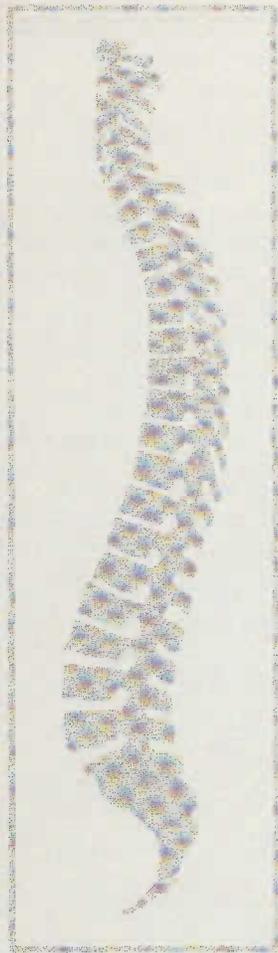


THE CHIROPRACTIC REPORT

An international review of professional and research issues, published bimonthly.

Editor: David Chapman-Smith, LL.B. (Hons.)

May 1988 Vol. 2 No. 4



Professional notes:

ACA/ICA Merger

Following years of negotiation the Boards of the American Chiropractic Association and the International Chiropractors Association agreed on a merger proposal on January 23, 1988. This now goes for ratification to the ACA's delegates in Philadelphia in June, and the ICA membership in Monterey in July. If there is ratification the new merged association will exist by September and be fully operational by December 1988.

The merger agreement establishes four immediate principal goals for the new association:

- A public relations campaign to increase the chiropractic patient population in the U.S. from 15 million to 50 million by 1995.
- Strengthened commitment to research - fully 25% of the budget will be devoted to research.
- Securing the position of the chiropractic profession as pre-eminent in non-surgical spinal and neuromusculoskeletal care.
- Assisting other countries to gain legislation licensing the practice of chiropractic - a goal of licensure in 50 countries by 1995.

This merger is of historic importance to the profession worldwide. Unity is past due and will benefit everyone, and there is high expectation that ACA and ICA members will have the courage to follow their leaders. There is necessarily a leap of faith and some compromise when different organizations merge.

continued on insert page 1.

Books of the Year

A. Introduction

For the chiropractic profession book-of-the-year for 1987 was 'Essentials of Skeletal Radiology'¹ by two chiropractic radiologists, Dr. Terry Yochum, of Colorado, U.S., and Dr. Lindsay Rowe, of Newcastle, New South Wales, Australia. Medical radiologists accepted this as meeting the most exacting standards of health science and recommended it to anyone working in skeletal radiology whatever their basic discipline.

In this issue we look at the two books we predict to be books-of-the-year in 1988. It is perhaps appropriate in 1988 that both have chiropractic and medical authors, drawing strength from each other's profession. One is a text for health professionals, the other a book for the lay public. They are:

- 'Managing Low Back Pain', edited by William Kirkaldy-Willis, M.A., M.D., F.R.C.S. (C). In a foreword to this greatly revised and expanded edition of a text first published in 1983 Drs. Leon Wiltse and Arthur White, perhaps the two most prominent U.S. orthopaedic surgeons specialising in the low back in their era, comment that "Few physicians in the world have spent more time thinking about the management of low-back pain" than Dr. Kirkaldy-Willis. They are "not aware of any similar work that deals so thoroughly with the fundamentals of degenerative spine pathology and the pathogenesis of low-back pain", and applaud "the major emphasis on non-operative treatment". They suggest that the ideas and concepts presented are original, clear, stimulating and "of great importance to all concerned with the prevention and treatment of low-back pain".

- 'Back Power' by David Imrie, M.D., Canada's leading occupational health physician, and Lu Barbuto, D.C., F.C.C.S.(C), a Toronto chiropractor prominent in occupational health. This book is to be published in the late summer by Stoddart's, one of North America's leading publishing houses, which plans to promote it heavily as a potential best seller. We have recently interviewed both authors and previewed the book. It represents a major publishing event for not only the public but both the chiropractic and medical professions.

B. Managing Low Back Pain

Edited by William H. Kirkaldy-Willis, Churchill Livingstone, New York and London, Second Edition, 1988 (403 pages, \$79.95).

1. This book is exceptional for four reasons:

- Its authority - Kirkaldy-Willis has gathered many leading experts such as Farfan on biomechanics, Heithoff on MRI, Burton on gravity lumbar reduction, Cassidy on spinal manipulation and the Mayers on functional rehabilitation.

- Its clarity - Kirkaldy-Willis has a well-known antipathy to use of jargon when simple language will suffice. This whole volume is distinctively concise, clear and accessible. This is rare in a comprehensive work on back pain.

