

Chapter 2

Studies Documenting the Efficacy of Chiropractic

Numerous research studies and government inquiries have over the years earned increasingly widespread recognition of chiropractic, and currently support the appropriateness of chiropractic treatment. Excerpts from some of these studies have been highlighted in this chapter.

The New Zealand Commission of Inquiry

One particularly significant study of chiropractic was performed in New Zealand by the New Zealand Commission of Inquiry. In its 377-page report to the House of Representatives, the Commission states that the report followed an extended (two-year) inquiry which developed into “probably the most comprehensive and detailed independent examination of chiropractic ever undertaken in any country.” Excerpts from the Commission's report illustrate the relevancy of the New Zealand inquiry to chiropractic worldwide:

“We entered into our inquiry in early 1978. We had no clear idea what might emerge. We knew little about chiropractors. None of us had undergone any personal experience of chiropractic treatment. If we had any general impression of chiropractic it was probably that shared by many in the community: that chiropractic was an unscientific cult, not to be compared with orthodox medical or paramedical services. We might well have thought that chiropractors were people with perhaps a strong urge for healing, who had for some reason not been able to get into a field recognised by orthodox medicine and who had found an outlet outside the fringes of orthodoxy.

“But as we prepared ourselves for this inquiry it became apparent that much lay beneath the surface of these apparently simple terms of reference. In the first place, it transpired that for many years chiropractors had been making strenuous efforts to gain recognition and acceptance as members of the established health care team. Secondly, it was

clear that organised medicine in New Zealand was adamantly opposed to this on a variety of grounds which appeared logical and responsible. Thirdly, however, it became only too plain that the argument had been going on ever since chiropractic was developed as an individual discipline in the late 1800s, and that in the years between then and now the debate had generated considerably more heat than light.

“By the end of the inquiry we found ourselves irresistibly and with complete unanimity drawn to the conclusion that modern chiropractic is a soundly-based and valuable branch of health care in a specialised area...”

Specific conclusions of the Commission's report, based on investigations in New Zealand, the United States, Canada, the United Kingdom, and Australia, were as follows:

- Modern chiropractic is far from being an “unscientific cult.”
- Chiropractic is a branch of the healing arts specialising in the correction by spinal manual therapy of what chiropractors identify as biomechanical disorders of the spinal column. They carry out spinal diagnosis and therapy at a sophisticated and refined level.
- Chiropractors are the only health practitioners who are necessarily equipped by their education and training to carry out spinal manual therapy.
- General medical practitioners and physiotherapists have no adequate training in spinal manual therapy, though a few have acquired skill in it subsequent to graduation.
- Spinal manual therapy in the hands of a registered chiropractor is safe.
- The education and training of a registered chiropractor are sufficient to enable him to determine whether ... the patient should have medical care instead of or as well as chiropractic care.
- Spinal manual therapy can be effective in relieving musculo-skeletal symptoms such as back pain, and other symptoms known to respond to such therapy, such as migraine.

- In a limited number of cases where there are organic and/or visceral symptoms, chiropractic treatment may provide relief, but this is unpredictable, and in such cases the patient should be under concurrent medical care if that is practicable.
- Although the precise nature of the biomechanical dysfunction ... and... the precise reasons why spinal manual therapy provides relief have not yet been scientifically explained, chiropractors have reasonable grounds based on clinical evidence for their belief that symptoms of the kind described above can respond beneficially to spinal manual therapy.
- Chiropractors do not provide an alternative comprehensive system of health care, and should not hold themselves out as doing so.
- In the public interest and in the interests of patients there must be no impediment to full professional cooperation between chiropractors and medical practitioners.

The Wilk vs. AMA Lawsuit

Another inquiry that further validated chiropractic came about through an antitrust suit filed by four members of the chiropractic profession against the American Medical Association (AMA), and a number of other medical organizations (*Wilk et al v. AMA et al*, No. 90-542, October 1990).

