



THE CHIROPRACTIC REPORT

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

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

July 1993 Vol. 7 No. 5

1993 World Chiropractic Congress

A. Introduction

1. The World Federation of Chiropractic (WFC), which now has the membership and support of all national associations of chiropractors worldwide, held its 1993 World Chiropractic Congress in London England, May 24-29, 1993.

Reasons why this is worthy of attention include:

a) This was the first ever chiropractic meeting with an academic program co-sponsored by the World Health Organization.

The theme was occupational low-back pain, identified by opening speaker Dr. Mikhail Mikheev, Chief Medical Officer, Office of Occupational Health, World Health Organization as "an epidemic ... with skyrocketing costs" that could only be contained with a team approach that includes much greater cooperation between the medical and chiropractic professions and use of the unique skills of chiropractors. He explained the WHO's new plans to achieve this - significant to everyone in the profession wherever you may practise. (See para 3).

b) Prominent British and North American medical experts agreed. Gordon Waddell, orthopedic surgeon, Glasgow, called for a completely new biopsychosocial model of management¹ and acknowledged that "the chiropractic profession, particularly in North America, is leading the way." (See para 7). Lu Barbuto DC and David Imrie MD of Canada, explaining their Back Power Program, illustrated how cooperation works in practice, and the benefits for patients and providers. (See para 8).

c) At the WFC Assembly national delegates reported and discussed significant professional developments worldwide - again of importance to chiropractors everywhere. For example:

- Norway reported that the government health plan now covers the cost of sophisticated imaging (e.g. MRIs and CT scans) ordered by chiropractors. In contrast, Denmark and Sweden have placed limitations on treatment of young children without medical referral.

- From the Middle East Dr. Garrett Moscoso reported on the rapid growth of chiropractic in Saudi Arabia under royal patronage.

Dr. Matthew Givrad reported on similar breakthroughs in Iran, and Dr. Sid Williams, President, Life College, reported on a major new collaborative project with the University of Arizona and Ain Shams University, Cairo to establish chiropractic research then education in Egypt.

- Speakers during a forum on chiropractic education in third world and other countries with huge need for chiropractic services but few chiropractors, included frontline new chiropractic leaders with joint chiropractic/medical qualifications (Sira Borges DC MD, Brazil, Udo Kastner DC MD, Austria, Edward Lee DC MD, Hong Kong).

2. In the 1990s the world is a global village. Developments in chiropractic, or health care generally, in one country are observed and followed in another, often with frightening speed. This is made possible by modern communication and reference databases such as the World Health Organization's International Digest of Health Legislation, which reports every change to chiropractic and other health professions legislation worldwide - both at the national and state/provincial level.

Accordingly international developments - legislation, research, third party reimbursement, human resources (manpower), and interprofessional relations - are of new significance, and the World Federation of Chiropractic (WFC) has a vital role in an era of rapid chiropractic expansion.

This Report presents summary comment on significant aspects of the WFC's 1993 Congress in London. The WFC will publish a full review of chiropractic worldwide, based on approximately 50 written country reports submitted in London, later in the year.

B. Academic program - (May 27-29, 1993)

3. The theme of the program was 'Occupational Low-Back Pain' and the opening speaker was Mikhail Mikheev MD, Chief Medical Officer, Office of Occupational Health, World Health Organization. Dr. Mikheev, currently at WHO's Directorate in Geneva but formerly a toxicologist specializing in occupational health in St. Petersburg, Russian Federation, set the stage clearly by observing:

a) Disability from back pain is currently "an

Professional Notes

NBCE Survey of Chiropractic Practice in the U.S.

'Job Analysis of Chiropractic', ed Christensen MG, National Board of Chiropractic Examiners, Greely, Colorado, 1993.

This survey and summary of the practice of chiropractic within the United States is by far the most comprehensive yet. It was performed by the U.S. National Board of Chiropractic Examiners, as part of continuing research as a foundation for appropriate licensing examinations. Results of a similar survey in Canada, done by the NBCE at the same time, are not included but will be published soon.