- Its wisdom - here is a work which acknowledges the roles of many disciplines in the understanding and management of low-back pain. There is appropriate emphasis on the emotional and spiritual aspects, and the role of the patient. At the same time as it is highly informed, the book is humble acknowledging present limitations in both knowledge and treatment.

- For chiropractors there is an overall explanation of the natural history and presentation of low-back pain that confirms the central importance of their perspective and clinical skills. The principal author of the chapter on 'spinal manipulation' (see para. 7) is David Cassidy, a chiropractor.

2. This second edition is greatly expanded, and contains new chapters on anatomy, epidemiology, magnetic resonance imaging, diagnosis, physical therapy, functional rehabilitation and the pain clinic. In short this is a state-of-the-art review - for a list of contents see Table 1.

3. The central theme of the book, set forth in Chapter 4 by Kirkaldy-Willis, is that there are three progressive and almost universal stages of spinal degeneration. Symptoms and management must be seen in terms of these, which are:

- i) Dysfunction. Here there is minor pathology resulting in abnormal function of the posterior joints and disc (called the 'three joint complex'). As the pathological changes are small they are frequently missed on medical examination.
- ii) Instability. The next stage in the disease process, where progressive degeneration due to repeated trauma produces laxity in the joint.
- iii) Stabilization. The third and final stage, where fibrosis, formation of osteophytes, etc. greatly restrict movement.

Next Issue: Chiropractic Management of Whiplash.

Dysfunction, the first stage of disability, includes 90% of low-back patients received at Kirkaldy-Willis' hospital clinic. (The percent is even higher, of course, for everyone seeking health care for low-back pain). The commonest types of dysfunction are posterior joint dysfunction and sacroiliac dysfunction. Manipulation has a leading role in the management of these conditions. This treatment should be by "a practitioner well versed in the art" and at his hospital for the past 12 years this has been by a team of chiropractors. (For further details see The Chiropractic Report (TCR), January 1987 Vol. 1 No. 1).

4. The opening chapter on epidemiology and natural history of low-back pain, written by David Cassidy D.C., a chiropractor, and John Wedge M.D., an orthopaedic surgeon, gives an excellent overview of current knowledge including:

- A review of literature on risk factors. A link has been shown between low-back pain and increasing age, marked scoliosis (but not most scolioses), lack of fitness, smoking, psychosocial problems (but not psychiatric illness), drug abuse, headaches, neck pain, angina pectoris, leg discomfort and stomach pains. Studies suggest no link with sex (status - not activity!) body build (with possible exception of obesity and tallness - the studies disagree), increased lordosis and different leg lengths.
- Studies of industrial low-back injuries show that injury from lifting (37-49%) is more than three times more common than the next categories of bending (12-14%) and twisting (9-18%).
- Annual compensation costs for low-back pain in the U.S. are approximately \$20 billion, with 10% of the cases giving rise to 80% of the cost. Cost breakdowns are given.
- Cassidy and Wedge conclude their overview on natural history of back pain with a comment that goes to the issue of whether or not back pain can be 'cured' by chiropractic or medical treatment:

"Patients have too often been led to believe that a form of treatment is an 'all or nothing' phenomenon and that therapeutic methods from different disciplines are mutually exclusive. ... the patient must understand that expectations are for significant general improvement or relief of a particular part of the problem rather than for a 'cure' ... with cooperation between physician and patient it is possible occasionally to effect a cure, often to arrest the progress for a long time, and nearly always to alleviate the suffering of the patient". (Pp.12-13).

Later Kirkaldy-Willis and Cassidy confirm the point:

"From the discussion of the natural history of the degenerative process it will be appreciated that *this process is often a continuing one and therefore we cannot expect a permanent cure from manipulation or from any other modality, including operation*". (p.296)

5. In 1983 in the first edition the chapter on 'Manipulation' was said to be written by Kirkaldy-Willis because Churchill-Livingston, the publishers, had extremely conservative views on chiropractic content. Times have changed. The second edition has a chapter on 'Manipulation' by Cassidy and Kirkaldy-Willis that has a firm chiropractic presence. For this chapter alone every chiropractor should have the book, drawing this chapter to the attention of other health professionals because:

- It answers the questions what is manipulation, how does it work, when is it indicated and what are results of treatment with impressive clarity. (There is even a photograph of the gas bubble released in the joint following manipulation).
- There is reference to the research of many chiropractors, commencing with the work Sandoz published in the Annals of the Swiss Chiropractors' Association in the 1970s.
- The chapter does "not attempt to describe the details of technique" for the express reason that "this book is written largely for medical practitioners", and it is then emphasized that MDs should complete formal training before considering the practice of manipulation.
- There is discussion once more of the highly successful results of the study of chiropractic manipulation for chronic low-back and leg pain that has been proceeding for the past 10 years under the leadership of Cassidy and Kirkaldy-Willis at the University Hospital, Saskatoon in Canada. (For further details see TCR January 1987, Vol. 1 No.2).