In 1987, following 11 years of legal action, a federal appellate court judge ruled that the AMA had engaged in a “lengthy, systematic, successful and unlawful boycott” designed to restrict cooperation between M.D.s and chiropractors in order to eliminate the profession of chiropractic as a competitor in the United States health care system. A 1990 ruling from the 7th United States Circuit Court of Appeals upheld the lower court’s findings.

The AMA offered a patient care defense. However, Workmen’s Compensation Bureau studies comparing chiropractic care to care by a medical physician were presented which showed that chiropractors were “twice as effective as medical physicians, for comparable injuries, in returning injured workers to work at every level of injury severity.”

As part of the testimony in the suit, Irvin Hendryson, M.D., presented a report to the AMA stating his views of the benefits of chiropractic adjustments during pregnancy. The report stated:

“...it is commonly known that in the third trimester of pregnancy unrelenting back pain is one of the prices that is paid for the perpetuation of the race. I have learned from personal experience that general

(chiropractic) manipulations of backs in this particular condition has [sic] given these women a great deal of physical relief and has [sic] permitted them to go on to term and deliver without having to be bedfast during that later term of this pregnancy ... or having to be hospitalized for traction, heat, support and all the rest of it.”

The settlement of the suit included an injunctive order in which the AMA was instructed to cease its efforts to restrict the professional association of chiropractors and AMA members. The AMA was also ordered to notify its 275,000 members of the court’s injunction. In addition, the American Hospital Association (AHA) sent out 440,000 separate notices to inform hospitals across the country that the AHA has no objection to allowing chiropractic care in hospitals.

The American College of Surgeons, co-defendants in the suit, settled its share of liability in the suit by agreeing to inform its members that they were free to cooperate with chiropractors in hospitals and private practice. The American College of Radiology (ACR), another co-defendant, settled its suit by agreeing to rewrite its policy on interprofessional cooperation and to remove all impediments to contacts with chiropractors, and by urging ACR members to be sensitive to the radiologic needs of chiropractors. In addition, the other co-defendants in the suit, the American College of Surgeons, the American College of Radiology, the American Osteopathic Association, the American Academy of Physical Medicine and Rehabilitation, and the Illinois State Medical Society were each fined for their actions against the chiropractic profession.

Since the court findings and conclusions were released, a growing number of hospitals and health care organizations have begun including the services of chiropractors.

Additional Studies on Chiropractic

In recent years, the United States government has begun requiring that health professions provide guidelines for use in assessing the appropriateness of care within their respective fields. In an attempt to address this requirement, 35 members of the chiropractic community were invited to participate in a conference held in early 1992 at the Mercy Center in Burlingame, California. A publication released in early 1993 entitled, *Guidelines for Chiropractic Quality Assurance and Practice Parameters*, related the proceedings of that conference.

In addition to the studies mentioned above, many others have explored various areas where chiropractic treatment may be beneficial and appropriate. These projects focused on aspects such as the effectiveness of chiropractic treatment for back pain or other work-related injuries, the cost-effectiveness of chiropractic treatment versus other types of health care, and the international role of chiropractic in the health care system. Although too numerous to fully enumerate here, some of these studies are briefly mentioned in the following pages.

The International Role of Chiropractic

As related in Chapter 1, chiropractic is (as of this printing) legally recognized or allowed to be practiced without official sanction in approximately 39 foreign countries. Varying degrees of investigation into the appropriateness of chiropractic treatment preceded the official stance of these countries.

The New Zealand inquiry noted earlier in this chapter was perhaps the most extensive foreign study to date. Subsequent to this 1979 study, the Australian Federal Minister of Health requested that a committee be formed to consider extending the scope of (government-funded) Medicare benefits for certain services, including chiropractic.

The Committee accepted all of the findings of the New Zealand commission, and additionally noted the “significant shift in the last decade in attitude ... towards the issue of scientific research” in chiropractic. It also recommended funding for chiropractic in hospitals and other public institutions, and endorsed greater philosophical unity in chiropractic.