The survey covers all aspects of practice - including patient characteristics, practitioner characteristics and forms of practice - and was sent at random to 9,210 DCs. 1,371 were deceased, retired or in part-time practice. 4,835 DCs in fulltime practice returned completed forms and represent the basis of the survey results.

Results are available on a state-by-state basis, but a weighting of the responses has given combined data which represent the national population of chiropractors in fulltime practice.

Many points of interest emerge including:

1. The typical chiropractor is in sole practice at one location. 1 in 20 (5%) has hospital staff privileges, and 8 of 10 (77.2%) receive medical referrals.

1995 Centennial Celebrations

Canada: May 31 to June 4, Toronto, Ontario. United States: July 5-9, 1995, Washington DC (incorporating the 1995 World Chiropractic Congress) and September 13-17, 1995, Davenport Iowa. Clear those dates now.

continued on page 6

Main Article: *continued from page 1*

epidemic" and "our greatest challenge" in occupational health. There are "sky rocketing costs for back pain in all industrialized countries", and in the U.S. in the 10 year period to 1981, despite improved diagnostic equipment and ergonomic knowledge "disability from low-back pain grew at a rate 14 times greater than the population - and this was the single greatest cause of increased disability."

b) "Traditional management based on rest and passive care has been unsuccessful, actually promoting disability." There must be a change to "active management" based on "early rehabilitation and restoration of function." There must be recognition of physical, psychological and social causes, and that physical causes include "structural and mechanical" problems.

c) To succeed there must be multidisciplinary management. Chiropractors have "unique skills" and "are important to a solution to the back pain epidemic." This is especially so since research has now shown "chiropractic management offers cost-effective care for various occupational health disorders including acute and chronic low-back pain."

d) Because many occupational health managers and physicians are unaware of

the role of chiropractic services, and because a number of WHO's 186 member nations do not have an established chiropractic profession, WHO is working with the chiropractic profession through the World Federation of Chiropractic to bring about cooperation between chiropractic and medicine in occupational health.

Current initiatives include:

- Sponsorship of "this meeting - exactly the right way to go about collaboration", with the bringing together of leading clinical and research experts from chiropractic and medicine worldwide.
- A WHO text on 'Chiropractic in Occupational Health' to be available in 1995. The first scientific meeting held in London the previous day, discussed final format, chapter contents and authors, and "brought together prominent health physicians and chiropractors from Europe (England, Denmark, Finland, the Russian Federation, Sweden and Switzerland), Asia and the Pacific (Australia, China and Singapore), and North America (Canada and the United States)". See Table 1.

Primary Prevention

4. The lecture program over three days was divided into:

- **Primary prevention** - risk factors and prevention strategies
- **Secondary prevention** - diagnosis and treatment, including preventing acute problems becoming long term or chronic.
- **Tertiary prevention** - rehabilitation.

A common theme of speakers throughout was that recurring and chronic back pain, the sources of most suffering and socio-economic cost from occupational low-back pain, generally had two significant aspects - *physical* and *psychosocial*. Thus Stephen Pheasant PhD, a renowned British ergonomist whose doctorate was in anatomy and biomechanics, speaking on primary prevention, noted:

a) Many people have one of two conflicting viewpoints on the progression to acute then chronic back pain. One viewpoint, physical and based on re-injury, is that various work tasks cause cumulative and continuing damage. The other, based on psychosocial factors, holds that chronic back pain is not an injury, but a result of a downward spiral of inactivity and reduced functional capacity.

Original Research Awards

A major feature of the congress was platform (30) and poster (28) presentation of the 58 best original research papers received in a competition that attracted 124 papers from researchers in ten countries.

Award winning papers were:

First: 'Pain Distribution: Relationship to Pain Severity and Disability in Back Pain Patients', **Jenni Bolton PhD, Mark Christensen** (*Anglo-European College of Chiropractic*).

One purpose of the study was to see if pain distribution was linked to disability in low-back patients - whether a patient with pain radiating to the thigh, or below the knee, was likely to have greater pain and disability as measured by VAS and the Oswestry Questionnaire.

