S. Letter to Richard Klausner, director of the National Cancer Institute, 1995, <http://catalog.com/bri/ncibri.htm>.
3. Bin Saeed A, Shuaib A, Al-Sulaiti G, Emery G. Vertebral artery dissection: Warning symptoms, clinical features and prognosis in 26 patients. *Canadian Journal of Neurological Sciences* 2000; 27:292-296.
4. Rome PL. Perspective: An overview of comparative considerations of cerebrovascular accidents. *Chiropractic Journal of Australia* 1999; 29(3): 87-102.
5. Terrett AGL. Vascular accidents from cervical spine manipulation. *Journal of the Australian Chiropractic Association* 1987;17:15-24.
6. Terrett AGL. Vertebral stroke following manipulation. West Des Moines, IA: National Chiropractic Mutual Insurance Company, 1996.
7. Terrett AGJ. Misuse of the literature by medical authors in discussing spinal manipulative therapy injury. *Journal of Manipulative and Physiological Therapeutics* 1995;18(4):203-210.
8. Hufnagel A, Hammers A, Schonle P-W, Bohm K-D, Leonhardt G. Stroke following chiropractic manipulation of the cervical spine. *Journal of Neurology* 1999;246:683-686.
9. Balon J, Aker PD, Crowther ER, Danielson C, Cox PG, O'Shaughnessy D, Walker C, Goldsmith CH, Duku E, Sears MR. A randomized trial of complementary treatment of childhood asthma utilizing chiropractic manipulation. *New England Journal of Medicine*, 1998; 339(15):1013-1020.
10. Dossey L. The science blues. *Alternative Therapies in 10. Health and Medicine* 2000; 6(4):12-17, 94-98.

Anthony Rosner, PhD  
Brookline, Massachusetts  
[RosnerFCER@aol.com](mailto:RosnerFCER@aol.com)

FEBRUARY 2001