6. A new chapter of particular interest to chiropractors is Chapter 13 entitled 'Making a Specific Diagnosis', by Kirkaldy-Willis and Thomas Bernard, an orthopaedic surgeon from Columbus, Georgia, U.S. It deals in detail with the differences between *referred* and *radicular* pain syndromes, and indicates the importance of sacroiliac joint syndrome and manipulation. It is suggested that response to manipulation or injection is the most reliable way to establish a specific diagnosis of posterior joint syndrome or sacroiliac joint syndrome, the two largest

Managing Low-Back Pain - Contents (Table 1)

Essential Principles

1. The Epidemiology and Natural History of Low Back Pain and Spinal Degeneration
2. Biomechanics of the Lumbar Spine
3. The Anatomy of the Lumbosacral Spine
4. The Pathology and Pathogenesis of Low Back Pain
5. The Mediation of Pain
6. The Perception of Pain

The Clinical Picture

7. Introduction
8. Psychological Assessment
9. The Three Phases of the Spectrum of Degenerative Disease
10. The Site and Nature of the Lesion
11. Diagnostic Techniques
12. Magnetic Resonance Imaging of the Lumbar Spine
13. Making a Specific Diagnosis
14. Differential Diagnosis of Low Back Pain

Treatment

15. A Comprehensive Outline of Treatment
16. The Back School
17. Manipulation
18. Supports and Braces
19. Gravity Lumbar Reduction
20. Surgical Techniques
21. Physical Therapy
22. Psychological Treatment of Back Pain and Associated Problems
23. The Pain Clinic in the Management of Low Back Pain
24. Neuroaugmentive Surgery
25. Functional Restoration: New Concepts in Spinal Rehabilitation
26. Back Pain and Work

causes of leg and back pain in a population of 1293 hospital patients studied. (This draws on work published in Clinical Orthopaedics last year, 2 reviewed in TCR, July 1987, Vol. 1 No. 5).

7. A note on terminology. Because of its large medical audience this book uses the term 'manipulation' rather than 'adjustment'. It is interesting to see, however, that 'subluxation' is used consistent with chiropractic usage. In his chapter introducing the largest section of the book - on treatment - Kirkaldy-Willis suggests these three explanations for the excellent results of manipulation with posterior facet problems:

- i) Direct mechanical effect on the joints, reducing a *subluxation* of 1 to 2 mm;

Editorial Board. United States: Peter Gale, D.C., Chiropractor, Boston, Massachusetts. Scott Haldeman, D.C., M.D., Ph.D., Neurologist, Santa Ana, California. Reginald Hug, D.C., Chiropractor, Birmingham, Alabama. Dana Lawrence, D.C., Chiropractor, Chicago, Illinois. John M.M. Mennell, M.D., Physical Medicine, Advance, North Carolina. Michael Pedigo, D.C., Chiropractor, San Leandro, California. Louis Sportelli, D.C., Chiropractor, Palmerton, Pennsylvania. Aubrey Swartz, M.D., Orthopaedic Surgeon, Oakland, California. **Canada:** J. David Cassidy, D.C., M.Sc., Chiropractor, Saskatoon, Saskatchewan. Donald J. Henderson, D.C., B.Sc., Chiropractor, Toronto, Ontario. William Kirkaldy-Willis, M.D., F.R.C.S. (C), Orthopaedic Surgeon, Saskatoon, Saskatchewan. **Europe:** Arne Christensen, D.C., F.I.C.C., Chiropractor, Bournemouth, England. **Australia:** Miriam A. Minty, D.C., Chiropractor, Perth, W.A. Lindsay Rowe, B.App.Sc., D.A.C.B.R., Chiropractic Radiologist, Newcastle, New South Wales.

The Chiropractic Report is published by Fumia Publications Inc., 78 Glencairn Avenue, Toronto, Ontario, Canada M4R 1M8, Tel. (416) 484-9601. You are welcome to use extracts from this Report. Kindly acknowledge the source. However neither the complete Report nor the majority or whole of the leading article may be reproduced in any form whatsoever without written permission. **Subscriptions: for rates and order form see page 4.** Subscriptions are for the year commencing November. All subscriptions and changes of mailing instructions should be sent to The Chiropractic Report, P.O. Box 244, Station "S", Toronto, Ontario, Canada M5M 4L7. Printed by Harmony Printing Ltd., 123 Eastside Drive, Toronto, Ontario, Canada M8Z 5S5. Second Class Mail Registration No. 7378. Copyright © 1986 Fumia Publications Inc. ISSN 0836-1444

Professional Notes: continued from page 1.

Close to the battle many real difficulties are seen but surely none of these can warrant the continued political impotence of two associations. What conflict of views, it may be asked, would warrant two congresses or two presidents in the United States? How would the U.S. fare in international relations with two presidents?