Another noteworthy study conducted in 1987 by the Swedish government's Commission on Alternative Medicine produced findings consistent with those in New Zealand and Australia. The Commission reported that:

- Chiropractors with the Doctor of Chiropractic degree should become registered practitioners and be brought within the national insurance system.
- The university-level training of D.C.s was found to be equivalent to Swedish medical training.
- D.C.s have competency in differential diagnosis and should be regulated on a primary care basis.
- Measures to improve cooperation between chiropractors, registered medical practitioners and physiotherapists are vital to the public interest.

Applications for Chiropractic Care

Other studies have explored various components of chiropractic care. Back pain, a common and costly problem within most occupational groups, is one of the areas frequently explored. Recent studies suggest eight of ten adults will experience back pain at least once in their lifetimes, with the total annual cost to the United States estimated to be greater than \$20 billion.

Numerous studies support chiropractic treatment for back pain and other disorders. The following is a brief summary of some of these studies:

- A study on workers' compensation cases in Florida concluded that “a claimant with a back-related injury, when initially treated by a chiropractor versus a medical doctor, is less likely to become temporarily disabled, or if disabled, remains disabled for a shorter period of time; and claimants treated by medical doctors were hospitalized at a much higher rate than claimants treated by chiropractors” (Wolk 1988).
- RAND, a non-profit research organization, has completed three studies on chiropractic with a fourth study currently underway.
 - The first study was a population-based estimate on the use of chiropractic services. This study, reported in the *American Journal of Public Health*, found that “chiropractors deliver a substantial amount of health care to the US population, and there are significant geographic variations in the rate and intensity of use of chiropractic services” (Shekelle 1991).
 - The second study, “Spinal Manipulation for Low-Back Pain,” published in the *Annals of Internal Medicine*, affirmed that spinal manipulation is of benefit to some patients with acute low-back pain (Shekelle and Adams 1992).
 - The third study created two sets of appropriateness ratings for spinal manipulation. One set of appropriateness ratings was by a multi-disciplinary expert panel and the other set was by an all-chiropractic expert panel (Shekelle et al. 1992).
 - The fourth study, which is currently under way, is an 18-month study to determine the types of health care problems for which people seek chiropractic care and the types of care people receive from chiropractors. This study is expected to be completed in November 1994.
- In Australia, a 12-month study conducted in association with the Australian Centre for Chiropractic Research included all work-related low-back pain claimants. Individuals were identified who received care either from a chiropractor or a medical practitioner. The results indicated that:
 - When chiropractic management was chosen, fewer claimants required compensation and fewer compensation days were taken.
 - When medical management was chosen, the average payment per

claim was greater and a greater number of patients regressed to chronic status (Ebrall 1992).

- A study reported in the *British Medical Journal* included 781 patients between the ages of 18 and 65 who suffered from chronic or severe back pain and sought care in chiropractic and hospital out-patient clinics. Two years of patient monitoring concluded that “for patients with low-back pain in whom manipulation is not contraindicated, chiropractic almost certainly confers worthwhile, long-term benefit in comparison with hospital out-patient management” (Meade et al. 1990).
- A survey of those receiving care from health maintenance organizations (HMO's) in Washington state found that “... patients of chiropractors were three times as likely as patients of family physicians to report that they were satisfied with the care they received for low-back pain ... Chiropractic patients were also more likely to have been satisfied with the amount of information they were given and to believe their doctor was concerned about them” (Cherkin and MacCornack 1989).
- “Family Physicians, Chiropractors, and Back Pain”, an article published in the *Journal of Family Practice* (November 1992), stated that “the number of days of disability for patients seen by family physicians was significantly higher (mean 39.7) than for patients managed by chiropractors (mean 10.8)” (Curtis and Bove 1992). A related editorial published in the same issue of the *Journal of Family Practice* suggested that family physicians should accept that “... spinal manipulation is one of the few conservative treatments for low-back pain that have [sic] been found to be effective in randomized trials. The risks of complications from lumbar manipulation are also very low” (Cherkin 1992).
- A study published by the *Chiropractic Journal of Australia* reported that, “a descriptive analysis of obtainable literature on complications from low-back SMT (spinal manipulation treatment) from 1911 to 1991 indicates that, on the average, less than one case per year occurs” (Terrett and Kleynhans 1992).
- As reported by the *Journal of Manipulative and Physiological Therapeutics*, women with dysmenorrhea (painful menstruation) tend to

benefit from spinal manipulation. An independent study of women between the ages of 20 and 49 with a history of dysmenorrhea found that “SMT may be an effective and safe nonpharmacological alternative for relieving the pain and distress of primary dysmenorrhea, at least for a short period of time after treatment” (Kokjohn et al. 1992).

