Review of the Report

Chiropractic in New Zealand

Report of the Commission of Inquiry

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by

David Banta

Health Program Manager

Office of Technology Assessment

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The report *Chiropractic in New Zealand* is a comprehensive and generally carefully done description of the state of chiropractic in New Zealand. It attempts to cover almost every aspect of chiropractic. There are serious problems in the sections dealing with efficacy and safety. Further, it applies specifically only to New Zealand. One must use great caution in trying to apply the findings to the United States.

The report is difficult to summarize fairly. It represents the work of a lay commission meeting for over a year, with 78 public meetings, 15 closed meetings, formal presentations of testimony from multiple individuals and groups, review of the published literature, visits to New Zealand institutions as well as travel to Australia, England, Canada and the United States, and demonstrations of the techniques of chiropractic. The commissioners themselves caution against reading only the summary: "We emphasize again that the report needs to be read as a whole."

Nonetheless, I will list the most important findings as given in the report:

Chiropractic specializes in spinal manual therapy of what chiropractors identify as biomechanical disorders of the spinal column.

Chiropractors are the only health practitioners who are necessarily equipped by their education and training to carry out spinal manipulative therapy.

Spinal manual therapy in the hands of a registered chiropractor is safe.

Spinal manual therapy can be effective in relieving musculoskeletal symptoms such as back pain, and other symptoms known to respond to such therapy, such as migraine.

Chiropractors do not provide an alternative comprehensive system of health care, and should not hold themselves out as doing so.

Chiropractors should be accepted as partners in the general health care system, and should be allowed access to hospitals.

The responsibility for spinal manual therapy training should lie with the chiropractic profession.
A properly designed program of chiropractic research should be instituted. The disciplinary machinery and disciplinary standards applicable to New Zealand chiropractors need thorough overhaul.

The Commission develops the background for the findings in its 377 page report that is divided into 45 chapters. Many of these chapters are not very relevant to the United States situation. Nonetheless, the entire report was carefully reviewed. In addition, a MEDLINE search was carried out to develop a separate and independent basis for generalizing about the literature on chiropractic. The remainder of this review will focus on two different aspects of the report: problems in applying it to the United States, and the weakness of the sections of the report dealing with efficacy.

Problems in Applying the Report to the United States

As the report describes on pages 37 and following, chiropractic developed out of a tradition of bonesetters. Bonesetters dealt with strains and sprains by manipulation, and developed a set of procedures by trial and error, with no particular theory behind it. Daniel Palmer started the profession of chiropractic by "curing" a patient of deafness by spinal manipulation in 1895. Palmer subsequently started Palmer College in Iowa. "The great majority of New Zealand chiropractors has been trained at it (Palmer College)." (p. 40)

However, William Carver, an Oklahoma lawyer, established a rival school of chiropractic in Oklahoma City. Carver believed that chiropractors should supplement chiropractic adjustment with other kinds of treatment, such as massage, heat therapy, diet regulation, and so on. Those who have followed Carver's views are now referred to as "mixers." Those who follow Palmer's views only do manipulation, and are referred to as "straights."

The New Zealand Commission makes a great point of the fact that New Zealand chiropractors are "straights." The Commission states that New Zealand
chiropractors do not claim to provide an alternative system of health care, but largely confine themselves to problems of the bones and joints, especially in the back and neck. The International Chiropractors Association represents these chiropractors. It is then no surprise that the International Chiropractors Association endorses the recommendations of the Commission which give chiropractors an exclusive right to spinal manipulative therapy but state clearly that chiropractors do not provide an alternative comprehensive system of care.

The thrust of the Commission's recommendations is to incorporate chiropractic into the health care system, and to force interaction between chiropractors and physicians. Given the fact that New Zealand chiropractors exist, are licensed, and receive payment for their services it would be difficult to argue against their being part of the larger system and subject to the same controls over quality, fraud, and so forth that apply to physicians.

The problem is that most U.S. chiropractors are "mixers." They apparently do claim to provide an alternative comprehensive system of health care. The minimum step necessary to implement the New Zealand recommendations in this country would be a limitation of chiropractors to manipulation and an acceptance by the chiropractic profession of this limitation.

Problems in the Efficacy and Safety of Chiropractic

The Commission Report is very confused on these issues. Unfortunately, the Commission did not include anyone familiar with the judgment of medical and scientific evidence. There was a consultant statistician, but he seems to have made little or no impact on major sections of the report. Sections contradict each other in very serious ways. In addition, the statements on efficacy go far beyond what the evidence will support.
To examine this part of the report, OTA carried out a literature review on the efficacy of chiropractic. Given time limitations, this could not be complete, and one article published in Germany that was identified was not obtained during the time of the review. MEDLINE searches were carried out seeking well-controlled studies of chiropractic. Bibliographies in all published articles that were obtained were examined for further references. In addition, the report of a workshop on chiropractic held at the National Institutes of Health in 1975, *The Research Status of Spinal Manipulative Therapy*, was examined. Since the last publication involved a number of prominent chiropractors, and several of them discussed efficacy, one may be safe in assuming that most of the literature has been identified in this brief search.