215 patients were divided into those with back pain only (Group 1 - 72.3%), those with back pain and radiating pain in one or both legs above the knee (Group 2 - 14.6%) and those with back pain and radiating pain in one or both legs below the knee (Group 3 - 13.1%).

Interestingly, there was no significant difference between Group 1 and Group 2 - but there was between these groups and Group 3 both in terms of pain severity and disability. These results suggest a link between pain distribution and disability.

Second: 'Lymphocyte Profiles in Patients with Chronic Low-Back Pain Enrolled in a Clinical Trial', **Patricia C. Brennan PhD, Meg A. Graham BS, Maria Hondras DC, John Triano MA DC** (*National College of Chiropractic*).

Third: 'A Comparison of Radiographic Signs of Degeneration to Corresponding MRI Signal Intensities in the Lumbar Spine', **Ronnie L. Firth DC DACBR, Dennis M. Marchiori DC MS, Ian McLean DC DACBR, Robert C. Tatum DC** (*Palmer College of Chiropractic*).

Third: 'The Epidemiology of Chiropractic in Europe', **Alan Breen DC PhD, Palle Pedersen DC** (*Anglo-European College of Chiropractic*).

These award winning papers and the abstracts of all 58 research papers accepted for presentation will be published as part of the Congress Proceedings in the Journal of Manipulative and Physiological Therapeutics (Williams & Wilkins) in the near future.

b) Both of these viewpoints, commonly adopted for adversarial purposes, "are reductionist and incomplete." With chronic pain physical and psychosocial factors frequently exist together. In addition there is now good evidence that

continued on page 3

Table 1

WHO/WFC Scientific Review Meeting

* = Invited by WHO

Chair: John Triano MA DC (United States),
WFC Research Council

WHO Liaison: Mikhail Mikheev MD, CMO,
Office of Occupational Health, WHO

Gunnar Andersson, MD PhD (United States)

Luciano Barbuto, DC (Canada)

Choon-Nam Ong, MD (Singapore)*

Tom Davis, DC (United States)

Phillip Ebrall DC (Australia)

He Fengsheng, MD (China)*

Paul Hooper, DC (United States)

N.F. Izmerov, MD (Russian Federation)*

Ann Kilbom, MD (Sweden)*

Charlotte Leboeuf-Yde, DC MPH (Denmark)

Palle Pedersen, DC (England)

J. Rantanen, MD (Finland)*

Jean Robert, DC (Switzerland)

Tilden Sokoloff, DC (United States)

Frank Venditti, DC (United States)

Editorial Board. United States: Peter Gale, DC, Chiropractor, Boston, Massachusetts. Scott Haldeman, DC, MD, PhD, Neurologist, Santa Ana, California. Reginald Hug, DC, Chiropractor, Birmingham, Alabama. Dana Lawrence, DC, Chiropractor, Chicago, Illinois. Michael Pedigo, DC, Chiropractor, San Leandro, California. Louis Sportelli, DC, Chiropractor, Palmerton, Pennsylvania. Aubrey Swartz, MD, Orthopedic Surgeon, Oakland, California. **Canada:** J. David Cassidy, DC, M.Sc., Chiropractor, Saskatoon, Saskatchewan. Donald J. Henderson, DC, B.Sc., Chiropractor, Toronto, Ontario. William Kirkaldy-Willis, MD, FRCSC, Orthopedic Surgeon, Victoria, British Columbia. **Europe:** Arne Christensen, DC, FICC, Chiropractor, Odense, Denmark. **Australia:** Miriam A. Minty, DC, Chiropractor, Perth, W.A. Lindsay Rowe, B.App.Sc., DACBR, Chiropractic Radiologist, Newcastle, New South Wales.

