

## Beyond Low Back Pain

Mary E. Johnson, FCER director of communications

The primary care crisis in the United States has created an opportunity for the chiropractic profession to assert itself and claim its proper role as an integral part in the evolving health care system. The profession cannot approach the bargaining table armed only with rhetoric and philosophy; it must have hard facts based on scientifically accountable research.

Common disorders such as scoliosis, otitis media, asthma, infantile colic, menstrual cramps, and mild to moderate hypertension are being successfully treated by many doctors of chiropractic. Nearly 100 years of chiropractic history has demonstrated that many patients experience improvement as a result of chiropractic care. But this is all anecdotal; what scientific support do these doctors have for their intervention and what documentation exists for those doctors who choose to practice in a primary care capacity?

A lack of scientific support leaves chiropractors vulnerable to attack. The FCER recognizes the need for solid scientific evaluation of the chiropractic treatment of these conditions. Research is now underway that will begin to establish the safe and responsible application of chiropractic health care for conditions that reach beyond low back pain and will help to determine the feasibility of chiropractic as a primary health care profession.

More than \$870,000 in funding has been committed to research studies that will evaluate chiropractic primary care and chiropractic management of scoliosis, otitis media, asthma, infantile colic, dysmenorrhea, and hypertension. They are:

"The Role of Chiropractic as Primary Care Gatekeeper," Abt Associates Inc., Gary L. Gaumer, PhD, and Ronald L. Rupert, MS, DC.

Recognizing not only the need, but the responsibility to help further the chiropractic profession in its fight for survival in managed care, the National Chiropractic Mutual Insurance Company (NCMIC) and FCER have joined forces to fund and manage one of the most provocative and expansive studies ever undertaken. This two-year, \$441,000 investigation will develop and test alternative primary care roles for chiropractors in medically underserved areas.

A study of this magnitude demands the highest quality research team available. For this reason, Abt Associates Inc., was selected to conduct the project. Abt Associates has earned an international reputation for rigorous, objective analyses and clear, well-documented reports, and as an innovator of various methods of policy research. The research objectives are to:

- define the scope of primary care of DCs;
- explore current roles and models for chiropractors in primary care and identify barriers and opportunities;
- assess how well the chiropractic colleges are preparing their students to deliver primary

care;

- develop a profile of chiropractic maintenance care patients to assess their health status; and
- evaluate attitudes and activities of patients and payers regarding expanding the role of DCs in primary care.

Four underserved communities will be identified in this study, two rural and two urban. Models of primary care using expanded roles for chiropractic will be developed and tested in surveys of consumers in the four sites and in a national survey of chiropractors.

The educational evaluation of chiropractic colleges and medical schools will compare the ability and disposition of practitioners from both types of institutions to give primary care services. The study will include a test of the students' knowledge and capacities in primary care.

"Rural Chiropractic Patient Satisfaction Study," Research Dimensions Inc., Ann Parker Maust, PhD.

FCER's landmark study, "The Chiropractor as a Primary Care Provider in Rural, Health Professional Shortage Areas of the U.S.," established that chiropractors in medically underserved rural areas are providing primary care. This study will expand on those results and survey the patients to obtain insights into patient satisfaction with their level of care and range of services provided.

"The Effect of Chiropractic Care on Adolescent Idiopathic Scoliosis," Charles A. Lantz, DC, PhD.

This research seeks to determine whether chiropractic care can reduce the severity of the curve in scoliosis or prevent further curvature. If this is borne out, it will demonstrate that chiropractic care may be beneficial in treating children with mild to moderate scoliosis.

The study group consists of 50-100 adolescents, age 9-15 who have spinal curves of mild to moderate severity (10-20 degrees). Treatment will consist of four interventions: full spine manual adjustments with particular attention to the apex, the pelvis, and the cervical spine; heel lifts, when indicated; exercises; and postural and lifestyle counseling for a period of one year.

The subjects' progress will be determined by radiography, comparing entry level measurements of spinal curvature to those of a control group not receiving chiropractic care.

"The Role of Chiropractic in the Management of Otitis Media: A Prospective and Retrospective Series," Kassem M. Kassak, PhD.