The New Zealand Commission report states, "there remains a lack of serious scientific study of the basis of chiropractic treatment." (p. 42) That certainly seems to be true. Chiropractic schools do little research, and until recently, did not teach basic biomedical science or research methods. This is consistent with the empirical beginnings of chiropractic.

Many physicians criticize chiropractic because its benefits are not consistent with what is known of the functioning of the spine and of the nerves that leave the spine. However, this is not the real test. The true test is, does it work? Unfortunately, there has been little scientific testing to find out if chiropractic works.

The New Zealand Commission devotes almost 100 pages to the question of whether chiropractic works. Most of this space is devoted to patient testimonials in favor of chiropractic. Despite warnings about the problems with anecdotal evidence that the Commission summarizes on pages 15-152, it ends up accepting these testimonials essentially at face value. "The evidence is not
decisive, but it is compelling." (p. 152) After reviewing the results of a questionnaire sent to patients by the Chiropractors' Association and interviewing a large number of patients, the Commission commented, "Many of them spoke of the dramatic relief they experienced. It was obvious that they were speaking the truth. Why should anyone disregard evidence of that kind?" (p. 151) And on age 154, "The Commission is not left in any doubt that chiropractors are effective in relieving Type M (musculoskeletal) disorders of a kind that will respond to spinal manual therapy. We see no need to review the evidence in any detail." What the Commission is presenting here cannot be dignified with the term "evidence." Furthermore, these conclusions are reached before reviewing the controlled clinical trials. (p. 200 and following)

Chapter 37, "The Scientific Basis for Chiropractic," reviews the clinical trials. Here the Commission contradicts itself, "In the absence of such evidence (well-designed controlled clinical trials), the New Zealand Medical Association...would have us reject chiropractic as being unworthy of government subsidy. Their argument seems convincing. The anecdotal testimonies of satisfied patients of New Zealand chiropractors are dealt with elsewhere. While we do not discount these testimonies, they alone would be an inadequate basis for any State subsidy. There is more evidence available, however, in the form of a number of uncontrolled trials and a few controlled trials conducted here and elsewhere." (p. 203)

The Commission devotes limited attention to controlled trials, seeming to accept that they have little validity. Since most patients with back pain improve greatly within one week, a study that shows that most patients with back pain improve when given chiropractic is useless.

The Commission then presents a discussion of five randomized controlled clinical trials. OTA reviewed these trials, and abstracts and critiques are
attached. In addition, OTA identified three controlled trials and one interesting retrospective analysis that is worth consideration. Abstracts of these articles are also attached. This appears to be the entire body of well-designed evaluative literature related to spinal manipulation as done by chiropractors.

It is important to note that of the five randomized trials reviewed by the Commission, only one involves chiropractors. The other three not only do not involve chiropractors, but they do not test chiropractic type manipulation. This is not made clear by the Commission. However, the report does state that these trials of non-chiropractic interventions are included because they show that "techniques which include spinal manual therapy, are likely to provide much quicker relief." This is certainly a misleading statement. The issue is, does chiropractic work? Not, does physiotherapy work?

In aggregate, the trials are not impressive. They are small, and several of them have obvious serious design problems. Nonetheless, the findings are interesting and suggestive. There is a strong hint that spinal manipulation has efficacy in the immediate relief of back pain and other kinds of pain that goes beyond placebo effort. However, this can only be considered suggestive without further research.

A striking finding is that chiropractors themselves have not organized any randomized controlled clinical trials. The one trial that has involved chiropractors was organized by physicians.

The Commission's review of the safety issue is also unsatisfactory. No literature is reviewed. The Commission apparently believed that its witnesses, including the New Zealand Medical Council, would represent any evidence that chiropractic was unsafe, and hearing nothing very convincing, the Commission
declared that "chiropractic treatment in New Zealand is remarkably safe." On the other hand, the medical literature contains numerous articles purporting to show that chiropractic is unsafe. These are mostly reports of one patient who suffered a condition such as a stroke after undergoing chiropractic manipulation. This is not evidence. In the brief period of this review, OTA was not able to identify any well-designed study addressed to the question of the safety of chiropractic.