The Chiropractic Report is published by Fumia Publications Inc. 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 8.** Subscriptions are for the year commencing November. All subscriptions and changes of mailing instructions should be sent to The Chiropractic Report, 3080 Yonge Street, Suite 3002, Toronto, Ontario, Canada M4N 3N1. Tel: (416) 484-9601, Fax: (416) 484-9665. Printed by Harmony Printing Limited, 123 Eastside Drive, Toronto, Ontario, Canada M8Z 5S5. Second Class Mail Registration No. 7378. Copyright © 1993 Fumia Publications Inc. ISSN 0836-1444.

acute and chronic pain are physiologically different - there are different underlying neural mechanisms involved. We should regard chronic back pain as involving elements of:

- physical re-injury
- neurological sensitization
- psychosocial reinforcement

c) This model, as Dr. Pheasant acknowledged, has important medico-legal consequences because it suggests that the direct cause of the initial back injury - whether it be an acute event, cumulative trauma, or a mixture of both - is the cause at law of the final chronic state.

d) Strategies for primary prevention of back injury at work must recognize the diverse causes or risk factors. Dr. Pheasant, ergonomics advisor to the British National Back Pain Association, listed the following risk factors:

- Heavy work (e.g. lifting and handling, sudden maximal forceful exertions, bending, twisting, etc).
- Prolonged sedentary work.
- Prolonged work in a stooped position.
- Lack of task diversity.
- Unaccustomed physical activity.
- Vibration.
- Psychosocial factors.

5. Gunnar Andersson MD PhD from Chicago, a Past President of the International Society for the Study of the Lumbar Spine and a foremost authority on occupational low-back pain, confirmed that the physical and psychosocial aspects of back pain were now well documented in the literature, and gave examples.

a) **Physical aspects.** Physical work factors that give increased risk of back pain are heavy physical work, lifting, static work postures, bending, twisting and vibration. Each aggravates the other. For example light lifting is relatively safe. Heavy lifting brings a fourfold increase in back injuries. Heavy lifting and twisting gives a sixfold increase.

b) **Psychosocial aspects.** Lack of work satisfaction is now well documented as a risk factor for low-back pain. Andersson attributed the following equation to Nordin Hadler:

$$\text{Satisfaction} = \text{fun} \times \text{funds}$$

Where workers enjoy the job (fun) and are well paid (funds) there is far lower disability from low-back pain. And an interesting new study from Sweden, where there is a generous government sponsored compensation system, has revealed that 27% of people who replied to a survey acknowledging openly that they had no back pain, were registered with the Swedish Health Insurance Plan as having back pain.

6. Andersson reported many current statistics of interest including:

a) Currently national data in the U.S. reports over 500,000 workers compensation claims per year for back pain - meaning that 2% of the work force has a back injury each year at a cost of 3% of the U.S. gross national product (GNP). Current cost of this to workers compensation is over \$13 billion a year. Total expense, including indirect cost to industry such as replacement training and lost production, is estimated at up to \$56 billion. About 10% of the back injuries are responsible for 80% of the cost.

In Canada 1.5% of the work force has a back injury each year. In the United Kingdom the most recent data (1987-1989) gives the following cost of occupational low-back pain each year - two million general practitioner consultations, and 52.6 million lost days at work costing approximately £2,000 million in lost output.

b) For many reasons the data on back pain and its socio-economic cost is hard to compare internationally, but back problems are "the most frequent cause of activity limitations in people under 64 in the U.S., the main reason for early retirement benefits in Sweden, and

the second most common reason for sickness absence in the U.K. ... the cost of the back problem is enormous."

c) There are large variations in medical management, both within a country and between countries. Current surgical rates for disc herniation per 100,000 people are:

| | |
|----------------|-----|
| United Kingdom | 100 |
| Sweden | 200 |
| Finland | 350 |
| United States | 900 |

Secondary Prevention - A Biopsychosocial Model.