Some ICA members fear a watering down of chiropractic purpose, direction and philosophy. We have three comments. Firstly the Rev. Jesse Jackson can do a lot more for the beliefs of people he represents by being a significant voice within a unitary system than by setting up an alternative power structure. The same applies for all U.S. chiropractors.

Secondly chiropractic associations elsewhere have undergone far greater restructuring without loss of direction - indeed they have gained strength and been forced to re-examine and affirm the fundamental tenets of chiropractic. In Australia the national and state chiropractic associations bitterly opposed the passage of the Chiropractic Manipulative Therapists' Act in Queensland in 1979. Faced with a situation where 60% of the skilled adjusters in the state were chiropractors and 40% manipulative therapists trained according to Scandinavian bone setting traditions (not physical therapists), the government passed legislation declaring all of them chiropractors.

Despite early fears the chiropractic profession's numbers, image, and political presence have been strengthened, and one of the manipulative therapists has now become president of the Queensland Branch of the Australian Chiropractors Association. I have spent a day with this very impressive chiropractor - Dr. Bruce Rock - and all Australian chiropractors will be grateful he is one of them rather than a powerful voice in opposition.

Thirdly national associations have remarkably little to do with the future philosophical direction of the profession in any event. That is governed principally by entrance standards and administrative decisions in chiropractic colleges. It is there that those concerned about the of future direction of the profession, as most chiropractors are, should focus their attention and energy. (For relevant comment see Quote-of-the-Month - opposite).

To see the validity of this last point one only has to look at the difficulties within the medical profession because of misguided admission criteria. To quote one commentator, David Horrobin, M.D., who was trained in England but has lived in North America since 1975:

"The idea that medicine is a vocation seems to be disappearing from our medical schools. Students want to get into medical school because that is the ultimate accolade for smart, city-bred kids and their parents: they want to get into medical school because that

is a certain route to wealth: ... It has become impossible for someone of moderate intelligence to become a doctor. Yet the great majority of jobs in medicine do require only moderate intelligence and this disparity between the intelligence available and the intelligence required becomes a major source of distress and unrest.

I am therefore gloomy about the current state of medical education. I see a cadre of narrowly intellectual, not very pleasant people, entering medical school and being herded through it in a way which is calculated to suppress any wider concerns they may have and ... incapable of relating to their patients in any sensible way in spite of receiving more formal courses in sociology and psychology than ever before.

As I see it the only hope is to change sharply the characteristics of the people entering medical school. ... If only one or two of (those people governing the choice of medical students) begin to adopt radically different ideas about who should be admitted to medical school they may well be able to exert an influence out of all proportion to their numbers on the future development of medicine. ... I do not believe that intelligence and personality traits can be much altered by education after the age of 20".

('Medical Hubris', Eden Medical Research Inc., St. Albans, VT, 1977 134-137).

Those with real concerns about the mind set of future chiropractors should focus on chiropractic colleges, but we think everyone should vote for one national association. Sure there are risks, but there is an overriding and compelling need for unity.

Florida WCB Study

The evidence of earlier WCB studies indicating that chiropractic treatment is a cost-effective alternative to medicine and osteopathy for work-related back injuries has been supported by a comprehensive new study which is the most thorough yet reported. The study was by the Foundation for Chiropractic Education and Research, principal researcher being Steven Wolk, Ph.D., Director of Research, FCER. The study is authoritative because:

- The methodology is meticulous.
- It is based upon much more accurate data than has been available in the past - sophisticated new computer records from the Division of Workers Compensation, Florida Department of Labour and Employment Security. The two databases were all back injury compensation claims for the year July 1, 1985 to June 30, 1986, and secondly the subset of all 'compensable' injuries (disabled for more than 7 days) and patients hospitalized.

The report compares chiropractic, medical and osteopathic costs. It supports conclusions you would suspect from clinical experience including:

Quote-of-the-Month

"Everybody wants to get into the act ... I get this call last week from some guy who has just decided he wants to be in chiropractic. Currently, he is in investments, but thinks he is sick of the ruthlessness and undercutting. So, he picks us. He says he wants a "change of professions", and that he's attracted to chiropractic because we are all making what he refers to as a "ton of money". I tell him I cannot talk long, since I am waiting for the Brinks Truck to arrive on its daily pick up. Those pesky guys are never on time.

Undaunted, he continues by saying he really likes chiropractors and *actually went to one for a while*. No longer though, because he doesn't need to! He and his brother currently "adjust each other's necks". My worst fears have been realized. These two have definitely been produced from a weakened gene pool.