Discussion

Clearly, more research is needed on chiropractic and its efficacy and safety. It is difficult to understand why the National Institutes of Health or another government agency has not funded clinical trials on this important subject. A number of prestigious groups have recommended such research during the last 10 years.

An increasing number of writers in medical care (see attached article from the New England Journal of Medicine) are stating that chiropractic should in some way be incorporated into the health care delivery system. These sources state that chiropractors should cooperate with physicians and refer to them, and physicians probably should refer patients with continuing back pain to chiropractors. Others, however, strongly disagree with this point of view.

Before the ultimate role of chiropractors can be defined, it will be necessary to carry out well-designed clinical trials to evaluate the efficacy and safety of chiropractic.

The role of chiropractors in the United States deserves thorough analysis. Certainly, an examination of the issues with full public input would be desirable. The best mechanism to accomplish these purposes is difficult to project and is beyond the scope of this review.
Type of Study: Randomized Controlled Clinical Trial
Site of Study: California College of Medicine, University of California, Irvine, California
Practitioners Evaluated: Osteopathic Physicians
Reviewed by New Zealand Commission: Yes


In this study, patients in the back clinic of the University of California at Irvine who met certain defined conditions were randomized into a treatment and a control group. The treatment group of about 50 patients was given spinal manipulation by osteopathic physician. The control group of about 39 patients was given soft-tissue massage by osteopathic physicians. The patients could not distinguish between manipulation of the spine and soft-tissue massage, so the blinding was successful. Assessment of the patients was done by objective means by the physicians doing the therapy. There were significant differences in such tests as straight leg raising in favor of spinal manipulation. Assessment was also done by questionnaire given immediately after the session. A nurse was available to help the patient fill out the questionnaire if necessary. There was dramatic improvement immediately after treatment in the group given spinal manipulation. Follow-up was incomplete, but indicated that after a week there was little difference subjectively (in pain, etc.) between the treatment and the control group.

Dr. Tobis interprets the study as indicating that there is significant short-term improvement in patients with back pain treated with spinal manipulation.

The study will probably be submitted shortly to the Archives of Physical Medicine and Rehabilitation.

Critique: The study is a small one. It is bothersome that the randomization procedure resulted in groups of such different size. It is hard to rely very much on the "objective" measures, since they were done by the treating physicians (as is recognized by Dr. Tobis). It is also unfortunate that the questionnaire was not administered under more controlled circumstances. The nurse or others could have given the patient cues as to what response was desirable.

The findings are suggestive, and deserve follow-up.
Type of Study: Randomized Controlled Clinical Trial
Site of Study: Welsh National School of Medicine, Cardiff, Wales, U.K.
Practitioners Evaluated: Physician
Reviewed by New Zealand Commission: Yes


Patients complaining of back pain of at least three weeks duration presenting at a University Hospital were entered into the trial. Certain criteria were used to exclude patients. Patients were then randomized into two groups. The first group of 15 patients was given a course of therapy that included rotational spinal manipulation on the first day, the seventh day, and the 14th day. The second group of 17 patients was given pain medicine, but was manipulated only on the 21st, 28th, and 35th day of the trial. Manipulations were all given by a physician trained in manipulation. No chiropractic-type manipulation was done. No data is given comparing the characteristics of the two groups.

Assessment was done by history and physical examination, as well as spinal X-rays. Such objective measures as spinal flexion were examined. This test was done by the same examiner who was unaware of the nature of the previous treatment for all patients. The patients kept diaries of their daily pain. Each patient was also asked to assess the efficacy at the end of each three-week period, to say which three-week period was better, and to assess his or her condition as to improvement at the end of the six-week period. The trial does not state who did this questioning or who instructed the patient in record-keeping.

The result showed a significant increase in spinal flexion measured clinically during the three-week period of manipulation, followed by a significant decrease in flexion in the three weeks following manipulation in both groups. Pain was worse in the group that was manipulated during the first week, but was better in the degree within four weeks of starting treatment only in the group manipulated in the first treatment period. However, it should be noted that the overall pain scores are considerably higher in the first group than in the second group raising questions about the comparability of the two groups.

Critique: This trial gives some evidence of both pain relief and objective improvement following rotational spinal manipulation. Chiropractors were not involved. The major problem with the trial concerns what was communicated to the patient. Patients were obviously aware that their spines were being manipulated, and this could then indicate placebo or Hawthorne effect. The two groups also do not appear to be comparable despite a randomization procedure.
Type of Study: Randomized Controlled Clinical Trial
Site of Study: Welsh National School of Medicine, Cardiff, Wales, U.K.
Practitioners Evaluated: Apparently Physiotherapist
Reviewed by New Zealand Commission: Yes


All patients with back pain that met defined criteria who visited the medical facility of a factory were the pool of patients. They were divided into two groups: patients with a first attack of pain and patients with previous attacks. Both groups were then divided into those who had had pain for less than a week and those who had had it for more than a week. In each sub-group, patients were allocated to manipulation or control groups randomly. The 84 patients were unequally divided: 19, 11, 20, and 23.