7. A leading presentation on secondary prevention came from Gordon Waddell, a Glasgow orthopedic surgeon who has won two Volvo awards during a distinguished research career in the field of low-back pain. Waddell is known as an outspoken - but highly informed and respected - critic of medical management of back pain. In London he acknowledged the leading role of the chiropractic profession with back pain patients, now well supported by research. Some of his essential messages were:

a) "Traditional medical management, according to the disease model, has failed." Standard medical advice to rest, stay off work, and avoid physical activity has promoted fear of pain, poor coping and disability. Passive treatments, with surgery as a back stop, have been ineffective. In recent decades there has been no increase in pain (incidence, severity, etc.), only in disability. It is natural that a back pain patient experiences psychological distress. Traditional medical management has aggravated that distress, so that the disabling fear of pain has become a bigger factor than the physical cause in many cases.

b) A new 'biopsychosocial model' must replace the disease model.¹ This deals with both the physical pathology and the patient's personal reaction to coping with pain.

c) In this new model of management the goals of relief of pain and restoration of function must be pursued at the same time. Failure to restore function means any pain relief will be temporary, and reinforces chronic pain.

d) With respect to specific treatments:

i) **Bed rest.** "Its use as a standard medical treatment should die as soon as it can. Avoid bed rest if possible. There is no evidence of effectiveness beyond 2 or 3 days at most."

ii) **Physical therapy modalities.** "Most are no good." There is no adequate scientific evidence of effectiveness.

iii) **Spinal manipulation.** "One of the two treatment approaches of proven value." "The last 10 years have produced a lot of solid scientific evidence to support the value of manipulation."

iv) **Early active exercises.** "The one other treatment approach supported by good scientific evidence."

e) **The new medical approach and chiropractic.** The key elements of the "whole new approach that is required to beat the back pain epidemic" are:

i) Use of the biopsychosocial model.

ii) Treat patients, not spines. During history and examination it is as important to get information about attitudes, beliefs and illness behaviour of the patient as it is to get physical information.

iii) Results of treatment (outcomes) should be measured in terms of reduction of disability, return to function, and cost of management - not relief of pain.

iv) Treatment should involve use of early exercises, manipulation and education - the management strategies that are proven effective for the desired results.

To the chiropractic profession all of this - the new model for medical management - is familiar. In essence it is the traditional chiropractic approach. This was implicit in Waddell's conclusion, which was that in the management of occupational back pain "the

chiropractic profession, particularly in North America, is leading the way”

The Back Power Program

8. Dr. Mikheev, on behalf of WHO, called for cooperation between the chiropractic and medical professions, and Dr. Waddell gave the theoretical model for this. Lu Barbuto DC and David Imrie MD, a chiropractor and physician who are co-authors of ‘The Back Power Program’² gave a half day seminar illustrating successful use of this model within industry in North America. Essential principles of The Back Power Program are:

- a) The vast majority of back injury is the result of loss of joint mobility and/or muscle tone.
- b) As a matter of primary prevention workers, and everyone, should test for back function regularly whether or not they have ever experienced pain. “Back pain in 90% of cases is the failure in management of back health.” Barbuto and Imrie gave detailed advice on self-testing, when to seek professional help and specific exercises for strength and flexibility of the four main trunk muscle groups - back muscles, abdominal muscles, sling muscles or hip flexors, and lateral muscles.
- c) There was emphasis on the importance of understanding the cumulative effect of several joint and muscle dysfunctions, and the fact that joint dysfunction generally requires professional help.
- d) 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 directed to the functional causes of the problem.

In summary, the Back Power Program views most back pain as similar to eye strain and headache from loss of eye function - the problem is weakness and loss of function, not disease.

C. WFC Assembly – (May 25-26, 1993)

9. The Assembly was attended by 58 delegates representing 39 national associations of chiropractors. For a list of the 39 countries,

Figure 1

WFC Member Associations

Every established national chiropractic association in the world has now joined, or applied for membership in, the Federation. The 69 countries included are listed below. 53 have been approved as members, 16 have applications under review.

