Dynamic Chiropractic

PHILOSOPHY

Scratching Where It Itches: Core Issues in Chiropractic Research

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With the recent burst of media coverage of both alternative medicine and chiropractic intervention, I have felt compelled to redouble our ongoing efforts to identify some predominating elements and trends in health services research in general, and chiropractic research in particular. I was fortunate enough to find some help in doing this at the Third International Forum for Primary Care Research in Manchester, England, October 2-3, 1998.

The conference's predominating message was that pain (low-back pain in particular) needs to be understood in the broader context of psychosocial, economic and even environmental phenomena. Such factors as depression, stress and negative reactions to the workplace can be useful predictors to chronicity of the problem in patients. There is growing evidence that the fear of back pain or reinjury is even more disabling than the pain itself.[1]

To lay out a research agenda is a daunting undertaking. At theManchester forum, Chris Main pointed out the prevalence ofpsychosocial issues.[2] This presents the challenge of attempting todelineate the active components of patient management whileavoiding becoming a rabid reductionist to the point of knowing moreand more about less and less until one knows everything aboutnothing.

All that has been said so far holds true for chiropractic research. To begin, we can learn from examples in which the process has gone awry. What we have witnessed in the recent Cherkin study in the *New England Journal of Medicine,*[3] for instance, is an inquiry which exemplifies what happens if one attempts to compare two types of intervention by two professions (side-posture adjusting by chiropractors vs. McKenzie protocols by physical therapists).

Ancillary procedures, including electrical stimulation, cryotherapy, exercises and counseling are severely limited or restricted from each of the interventions compared. The fact that significant differences were not observed in comparison to the use of a medical booklet does not mean that the practices from which these techniques were isolated are themselves of limited value, as suggested by a cursory reading of Cherkin's research.

What we have witnessed from the Balon study in the same journal[4] is much the same thing. The failure of the authors to detect differences between the patient groups which were given active treatment or a sham procedure led them to make a quantum-leap conclusion: "The addition of chiropractic spinal manipulation to usual medical care provided no benefit." What is not appreciated in the latter study is that the control group of patients were not given "usual medical care at all." This cohort was given soft-tissue massage and palpation to the spine, paraspinal muscles, and shoulders. A distraction maneuver was also applied to the head, while the ankles were alternately palpated, in addition to applying impulses to the gluteal and scapular areas. One begins to wonder what anatomical regions were left out! One could quip that in the sham procedure, the practitioners were all over the patient like a cheap suit.

There is an important take-home lesson here. There is the real risk of becoming so enamored of the randomized, clinical trial that we forget that its gold standard purity comes at a price: that of proper generalization. Since the RCT is often conducted in a laboratory setting, and since it often limits the type of interaction between practitioner and patient and the environment in which it is usually conducted, it may help to delineate specific components of the interaction which produce an effect. However, the fact that there may be a failure to identify those components sought after does not mean that the entire treatment from which these elements were extracted is invalid. This has led such individuals as Richard Deyo to suggest that it would be helpful to see more clinical trials conducted in primary rather than tertiary care settings.[5]

The other element, of course, which sorely needs revisiting in our search to identify core issues in research, is the notion of the sham procedure. We heard recently from Walter Herzog at FCER's 1998 ICSM that electromyographic responses associated with spinal manipulative therapy appear to be of reflex origins, themselves originating from a multiplicity of receptors.[6] The onset of the actual thrust did not coincide with the timing of afferent activation. This suggests that the audible release, interpreted by some as the benchmark of chiropractic manipulation, may not be all that it is cracked up to be.

The facts that many of the beneficial effects which chiropractors report are occasionally seen in massage[7] or even ultrasound[8]therapy lends increased weight to this assertion. In terms of chiropractic health care, we simply do not know how to effectively distinguish a sham from an active intervention. Until we appreciate this lesson, we run the risk of having chiropractic effectiveness collapsed into nothingness with such indiscriminate use of the sham terminology and procedures as shown in the previously discussed asthma study.[4]

In our search for key issues in research, therefore, aspects of the chiropractic intervention other than the actual thrust clearly need to be more clearly recognized, appreciated and researched. Otherwise, we will be forced to invest the lion's share (if not the whole) of chiropractic intervention upon the audible release, with the real possibility that people in the future, when referring to chiropractic, may someday say, "I never heard of that."

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