The manipulation was not the typical spinal manipulation given by chiropractors, but was rotational manipulation. The control group was given diathermy, acting as a placebo. The study report does not state who gave the manipulation, but it was not a chiropractor.

Assessment was done by a physiotherapist who did not know which group the patient belonged to. She measured neurological signs and looked for tenderness. She then questioned the patient about pain.

After the initial treatment, all patients received diathermy for four days. Patients were assessed again at 3 days, 7 days, and one month.

There was an immediate improvement in the treated group in terms of pain. The manipulated group had 34 percent mean pain relief, compared with 22 percent in the control group. This difference had disappeared at 3 days. There were no other differences in the two groups found. All groups had progressive and marked improvement in pain during the first week.

Critique: This study is a small one, and the unequal groups make one wonder about the randomization procedure. The intervention is not well-defined, and it is not stated who delivered it. At any rate, the trial is not a test of manipulation as practiced by chiropractors.

The assessment procedure was blind, and did demonstrate a marked immediate pain relief from manipulation. Perhaps the most interesting part of the trial is the demonstration that all patients improved rapidly during the first week.
Type of Study: Randomized Controlled Clinical Trial
Site of Study: University of Goteborg, Goteborg, Sweden
Practitioners Evaluated: Physiotherapists
Reviewed by New Zealand Commission: Yes


Two hundred and seventeen workers in a Volvo Plant in Sweden with low back pain were admitted to the trial following set criteria. The pain could not have been of more than 3 months duration, and the patient was required to have a pain-free year before the onset of the episode of pain. All patients were extensively examined and had a number of tests, including psychological testing, in the university health center. Very complete objective testing for neurological impairment was done.

Patients were randomized to three groups. One group of 70 attended "Back School," a course intended to teach patients with back pain how to avoid it and how to exercise appropriately with a bad back. One group of 72 was given combined physical therapy by physiotherapists especially trained in manual therapy — none of the patients received chiropractic manipulation. The third group of 75 were sent to a placebo group that was given short-waves to the painful area. After the completion of the therapy, patients were examined 5 to 7 times during the next year. After six months, more psychological testing was done.

The study includes a great deal of detail about the natural history of low back pain.

The three groups apparently were similar after randomization in various characteristics.

The results showed that the duration of symptoms following the first treatment was 14.8 days for the Back School group, 15.8 days for the physiotherapy group and 28.7 days for the "placebo" group. The median absence from work was 20.5 days for the Back School patients, 26.5 days for the physiotherapy group and 26.5 days for the "placebo" group. The investigators concluded that both the Back School and combined physiotherapy were superior to "placebo."

Critique: This is a carefully-done study comparing two therapies to a placebo for back pain. It gives clear indication of the efficacy of two therapies. It has no direct relation to chiropractic therapy.

Note: The New Zealand Commission states that this trial includes chiropractic-type manipulation. That does not appear to be true from analyzing the description of what was done.
Type of Study: Randomized Controlled Clinical Trial
Site of Study: University of New South Wales, Sydney, Australia
Practitioners Evaluated: Chiropractors, Physicians, Physiotherapists
Reviewed by New Zealand Commission: Yes


A study group of patients with migraine headache were put together by advertising in the media. After careful examination, including X-rays of the neck, the patients were randomized to three groups: chiropractic manipulation, manipulation by non-chiropractors (two physicians, four physiotherapists), and a control group that was treated by mobilization (the process of inducing small movements in the joint within normal range). Mobilization has not been claimed to be helpful to migraine, so was felt to be a good placebo therapy.

The trial was divided into three phases: a two-month pretreatment phase with patients being excluded if they reported less than four migraine attacks in that period, a two month treatment phase, and a two-month post-treatment phase. The final groups included 30 patients who had chiropractic manipulation, 27 who had manipulation, and 28 who had mobilization. The three groups were similar on a variety of measures.

Therapists gave details of treatment they gave the patient. Patients were contacted after their first treatment by the second author (a research assistant) who obtained their subjective evaluation at that time. The patients also kept records of each attack of migraine, including its duration and severity.

Migraine symptoms were reduced overall. The chiropractic group reported a 40 percent reduction in frequency of attack and a 43 percent reduction in pain intensity, while the control group reported a 34 percent reduction in frequency of attack and a 15 percent reduction in pain intensity. These differences were not statistically significant.