- A number of clinical studies cite success rates ranging from 72% to 90% in the treatment of headaches. A 1978 study in the *ACA Journal of Chiropractic* reported that 74.6% of patients with recurring headaches, including those experiencing migraines, were either cured or experienced a marked improvement in their headaches after receiving chiropractic manipulation. Most importantly, the success rate was maintained two years after treatment ended (Wight 1978).

In addition to the above, a number of studies have documented the effectiveness of chiropractic treatment for a variety of conditions, including soft tissue injuries and visceral disorders (Plaughner 1993; Lewit 1985; and Korr 1978).

Cost-Effectiveness of Chiropractic Care

Historically, chiropractors have promoted chiropractic management of back pain as a cost-effective approach to alleviating this condition. There are several studies which support this assertion:

- The Florida study on workers' compensation claims, previously mentioned in reference to back pain, found that “the estimated average total cost of care, computed across all the major categories of treatment cost, was substantially higher for medical patients compared with chiropractors' patients...” (Wolk 1988). This study concluded that chiropractic care is more cost-effective in the treatment of work-related back injuries than standard medical care.
- A 1988 workers compensation study in Utah assessed the total cost per case of chiropractic claims versus medical claims for conditions with identical diagnostic codes. The results indicated costs were significantly higher for medical claims than for chiropractic claims. In addition, the number of work days lost for those receiving medical care was nearly 10 times higher than for those who received chiropractic care (Jarvis, Phillips, and Morris 1991).

- A comparison of the cost of chiropractic care versus the cost of medical care for various health conditions (predominantly low-back pain, spinal-related sprains, strains, dislocations, arthritis, and disc disorders), revealed that “chiropractic is a lower cost option for several prominent back-related ailments ... If chiropractic care is insured to the extent other specialists are stipulated it may emerge as a first option for patients with certain medical conditions. This could very well result in a decrease in overall treatment costs for these conditions” (Dean and Schmidt 1992).
- A study, published in 1992, compared the cost-effectiveness of chiropractic care to medical care in the commonwealth of Virginia. The report on the study indicated that chiropractic:
 - has minimal cost-increasing effects on insurance and may in fact reduce insurance costs.
 - provides important therapeutic benefits at economical costs.
 - should be a widely available form of health care.
 - is a growing component of the health care sector, and it is widely used by the population (Schifrin 1992).

In addition, studies have been performed on the utilization and acceptance of chiropractic services throughout the United States:

- A Gallup Organization poll reported in March of 1991 examined the attitudes and behaviors of both users and nonusers of chiropractic services.
 - Of the users of chiropractic services:
 - 90% felt chiropractic treatment was effective;
 - more than 80% were satisfied with their treatment;
 - nearly 75% felt most of their expectations had been met during their visits;
 - 68% would see a chiropractor again for treatment of a similar condition;
 - 50% would likely see a chiropractor again for other conditions.
 - Of the non-users of chiropractic services:
 - 62% responded they would see a doctor of chiropractic for a problem applicable to chiropractic treatment;
 - 25% reported that someone in their household had been treated by a chiropractor, and nearly 80% of those had been satisfied with the chiropractic treatment received.

- A survey of North Dakota residents was also conducted by the Gallup Organization. The results of this 1985 poll indicated that the awareness and use of chiropractic services in that state were very high. Nearly 100% of the residents had heard of chiropractors, with almost half of those residents (49%) having been examined or treated by a chiropractor at some time in their lives. One in six residents (17%) had seen a chiropractor in the past year.