I am bored now, listening to this loon, asking me whether or not I think this would be a good career move for him. ... While I applaud our improved image, I deplore the constant onslaught of potential DC's telling me they intend to make the magic \$100,000 their first year in practice. They miss the point. How much more honourable they would be if they set their goals on the 100,000 patients they intended to help. If money is their goal, there are plenty of other professions to accommodate the desire. However, if helping sick people is the focus, chiropractic can be the compensation some seek".

Albert J. Babel, D.C., President's Editorial, Georgia Chiropractor, March 1988.

1. Chiropractors provide more frequent early services than MDs or DOs for the average worker with back injury.

2. However, this means that patients return to work more quickly. Chiropractic patients had the lowest rate of incurring compensable injuries (20.5% for chiropractic patients, 26.2% for osteopathic, 36.1% for medical) and where patients incurred compensable injuries chiropractic patients were less likely to be hospitalized. (Chiropractic patients 21%, medical patients 57%).

There is to be a second report examining costs in greater detail (and bringing in drug costs which are not covered in the first report) and this will make final conclusions regarding the effectiveness of chiropractic care for back related injuries.

(The complete report 'An Analysis of Florida Workers Compensation Medical Claims for Back Related Injuries' is available from FCER, 1701 Clarendon Blvd., Arlington VA, 22209 at cost of US \$10.00).

World Notes – Eastern Mediterranean

Cyprus. During 1986 Dr. Phylactic Ierides, President, Cyprus Chiropractic Association was charged with the practice of medicine with respect to x-ray diagnosis and spinal adjustment. Given the state of the law the judge was obliged to enter a conviction, but he passed no penalty and instructed the government to proceed with legislation regulating the practice of chiropractic in Cyprus.

The Attorney-General is in the process of drafting legislation, based upon recent legislation in the Canadian provinces of Alberta and Manitoba.

Greece. Similar charges were brought last year against two Greek chiropractors, including Dr. Socrates Christodoularis, President, Hellenic Chiropractic Association. The charges were laid by the Medical Association of Athens. They were particularly significant since, in Greece, formal recognition is gained through judicial decision rather than legislation.

The charges came to trial on February 18, 1988 at which point the chiropractic defendants were supported by the Public Prosecutor and, following a bitterly contested hearing, the charges were dismissed. An appeal has been filed, which will lead to an authoritative determination in the High Court.

Israel. Israel now has 12 chiropractors, the President of the Israel Chiropractic Association being Dr. David Greenblatt of Jerusalem. As there is no licensing legislation a number of others practising manipulation use the title 'chiropractor'. Chiropractic practice does not fall within the legislative definition of 'medical practice'. Government policy is to license chiropractic and negotiations are proceeding to that end.

Jordan. Dr. Yousef Meshki of Amman, trained in Canada, is Jordan's sole chiropractor. For some years he was forced to practise as a 'master physiotherapist' at the King Hussein Hospital where his reputation was so fine that he in due course treated members of the royal family and senior personnel in the government and armed forces.

As a result King Hussein has asked the government to draft chiropractic legislation and, in anticipation of this, Dr. Meshki has been authorized to commence private practice.

Egypt. In 1983 the International Chiropractors Association designed, staffed and funded a preliminary trial of chiropractic treatment for low-back pain at a major hospital in Cairo, the Manhyatt Elbackray Hospital. One trial group received chiropractic care, another medical care, and a third placebo treatment.

Impressed with the results achieved under chiropractic care Dr. Medhad Alattar, one of the Egyptian MDs involved in the trial, subsequently enrolled at Life Chiropractic College, Marietta, Georgia, becoming the first Egyptian to enter the formal study of chiropractic. Dr. Alattar, M.D., D.C., has recently graduated and returned to Egypt

and there is now the likelihood of several Egyptian MDs studying chiropractic at Cleveland College, Kansas City, Missouri, pursuant to a scholarship program just announced.

Vertebral Subluxation – Objective Demonstration and Proof.

'Approaches to the Demonstration of Vertebral Subluxation' Charlton K H, J Aust Chiropractors' Assoc (1988) 18:9-13. PN

This is the first in a series of articles on objective determination of vertebral subluxation by Keith Charlton, a chiropractor from Brisbane, Queensland, prominent in research and postgraduate education in Australia.

Charlton explains that chiropractors, medical practitioners, osteopaths and physiotherapists have all treated and researched the vertebral subluxation (often using a different name - but the concept has similarities in all professions) and then provides a careful review of the research by each profession into consistency of inter-observer findings in manual diagnosis. He explains:

- There has been significant research in this area by chiropractors, osteopaths and physiotherapists, but none by medical manipulators.
- The research indicates greater consistency by chiropractic examiners than osteopaths and physiotherapists.
- However while "studies tend to suggest that chiropractors' skills, or their methods, may be more reliable than those of osteopaths and physiotherapists for the manual examination of some regions of the spine" all disciplines need to conduct more research both to show agreement on findings and then the objective existence of the subluxation agreed upon.