Critique: This study, although small, seems to have been well-designed and carried out. It would have been preferable to have had independent confirmation of the migraine attacks.

The most interesting part of the study is that any intervention appears to help migraine.

In addition, the reduction in pain intensity is impressive. The lack of statistical significance is due to the relatively small study groups. However, this could be placebo effect, since the chiropractors were much more optimistic to the patients than the other therapists were.
Type of Study: Retrospective Evaluation
Site of Study: University of Utah, Salt Lake City
Practitioners Evaluated: Chiropractors and Physicians
Reviewed by New Zealand Commission: No


In this study, claims of the Utah State Insurance Fund (Workmen's Compensation) from 1972 were reviewed, and a random sample taken of patients with neck and back injuries within an hour's travel time of the University of Utah. The final sample consisted of 110 patients treated by an M.D. and 122 treated by a chiropractor. The two groups were similar by different measures such as race, sex, education, and income. The two groups were also similar on a scale to measure patient hypochondria. Those who visited the physicians were significantly more disabled at the time of their first visit.

The authors developed a measure of functional status that was obtained by interviewing the patient. A ratio of improvement was devised. Physicians were somewhat less effective than chiropractors in the degree of improvement.

The patients were asked about their sense of satisfaction with their therapist. There was a statistically significant difference in the chiropractor patients' perceptions of the degree to which they satisfied with the explanation they received about their problem and its treatment.

Critique: The authors are careful to point out all the flaws of their small, retrospective, non-randomized study. Nonetheless, they conclude that "the results suggest that by two measures of outcome — patient's perception of improvement in functional status and patient satisfaction — the chiropractors have been as effective with the patients they treated as were the physicians. This may be in part attributable to good self-selection by the patient in his choice of therapist."

While this study cannot be considered to be more than suggestive, it certainly does indicate the need for further research before dismissing chiropractic as of no value.
Type of Study: Controlled Clinical Trial
Site of Study: The Post Graduate Institute of Osteopathic Medicine and Surgery, New York City
Practitioners Evaluated: Osteopathic Physicians
Reviewed by New Zealand Commission: No


Patients admitted to the study had chronic obstructive pulmonary disease and met other criteria, including having no other disease. Patients presenting at a clinic who met the criteria were randomized to treated or control group. However, patients were assigned in pairs, with the first patient being assigned randomly to one group or the other, and the next patient being assigned to the opposite group.

Each patient had a detailed history and physical examination, and also had extensive laboratory work done. Pulmonary function studies were done. Detailed spinal examination was carried out.

Patients in both groups received appropriate therapy for their lung disease, including drugs, oxygen, and so forth. Patients in the first group also received osteopathic manipulative therapy twice a week, including specific manipulative therapy. Apparently, neither patients nor therapists were blind to which group they were in.

The major outcome was measured neuromusculoskeletal abnormalities in the spine as measured by the therapist. These abnormalities are specified. However, the scale used is not specified, except that above four was considered hyperreactive. Eight figures are presented with data from this examination, but they are very hard to interpret because of lack of specificity in the article. The results showed an improvement in neuromusculoskeletal findings. Pulmonary function studies were also done after therapy. When these were done is not specified. Blood gases remained about the same. There was a tendency for the treated group to have a greater improvement in lung function than the control subjects. However, significance testing is not presented. Finally, treated subjects had marked subjective improvement. This was assessed by questionnaire, and included such improvement as being able to walk greater distances, having fewer colds, having less shortness of breath, and so forth. No detail is given about the questionnaire or who administered it.

Critique: This study has numerous shortcomings. Forty-four patients were in the trial, but data on lung functioning is only presented on a minority, usually 23 patients. No data is given on the comparability of the two groups. The randomization procedure is faulty. Assessment was done by those providing the therapy. So little detail is given on many aspects of the study, such as assessment techniques and their quantitation, that conclusions are difficult to draw. Overall, this study cannot be considered to present any evidence of the benefit of spinal manipulation.
Type of Study: Randomized Controlled Clinical Trial
Site of Study: University of Bristol, Bristol, England
Practitioners Evaluated: Physiotherapist
Reviewed by New Zealand Commission: No


The patients entering the trial had back pain sufficient to cause their GP's to order X-rays of the spine. There were specific reasons for excluding patients. All patients included had a careful history and physical examination, as well as spine X-rays. Assessment were made by a physicians without knowledge of which treatment was given.

94 patients entered the trial and were randomized to two groups: an active physiotherapy group and a placebo group. The active treatment was given by a physiotherapist who used a variety of measures, including spinal manipulation. The spinal manipulation appears to be similar to what chiropractors do. The placebo was given by the same physiotherapist "with comparable degrees of enthusiasm," and consisted of low level microwave radiation.