Chiropractic treatment of otitis media has been attacked by the press on a number of occasions recently. However, widespread anecdotal evidence supports the efficacy of chiropractic intervention, while traditional medical interventions such as antibiotic treatment and insertion of tympanostomy tubes have drawn criticism in the Canadian Family Physician and the Journal of the American Medical Association.

Data has been assembled by a chiropractor with referring physicians that includes details of the children's health histories, signs, and symptoms, types of treatment, duration and improvement. This field will use tympanometry as an objective measure of pressure within the ear before and after adjustments.

A secondary study will provide digitized MRI imaging to determine the diameter and/or inclination of the eustachian tubes before and after adjustments. Significant changes observed in these measurements would provide tangible support for the chiropractic treatment of otitis media.

"The Role of Chiropractic Treatment in Chronic Childhood Asthma: A Pilot Study," Gert Bronfort, DC.

Asthma is the most common chronic disease in childhood and among the most frequent reasons for visits to pediatricians. Medical treatment often involves the use of inhaled drugs, which provide symptomatic relief, but unless they are steroids, may not control the underlying inflammation.

The primary purpose of this project is to establish if 12 weeks of chiropractic spinal manipulative treatment can produce a clinically significant change (15 percent improvement) in morning and evening peak expiratory flow rates, patient-related asthma severity, use of inhaled bronchodilators, and nonspecific bronchial reactivity. This pilot study has two sections, a prospective clinical series of children who have chiropractic adjustments added to their current regimen of medical therapy and a feasibility study for an anticipated full-scale, interdisciplinary, multi-site, double-blind randomized controlled clinical trial.

"Chiropractic Spinal Adjustive Therapy Versus the Use of Parental Guidelines for Appropriate Parent/Infant Interaction in the Treatment of Infantile Colic: A Placebo Controlled Randomized Clinical Trial," Gert Bronfort, DC.

Chiropractic treatment of infantile colic will be compared to both a placebo chiropractic treatment procedure and to written guidelines used by parents that instruct them how to respond to the infant's crying (an approach that has already been evaluated and supported in a randomized clinical trial).

The infants' responses will be evaluated through 24-hour diaries kept by parents and parent-rated distress scores. This study will draw from populations in Denmark.

"Prostaglandins in Dysmenorrhea: Effects of Manipulation," Patricia C. Brennan, PhD.

FCER is also funding research investigating the role of chiropractic in women's health care. A pilot study published in the June 1992 issue of the *Journal of Manipulative and Physiological Therapeutics* established a possible link between chiropractic adjustments and a reduction in prostaglandin levels and perceived menstrual pain.

This study is designed to indicate whether spinal manipulative therapy reduces elevated prostaglandin levels which are believed to cause uterine contractions resulting in painful menstruation. The results may offer women an alternative to medication and its inherent side effects.

Three measurements will be used: A biomechanical probe measuring prostaglandin levels; a visual analog scale measuring pain; and an independent questionnaire evaluating changes in menstrual distress. Measurements will be taken during the week before the onset of menstruation and on the first day of menstruation. Observations will be compiled over three menstrual cycles, offering a better understanding of any placebo effects and the long-term effects of manipulation.

"Randomized Clinical Trial of Chiropractic Adjustments and Massage Treatment for Essential Hypertension: A Pilot Study," Gregory Plaughter.

This study is designed to determine if chiropractic adjustments or massage treatments have an

effect on patients suffering from primary mild or moderate hypertension. For a two-month period, the systolic and diastolic pressure and pulse rates of patients will be evaluated before and after treatments.

A patient-oriented health status questionnaire will be administered at the beginning and end of the treatment series. Follow-up blood pressure measurement will be taken to determine if any changes are lasting. This pilot study will evaluate the feasibility of a future, full-scale randomized clinical trial.

Scientifically evaluating the safety and effectiveness of chiropractic intervention for a broad spectrum of disorders, both somatovisceral and musculoskeletal, is just one way that FCER is working to protect the future of the chiropractic profession. To help support further research of this nature, please contact FCER at 1701 Clarendon Blvd., Arlington, VA 22209. Tele: 1-800-637-6244 or (703) 276-7445.

*Mary Johnson*  
*FCER Director of Communications*

SEPTEMBER 1994