Useful objective evidence of subluxation also comes from imaging, both visually and radiographically, and subsequent papers by Charlton will review this evidence.

U.S. Patients with Back or Neck Pain - Who do They Consult?

'Women and Workers Compensation' Johnson R, Ferguson A, and Swank L, Research Forum, J Chiro Research, Vol. 3 No. 3, Palmer College of Chiropractic, Davenport, Iowa.

In 1987 Deyo reported in Spine that 1 in 3 Americans with an episode of back pain lasting more than two weeks consulted a chiropractor. His statistics were based on the largest U.S. survey of back pain yet, the National Health and Nutritional Examination Survey conducted between 1976 and 1980 which included 10,404 back pain patients.

Marjorie Johnson, D.C., Ph.D. and her fellow researchers from Palmer confirm the 1 in 3 ratio on a

survey of all 1984 Iowa workers compensation cases involving back or neck strain/pain. Findings are:

- 27% of claims filed (6,012 of 22,527) were for back or neck injury.
- A mailed survey returned by 37% of claimants showed the following first choice of provider:

chiropractor	27%
medical doctor	60%
osteopath	10%
other	3%

- 1 in 3 of those patients consulting a chiropractor (37%) or medical doctor (36%) subsequently swapped providers or sought additional health care.
- An analysis of closed cases - full recovery and return to work - showed that 72% (541) of those who consulted a chiropractor first or subsequently (542 and 206 respectively) regarded the chiropractor as the care provider responsible for their recoveries. Success rate for medical doctors was 59% (901 of 1,519).
- An interesting finding, given that all cases were of the strain/sprain category, related to open cases (compensation still being paid). Only 5% of females and 3% of males were under the care of a chiropractor, whereas 54% of females and 49% of males with open cases were seeing a medical doctor. (22%/20% seeing osteopaths). These ratios, compared with the overall statistics described, suggest better rehabilitation by chiropractors, with patients under medical and osteopathic treatment more prone to chronic problems and overlay. This is consistent with a number of earlier studies showing shorter periods off work under chiropractic care, and the new Florida study described in this Report.

Topsy-Turvy Science

There have been striking recent examples of how dangerous it is to rely upon apparently good looking research published in reputable journals. Many concurring studies since the 1950s led to recognition of Type-A personality (hard driving, competitive, aggressive, unable to relax) as a clear risk factor for coronary artery disease. Now the New England Journal of Medicine presents yet another recent study that follows patients who survived an original coronary event and disagrees, finding that Type-A personalities have a distinct advantage and a lower subsequent mortality rate.

An NEJM editorial acknowledges that the new research "casts a long shadow indeed on the evidence supporting Type-A behaviour as a risk factor in coronary heart disease", acknowledges that science is giving Type-A personality "a topsy-turvy career", and suggests that one of the things that has led to confusion is "far too much fervour on both sides of the argument" among researchers. Yet another reminder that everything we read, even well-groomed science, needs to be taken with a large grain of salt. ('Type-A Behaviour and Mortality from Coronary Heart Disease', Ragland and Brand, NEJM (January 14, 1988) 318:65-69; and editorial)

- ii) Stretching of hypertonic posterior segmental spinal muscles by the thrust, thereby abolishing pain coming from the muscles, ligaments and tendons; and
- iii) Increased neuro output produced by mechano-receptor stimulation that likely modulates pain perception through the gate control mechanism. (p.251).

8. In the preface Kirkaldy-Willis quotes Albert Einstein saying "imagination is more important than knowledge". His book reveals a large store of both, and has the potential to smooth the way of cooperation between the chiropractic and medical professions as well as anything yet written. Its message is that the patient needs the differing skills of many professions.

C. Back Power

By David Imrie, M.D. and Lu Barbuto, D.C., Stoddart Publishing, Toronto, 1988 (in print - for release this summer).

9. This is the first comprehensive work for the lay public co-authored by a chiropractor and a medical doctor. It reports on 'Back Power', a comprehensive program for the assessment of low-back problems evolved during the authors' work together over 10 years from 1978.

10. Imrie, aged 43, is an occupational health physician who is the most prominent Canadian medical expert on industrial safety and prevention. He is a consultant to the Ontario Workers' Compensation Board, one of the largest in North America, and is retained by the safety associations representing construction, electrical utilities, farming, forest products, mines, transportation, and various other smaller sectors. His Back Care Centre, a multi-disciplinary centre in which a chiropractic clinic is an important component, serves 70 local industries and 30,000 workers.

11. Barbuto, who has worked with Imrie since 1978, has an independent practice in Toronto. In recent years he has been Director of the Canadian Memorial Chiropractic College Clinic in West Toronto, prominent in undergraduate and postgraduate education particularly in the field of occupational health, and since 1986 has been retained by the Ontario Workers' Compensation Board as chiropractic consultant.