Assessment was done at the completion of the four-week course of treatment, two months later, and by postal questionnaire after one year. Patients who failed to reply to the questionnaire questionnaire were visited. Subjective assessments of pain, return to normal activity, and some objective measurements of spinal mobility and straight-leg raising were the major outcome measures.

Detailed figures are not given in this brief article. The article states that reduced pain was evidence in most cases, but was more common in patients who had received active treatment. The difference was of borderline statistical significance. More patients who had had active treatment could perform at least light work. Most patients, both treatment and control, felt that their treatment had been helpful, but the difference between treated and control groups was statistically significant. Objective testing had improved in the active treatment group as shown by such tests as straight-leg raising at one month. At three months, the two groups were more similar — that is, the improvement in the active treatment group did not continue to be dramatic.

Critique: The study was generally well-designed. However, having the same person delivery the therapy and the control "treatment" is a serious problem. The physiotherapist probably felt that the active treatment would make a difference. The assessment was blind, so appears to show some real differences. The article has no detailed results, so cannot be thoroughly analyzed.
The future of chiropractic

What is to be done about chiropractors? Efforts by organization medicine to eliminate them have been unsuccessful. The label "quack" has not stuck. Despite the most strenuous opposition, they have attained licensure in every state in the United States and in Canada and many foreign countries. Over 23,000 chiropractors treat some 8 million Americans for a wide variety of conditions. Reimbursement for their services has been authorized by Medicare, Medicaid, Workmen's Compensation plans, and by many Blue Shield plans and other private insurance carriers. Chiropractors received more than $30 million of Medicare funds in 1978. Over 2000 new chiropractors will be graduated this year, more than 70 percent of them from colleges federally recognized as accredited. Chiropractors appear to be winning their struggle to survive.

Awareness of these facts is finally appearing in medical circles. Perhaps the most important stimulus, however, is the antitrust suit filed in 1976 by five Illinois chiropractors against the American Medical Association (AMA), the American Osteopathic Association, 10 other medical organizations, and four individuals followed by antitrust suits in several other states. The medical code of ethics has already been modified to remove restrictions on professional association with chiropractors, but the broader question of the role that chiropractors will play in the American health-care system must still be faced by makers of health policy, legislators, and the leaders of organized medicine.

An informative discussion of the worth of chiropractic therapy is contained in a recent report, "Chiropractic in New Zealand," by an official Commission of Inquiry. I agree that it is probably the most comprehensive and detailed independent examination of chiropractic ever undertaken in any country. Its principal conclusions are that: modern chiropractic is far from being "an unscientific cult," that it is safe, and often effective in relieving musculo-skeletal symptoms. 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 practical. There must be no impediment to full professional cooperation between chiropractors and medical practitioners. Chiropractors should in the public interest be accepted as partners in the general health care system. Patients should continue to have the right to consult chiropractors directly.

An impartial evaluation of chiropractic in the United States should, and probably would, come to essentially the same conclusions as the New Zealand Commission. In any case, the makers of American health policy need to consider carefully the roles that chiropractors might play in the future.

One alternative seems clearly foreclosed — the route that osteopathy has followed. The notion that chiropractic's evolution has, a generation later, been modeled after that of osteopathy is not historically accurate, nor is such a route likely in the future. Despite their shared preoccupation with manipulation, chiropractors simply do not practice like osteopaths, who prescribe drugs nearly as much as medical doctors do. Although chiropractors envy the greater prestige and comprehensiveness of medical practice, and some claim to provide complete primary care, their hostility toward drug therapy strongly inhibits the desire to become allopathic practitioners. This impediment, of course, reinforced by the vigorous opposition of organized medicine to any claims by chiropractors to practice comprehensive medicine.

A second possible alternative — for chiropractors to function under medical prescription as physical therapists do — is equally unlikely, although it is what President Carter first proposed to Congress, but later dropped, in his 1979 National Health Insurance Plan. It would not work because chiropractors already have too autonomous a professional status to be willing to subordinate themselves to medical doctors. In addition, medical doctors are not trained to know when chiropractic would be beneficial or contraindicated, and they have regarded chiropractors as unfit for professional association for so long that they would generally be unwilling to send patients to chiropractors.