* = applicant for membership

Italics = represented at 1993 World Chiropractic Congress in London.

| Africa: | Asia: | Eastern Mediterranean: | |
|----------------------|----------------|------------------------|----------------------|
| Ethiopia | Hong Kong | Bahrain | Libya |
| Kenya* | Japan | Cyprus | Qatar |
| Morocco* | Korea* | Egypt | Saudi Arabia* |
| Namibia | Philippines | Greece | United Arab Emirates |
| South Africa | Singapore | Iran | |
| Zimbabwe | Taiwan, R.O.C. | Jordan | |
| Europe: | | | |
| Austria | France | Liechtenstein | Spain |
| Belgium | Germany | Netherlands | Sweden |
| Croatia* | Hungary | Norway | Switzerland |
| Czech Republic* | Iceland* | Portugal | United Kingdom |
| Denmark | Israel | Russia* | |
| Finland | Italy | Slovakia* | |
| Latin America | | | |
| Brazil* | Panama | North America: | Pacific: |
| Colombia | Peru* | Barbados* | Australia |
| Ecuador | Uruguay* | Belize | Fiji* |
| Guatemala* | Venezuela | Bermuda | Guam |
| Mexico | | Canada | New Zealand |
| | | St. Kitts | Papua-New Guinea* |
| | | Trinidad & Tobago | |
| | | United States: ACA | |
| | | ICA | |

and all 53 WFC member countries see Figure 1. Written reports were received from 49 countries.

Administration

10. The following Council and Executive positions were confirmed:

Executive Council

President, Christoph Diem DC, Switzerland
Vice-President, John Sweaney DC, Australia
Secretary-Treasurer, Louis Sportelli DC, USA

Regional Representatives

Africa: Gert van der Walt DC, South Africa (Past President, Chiropractic Association of South Africa)
Asia: Bruce Vaughan DC, Hong Kong (President, Hong Kong Chiropractors' Association)
Eastern Mediterranean: Efstathios Papadopoulos DC, Cyprus (President, Cyprus Chiropractic Association)
Europe: Anthony Metcalfe, England, (President, European Chiropractors' Union)
Latin America: Enrique Benet-Canut DC, Mexico (President, Latin-American Federation of Chiropractors)
North America: Paul Carey DC, Canada (Past President, Canadian Chiropractic Association.)
 Gerard Clum DC, USA (Past Vice-President, ICA)
 Vince Lucido DC, USA (Past President, ACA)
 John Pammer DC, USA (President, ACA)
 Louis Sportelli DC, USA (Former Chairman of the Board, ACA)
Pacific: John Sweaney DC, Australia (Executive Director, Australian Chiropractors' Association.)

Research Council

Scott Haldeman DC MD PhD, Chair (USA)
 Alan Breen DC PhD (England)
 J. David Cassidy DC PhD (Canada)
 Lynton Giles DC PhD (Australia)
 Reed Phillips DC PhD (USA)
 John Triano DC MA (USA)

Significant administrative decisions included:

- a) **1995 Centennial Celebrations.** A contract with the Chiropractic Centennial Foundation, providing that the WFC shall have responsibility for planning and administering the educational programs for the US Centennial Celebrations (Washington DC July 5-9, 1995 and Davenport Iowa September 13-17, 1995) was ratified.
- b) **1997 Congress.** The 1997 World Chiropractic Congress will be held in Tokyo, Japan in May/June 1997.
- c) **Relations with WHO.** A major role of the WFC, according to its constitution, is to represent the chiropractic profession before WHO and other international health agencies. At this Assembly:
 - The contract and funding for the WHO text ‘Chiropractic in Occupational Health’ was approved. (The Chiropractic Council of Japan presented a donation of \$10,300 towards the project. Other generous donations have come from Canada, Croatia, Denmark, Dr. Christoph Diem, France, Ireland, Mexico, Norway, South Africa, Switzerland and the United Kingdom.)
 - The decision was made, following approximately four years working relations with WHO and fulfilment of other criteria, now to apply for formal non- government organization (NGO) status.
 WHO, which has relatively low profile in North America, remains a central and influential source of health policy worldwide and has a major impact on the recognition and use of health services. It is thus important, for example, that resource books published by or in collaboration with WHO include chiropractic, which has been omitted in the past. Following input from the WFC that is the case with the newly published ‘State of Health Atlas’³ which, in its world review of health issues and services, describes and publishes a map of chiropractic around the world.