"The key to Back Power is not modalities to modulate or treat pain; rather it is a philosophy of balance . . . Balance of muscles and joints. Balance of health science and art. Balance of effort from practitioner and patient. Balance of treatment and prevention. Balance between chiropractor and physician. And the secret of it all is to identify the imbalance".

Back Power, Chapter 1.

12. There is nothing dramatically new about the Back Power program from a chiropractic perspective. However, the importance of the book now describing it is that it:

- Represents a new approach to medical management of back pain, advocating cooperation with the chiropractic profession.
- Has the traditional chiropractic emphasis on function rather than pain or disease pathology, focuses on the asymptomatic back and declares "that back pain in 90% of cases is the failure in management of back health".
- Gives equal emphasis to management of joint and muscle function, in a program with new integration and detail.
- Gives the public clear advice on self-management and testing of back muscle function.
- Gives fundamental importance to chiropractic theory, practice and research on low-back pain.

Origins of Program

13. The evolution of the program, as explained in the book, is of great interest.

• Dr. Imrie moved from general practice to an industrial health practice in the 1970s. Back injury became the dominant part of his practice. He was failing on the basis of his medical training. He was looking at the symptom of back pain, seeking a diagnosis, then trying to remove the pain. His traditional neuro-orthopaedic assessment tools indicated pathology in under 10% of cases.

With the other 90% he was helpless. When pain ceased he would certify the patient fit for return to work. Within weeks many of them were disabled once more. This represented a clear failure, and convinced him of the need for an alternative approach. He decided to investigate the roles of muscle and joint function, fields outside his training as a physician.

His interest in muscles arose in part from the training of his sister as a physiotherapist, and her experience with back school. It also arose, as he explains, from the work of a local rehabilitation specialist, Dr. Terry Kavanagh, in caring for heart recovery patients.

Kavanagh became internationally famous when a group of his patients completed the Boston Marathon in 1973. At a time that traditional medicine was telling heart attacks victims to avoid exertion for the rest of their lives, Dr. Kavanagh produced an exciting effective low-tech alternative - commencing a controlled diet and graded exercises until patients could run a marathon. If muscle conditioning could do so much for heart function, reasoned Imrie, why not for backs.

Results showed that improved muscle function alone was insufficient.

• Where was Imrie to go to learn about joint function? He had heard criticism of chiropractors at medical school, but many of his patients swore by them. He had no personal experience. "I mustered my courage and phoned the chiropractic college in Toronto", asked to speak to a competent young chiropractor, and was given Dr. Barbuto. Within weeks they were working together, two mornings and one evening each week. His Back Care Centre thus had the ability to evaluate and treat joint function, and the full Back Power program was born.

The Back Power Model

14. The Back Power model starts with the premise that everyone should test for back function regularly, regardless of *whether or not they have ever experienced back pain*. The essence is:

- a) If you have back pain, or a history of back pain, you should seek professional advice to determine whether you are one of the relatively few with pain from organic disease, or one of the more than 90% with mechanical dysfunction.
- b) If you have no history of back pain, or pain from dysfunction - i.e. almost everyone - you should do a simple chair test (rising with arms folded) to indicate whether you have a pelvic ring disorder as described. (A large number of those experiencing pain, or not yet in pain, will.) If so you should seek professional advice, and Imrie and Barbuto explain the role and importance of chiropractic motion palpation. If you pass the chair test you are likely to be able to help yourself.
- c. With respect to muscle function, what is important is *strength and flexibility* of the four main trunk muscle groups themselves. (Back muscles, abdominal muscles, sling muscles or hip flexors, and lateral muscles). People can test strength and flexibility themselves. Appropriate exercises and a point grading system are given, which lead to an aggregate muscle dysfunction mark. Specific advice is given on exercise and lifestyle to improve each area of poor muscle function. There is also advice on when to stop, when to recognize that joint problems may be a factor, and when to seek professional help.
- d) With respect to joint function "... bony elements are static and much more difficult for personal management ... improvement of joints can only be a health professional's responsibility".
- e) When professional help is needed for treatment of dysfunction

rational management is based on a back power functional model (see Fig. 1) which presents four rational bases for treatment:

- Joints too tight and fixed - appropriate treatment is to restore movement through adjustment, mobilization or manipulation.
- Joints hypermobile (too mobile - relatively uncommon) - restore normal movement through external support, surgery or improved muscular strength.
- Muscles too short (tight) and weak - lengthen them through stretch/relaxation exercises or yoga.
- Muscles too long and weak - tighten through power exercises or weight lifting.

f) It is emphasized that several dysfunctions may be found "and the approach is thus to try to restore all of them as much as possible toward normal function ... recognizing that the pain symptom usually results from the cumulative effect of the several dysfunctions and not from any one of them in itself". There is explanation of how joint hypermobility at one spinal level may be secondary to fixation at others.

g) On this model rest, medication, heat therapy and electrical therapy are all of secondary importance - they are merely palliative treatments to alleviate some immediate pain, and are not working on the cause of the problem.

h) All aspects of this back power model are illustrated with case examples.