A variant on this "solution" would be for physical therapists to become skilled spinal manipulators and offer patients all that chiropractors do — but under medical prescription. James Cyriax, M.D., himself a skilled manipulator, urges physicians and physical therapists to master the manipulative therapy that he calls "orthopaedic medicine," and he offers training workshops for those who wish to learn. Similarly, the physical therapist Stanley Paris tells me that he offers postgraduate instruction in "orthopaedic physical therapy." He organized the Institute of Orthopaedic Physical Therapy on Staten Island, N.Y., and in 1974 helped establish a Section on Orthopaedics of the American Physical Therapy Association. However, if physical therapists were to follow this route, not only would the prescribing physicians have to know much more about the indications and contraindications for manipulative therapy than they do now, but physical...
therapists would in effect have to become chiropractors, although their current baccalaureate-level training does not qualify them to diagnose general pathology or to prescribe for it. Hence, it is not likely that the problem of chiropractic can be eliminated by a concerted effort to replace chiropractors with upgraded physical therapists.

A third option is to maintain the status quo. Chiropractors would remain a “marginal” profession independent of organized medicine, their therapy continuing to be stigmatized as of dubious value, and their ability to make differential diagnoses suspect. Perhaps chiropractors could gradually elevate themselves to a profession “parallel” to medicine (a status somewhat like that of osteopaths in the recent past) through continuing to upgrade the quality of their schools and their diagnostic competence. But if this were to happen, the “separate but equal” dilemma would probably appear, just as it has with race relations. Separated groups are seldom truly equal; insidious comparisons are inevitably made. The reverse also occurs: Groups of equal status tend not to remain separate. Just as racial groups of equal standing integrate more easily, so do professional groups that are close to equal status — thus, the recent rapprochement between medicine and osteopathy. Since chiropractic, for reasons stated earlier, is not likely to follow the path of osteopathy by broadening its scope of practice and upgrading itself to the level of medicine, the attempt to maintain the status quo in professional relations between chiropractic and medicine would be more likely to keep chiropractic “marginal” rather than “parallel.” Still, this is a viable option.

The final alternative, and the most promising one for many reasons, is the gradual evolution of chiropractic to a “limited” or “limited medical” profession. The most familiar examples are dentistry, podiatry, and optometry; psychology, speech therapy, and audiology occupy similar roles. These professions limit their scope of practice to a specific part of the body or its functioning, and the range of therapies they employ is also limited. Unlike chiropractic, they do not challenge orthodox medical theories of disease and therapy. Hence, they can coexist with organized medicine. However, the road can be rocky, as demonstrated by the long history of disputes between ophthalmologists and optometrists and between psychiatrists and psychologists.

It is far more difficult for a marginal profession like chiropractic, which has historically subscribed to a suspect theory explaining the source of all illnesses, to achieve the satisfactory relation with medicine that the limited medical professions have. The different definitions in state laws of chiropractors’ scope of practice have relatively little effect on how chiropractors actually practice or on major trends in chiropractic practice. One critical question will be to what extent chiropractors will abandon some of their central principles, a process that has indeed already begun. Policy makers should not be misled by pronouncements of the chiropractic “superspecialists,” a very small group of doctrinaire practitioners who disavow the vast majority of chiropractors and who are in turn disavowed by them.

With most states now requiring that candidates for licensure be graduated from accredited colleges, there is increasing uniformity in chiropractors’ education as well as a guaranteed minimum of competence in the basic medical sciences. Furthermore, the colleges now use standard medical textbooks and university-trained instructors, most of whom are not chiropractors, for the basic sciences. Although the colleges are still weak, recent graduates are less doctrinaire, more aware of the limitations of chiropractic theory and therapy, and better able than their predecessors to identify conditions beyond their competence to treat. Therefore, they can function satisfactorily as “portals of entry” into the health-care system without being the providers of total primary care that medical doctors are (and that some chiropractors still claim to be). As a result, chiropractors have the potential for evolving into “limited” or “limited medical” practitioners even though many of them would deny it and many medical doctors would resist it.

There are several forces pushing chiropractors toward becoming limited practitioners. Chiropractic is in fact a limited therapy, not as limited as most physicians have assumed, but certainly not as broad as chiropractors originally claimed, and as chiropractors become better educated in the basic medical sciences, they better understand the limited role of spinal manipulation. They devote most of their time to treatment of musculoskeletal conditions and closely related conditions such as sciatica that manipulative therapy has been shown to help. These conditions are the ones that chiropractors are most associated with in the public view, the ones for which third-party payers are most willing to reimburse chiropractors, and the ones for which medical doctors would be most likely to refer patients to chiropractors.

If chiropractors were to become limited practitioners, there would be advantages for them, organized medicine, the health-care system, and public health. Chiropractic would be “contained” to a limited role, and organized medicine could cease its active opposition to chiropractors. Medical doctors would be more likely to refer patients to chiropractors, and vice versa. There would develop a greater consensus among chiropractors as to what chiropractic is, and the public would have a clearer understanding of what chiropractors do, which should lead to an improved public opinion of this form of treatment and its practitioners. Insurance companies would more readily reimburse chiropractors for services performed. Chiropractors would attain a more secure place in the health-care system, and the health of the American public would be enhanced.
It may seem utopian to expect chiropractors to accede to such a limited role, and just as utopian to expect organized medicine even to consider it. But that is what the New Zealand Commission of Inquiry seems to be recommending for its country. In Ontario, where chiropractors are routinely reimbursed under a socialized system, hostility between medical doctors and chiropractors is minimal. There is no fundamental reason why the same situation could not prevail in the United States. The AMA has already lost its struggles to keep chiropractors unlicensed, to prevent payments to them under Medicare, Medicaid, and Socialized System, hostility between medical doctors and chiropractors is minimal. There is no fundamental reason why the same situation could not prevail in the United States. The AMA has already lost its struggles to keep chiropractors unlicensed, to prevent payments to them under Medicare, Medicaid, and most other third-party payers and to prevent the accreditation of chiropractic colleges. Organized medicine faces further assaults on its prerogatives and practices from the courts and in legislative chambers. The leaders of organized medicine and other makers of health policy need to become better informed concerning the current status of chiropractic education and practice, and should seriously consider whether the limited-practice model could be the basis of accommodation between the two groups that have been so hostile to each other for so long.

University of Connecticut
Storrs, CT 06268

WALTER I. WARDWELL, PH.D.

REFERENCES


MASSACHUSETTS MEDICAL SOCIETY

DEATHS

ANDREW — Edward Donald Andrew, M.D., of Easthampton, died on August 1. He was in his 57th year.
Dr. Andrew received his degree from Columbia University College of Physicians and Surgeons in 1951. He was associate medical examiner for Hampshire County.
He is survived by his wife, four daughters, and three sons.

BAKER — Harry Abraham Baker, M.D., of Holyoke, died on October 2. He was in his 3rd year.
Dr. Baker received his degree from Tufts College Medical School in 1932. He was a member of the American College of Radiology and the American Medical Association.

BARNES — William Ellsworth Barnes, III, M.D., formerly of Taunton, died on December 3. He was in his 60th year.
Dr. Barnes received his degree from Tufts College Medical School in 1945. He was a member of the American Medical Association.
He is survived by his wife, three daughters, and two sons.

BARONE — Salvatore Antonio Barone, M.D., of Lawrence, died on August 4. He was in his 74th year.
Dr. Barone received his degree from Middlesex University School of Medicine in 1930. He was a member of the American Medical Association.
He is survived by his wife, a daughter and son, two brothers, four grandchildren, and several nieces and nephews.

BEAUCHAMP — Eugene Wilfrid Beauchamp, Sr., M.D., of Chicopee, died on October 30. He was in his 81st year.
Dr. Beauchamp received his degree from Jefferson Medical College in 1923. He was formerly president of the staff and chief of surgery at Mercy Hospital and president of the staff at Holyoke Soldiers Home. He was a member of the American College of Surgeons, the American Medical Association, and a 50-year member of the Massachusetts Medical Society.
He is survived by his wife, a daughter and four sons, a brother and two sisters, and 17 grandchildren.

BEETHAM — William Parkes Beetham, Sr., M.D., of Waban, died on January 24, 1979. He was in his 77th year.
Dr. Beetham received his degree from Harvard Medical School in 1926. He was formerly surgeon-in-chief at Massachusetts Eye and Ear Infirmary and assistant clinical professor of ophthalmology at Harvard Medical School. He was a member of the American Ophthalmological Society, the American Association for Research in Ophthalmology, the American Academy of Ophthalmology and Otolaryngology, the American Society for Internal Medicine, and the American Medical Association.
He is survived by his wife, two daughters, and a son.

BELHUMEUR — Gedeon Aram Belhumeur, M.D., of Gardner, died on November 12. He was in his 81st year.
Dr. Belhumeur received his degree from University of Montreal Medical School in 1929. He was formerly chairman of the Board of Health in Gardner. He was a member of the American Medical Association and a 50-year member of the Massachusetts Medical Society.
He is survived by a daughter and son, and three grandchildren.

LOGIE — Arthur James Logie, M.D., of Tavares, Florida, formerly of Westfield, died on July 26. He was in his 88th year.
Dr. Logie received his degree from Temple University School of Medicine in 1917. He served with the Army Medical Corps during World War I. He formerly was chief of staff at Noble Hospital. He was a member of the American Medical Association and a 50-year member of the Massachusetts Medical Society.
He is survived by his wife, a daughter and a son, a brother, and five grandchildren.