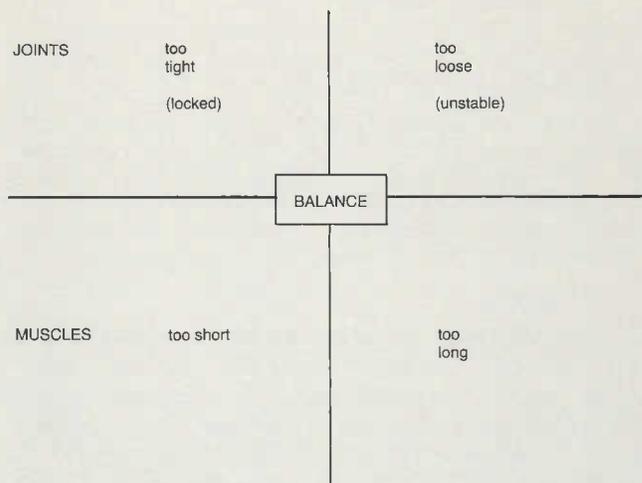
General Comment

15. There are many passages that will be music to the souls of chiropractors. Examples:

- This book for the lay public commences with Dr. Imrie commenting on the Wilk Case, quoting the terms of the court injunction issued against the American Medical Association, and explaining how disagreement between the chiropractic and medical professions is contrary to his experience in practice and quite unnecessary. He then deals with and dismisses some common medical criticisms of chiropractic, confirming that he now knows chiropractic education - in all respects except for the absence of pharmacology - to be the equivalent of undergraduate medical education.

Back Power Functional Model

(Fig. 1)



(In an interview with us Imrie noted that when he and Barbuto met "Lu could discuss medicine with me, because he had all the same basic sciences and background - but I was quite unable to discuss chiropractic with him").

- There is colourful use of analogy. Pain from loss of back function is said to be like eye strain and headache from loss of eye function - a problem of weakness and function not disease. Sacroiliac strain leads to a 'back attack' and pain, in the same way as diminished vascular function (through increasing clogged arteries) leads to 'heart attack' and pain. A remedy must be sought before arrival of pain, which is the end point of the problem.

- Constantly there is rejection of the "traditional approach" of asking "what is causing the pain and how do I get relief from it" and seeking "quick fixes for symptomatic pain relief rather than ... making a meaningful diagnosis and correcting the underlying problems which are causing the pain".

- In the book's introduction Barbuto defines chiropractic as "the study of problems of health and disease from a structural point of view with special consideration given to the mechanics of the spine and its neurologic relationship".

- Elsewhere he gives appropriate emphasis to other aspects of the chiropractic model of health -homeostasis, the link between the whole body and neuromusculoskeletal problems, holism, and what the patient must contribute himself/herself.

- Barbuto and Imrie close their introduction with this comment:

"We've come to the conclusion that health is no longer the exclusive domain of one profession. Rather, by challenging current concepts and taking an interdisciplinary approach to the problems associated with the diagnosis, treatment and management of back pain we have arrived at our mutual goal. Helping you to help yourself be the best you can be whether or not you've ever experienced back pain".

16. Back Power is going to reach many people, and be influential in the increasing public and medical understanding and acceptance of chiropractic. You will want to read it. By this time next year many health professionals are going to be consulted by patients who have read Back Power and know rather more than they the professionals do about the rational management and treatment of common low-back pain.

SUBSCRIPTION AND ORDER FORM

Annual Subscription (6 bi-monthly issues): US - US\$48.
Canada - Can\$48. Australia - A\$60. NZ - NZ\$60.
Europe and elsewhere - £25 or US\$50.

PLEASE PRINT CLEARLY

Name _____

Address _____

City _____ State/Province _____

Country _____ Postal Code/Zip _____

Tel. No. () _____

ACA ICA AustraCA CCA ECU NZCA
UCA (CHECK AS APPROPRIATE)

PLEASE CHECK ONE

Visa Card Number _____

Master Card Exp. Date _____

Check/Cheque Enclosed

Payable to:

The Chiropractic Report
P.O. Box 244, Station "S"
Toronto, Ontario M5M 4L7 Canada

References

1. Williams and Wilkins, Baltimore 1987. (1136 pages, two volumes, US \$150.00).
2. Bernard TN and Kirkaldy-Willis WH (1987) 'Recognizing Specific Characteristics of Non-Specific Low Back Pain', Clin Ortho 217: 266-280.