Country Reports

11. These evidenced the unprecedented international growth and development of the chiropractic profession during the past two years. For example:

a) **Legislation.** There is new legislation recognizing chiropractic in the British West Indies (Leeward Islands 1992), Hong Kong (1993), Iran (1993) and Saudi Arabia (1993). The Hong Kong law, which reflects the now accepted traditional scope of chiropractic practice internationally, is the first in Asia. Similar legislation is imminent in a number of other countries - most notably the United Kingdom where all political parties and interested parties (e.g. the British Medical Association) support the recently filed King's Fund Report which establishes the basis for the new legislation.

However, there is a clear need for the chiropractic profession worldwide to promote a uniform scope of chiropractic practice and watch developments in individual countries closely. This was highlighted by the report from Sweden of a new law that prevents chiropractors from treating children under the age of 16 years without medical referral. Two states in Australia have recently restored medical doctors as gatekeepers under workers' compensation plans, a retrograde move that is at odds with the international standard and evidence. In the 1990s governments in some countries newly recognising the chiropractic profession are under pressure to restrict the use of diagnostic radiology by chiropractors for cost and other reasons. This would, of course, have a major impact on patient and professional rights, and is another example of how there needs to be close awareness of legislative developments worldwide.

b) **Education.** Government funded educational programs are in various stages of development in many countries. A second chiropractic program has already commenced in South Africa (at the Technikon Witwatersrand, Johannesburg) and a second university program is planned in the United Kingdom for September 1994 - at Queen's College, Glasgow, Scotland.

This September a new chiropractic program commences at the University of Quebec in Canada - the first chiropractic school at a major university in North America. Such university affiliations are of major significance in terms of funding, acceptance, research and expanded use of chiropractic services.

c) **Middle East.** Dr. Garrett Moscoso reported new legal recognition of chiropractic in Saudi Arabia, and royal endorsement and funding for chiropractic services. He directs a large multidisciplinary clinic, which employs four chiropractors, in Riyadh. There is now a similar facility in Jeddah, and three more will open during the next 18 months. A chiropractic degree from an accredited college is accepted for licensure on an equivalent basis to medical doctors.

Similarly in Iran, where the 11 members of the Iranian Chiropractors' Association are continuing extensive negotiations with the government, a chiropractic degree from an accredited college has now been accepted as a full health science doctorate and the government is preparing a scope of practice statement.

d) **Latin America.** In some world regions the need remains acute. Dr. Enrique Benet-Canut, President, Latin-American Federation of Chiropractors, reported on continuing negotiations to establish the world's first Spanish language chiropractic college in Mexico City. Dr. Luis Valera (Venezuelan Chiropractors' Association - 10 members) noted that chiropractic was legal in Venezuela but unavailable to most Venezuelans, and Dr. Sira Borges (Brazilian Chiropractors' Association - 6 members) explained that alternative care - including chiropractic - is now an official part of the government health services program but that patients have to wait almost 12 months before receiving an appointment with her.

Evolution of Chiropractic Education

12. The central focus of the Assembly was an extended discussion of how to bring chiropractic education to countries such as Brazil or Egypt or the Russian Federation - countries where the profession is small, need is great, and lack of resources makes it impossible for students to travel to western world chiropractic colleges.

First invited speaker was Dr. James Parker, President, Parker College, who had placed this issue before the WFC one year previously. For other invited speakers see Figure 2. This was an occasion for learning rather than decision, with more expertise, experience and viewpoints gathered in one conference room than ever before. However, following four hours of discussion there was an apparent consensus on the following:

- a) There must be no second level of recognized chiropractic qualification, no retreat from hard won and respected CCE standards, in establishing new chiropractic educational programs in any country.
- b) Where medical doctors and others with a health sciences background from Third World and other countries are sponsored to attend accredited colleges in the western world, even with maximum cross-credits there should be a minimum of two years fulltime study. (That is in accord with the current formal policy of CCE in the United States).
- c) Upon return to their home countries, pioneering chiropractors should be encouraged and supported in their desire to establish chiropractic education, features of which should be:
 - Formal affiliation with a university or other accredited institution in the home country.
 - Formal affiliation with a CCE accredited college in another country.
 - Flexibility on *structure* of the program but not *standard or content* to meet economic and other realities. (e.g. Local requirements may lead to a fulltime basic science component, but then a part-time model - e.g. two weeks study, two weeks earning a livelihood. Overall length of program would be extended. Such part-time study might be combined with more intensive periods of study when faculty members from the affiliated accredited chiropractic college visited the country).
 - Access to the program by all qualifying students, not for example just medical graduates.

President's Banquet

13. At its biennial congresses the WFC presents special honor awards, a maximum of three every two years, for outstanding service to the chiropractic profession internationally.

To standing ovations these awards were presented to:

- **Felix Bauer DC**, retired chiropractor, Australia, for services since the 1960s which have been fundamental to preserving the right of chiropractors in Australia to perform diagnostic radiology services.

continued on page 6

Figure 2

WFC Assembly - Invited Speakers on Chiropractic Education

Enrique Benet-Canut DC - Mexico

Sira Borges DC MD - Brazil

Glenn Hultgren DC - USA, Christian Chiropractors' Association re mission experience in Africa and Eastern Europe.

Paul Jaskoviak DC - USA, Dean, Postgraduate Education, Parker College of Chiropractic re Korea.

Donald Kern DC - USA, President, Palmer College of Chiropractic

Brian Klinger PhD - United Kingdom, Principal, AECC

Edward Lee DC MD - Hong Kong

James Parker DC - USA, President, Parker College of Chiropractic

Stephen Press DC - Russian Federation

Joseph Shafer DC - re Russian Federation

Karen Shields DC - USA, Christian Chiropractors' Association, re mission experience in Latin America.

Sid Williams DC - USA, President, Life Chiropractic College

James Winterstein DC - USA, President, National College of Chiropractic and CCE (United States)

- **George McAndrews Esq**, attorney, United States. Lead attorney in the Wilk v AMA et al lawsuit, a son and brother of chiropractors, and now General Counsel, American Chiropractic Association.
- **Walter Wardwell PhD**, sociologist, United States. Renowned commentator on and historian to the chiropractic profession and author of the newly published 'Chiropractic: History and Evolution of a New Profession'.⁴

D. Conclusion

14. This brief review has not mentioned, let alone done justice to, many impressive presentations on the academic program - by those such as Reed Phillips DC PhD (on cost-effectiveness of chiropractic management of low-back pain patients), John Triano DC MA (the transition from passive to active care), Howard Vernon DC (how to assess function - using validated outcome measures such as the Oswestry Index), Jeremy Fairbanks MD (the British orthopedic surgeon who first developed the Oswestry Index), Tom Meade MD (principal researcher in the British trial of chiropractic - advising that continued follow-up of patients in the trial confirms the early conclusion that the benefits of chiropractic treatment are long term), and Tom Mayer MD (explaining the functional restoration programs for the chronically disabled that he has pioneered in Dallas).

There has been focus on the central and exciting point demonstrated by the Congress, and representing a return on chiropractic's investment in and evident commitment to research during the past 15 years. This is that the international health care community, as confirmed by the World Health Organization and foremost medical experts at this meeting, has a serious new interest in the recognition and use of chiropractic services in meeting the greatest challenge in occupational health and an epidemic running out of control - disability from low-back pain.

References

- 1 For the best description of this biopsychosocial model see Waddell G (1987) 'A New Clinical Model for the Treatment of Low-Back Pain', Spine 12(7):632-644.
- 2 Imrie D, Barbuto L (1988) 'The Back Power Program', Stoddart Publishing, Toronto.
- 3 MacKay J (1993) 'The State of Health Atlas', Simon and Schuster, London and New York.
- 4 Wardwell WI (1992) 'Chiropractic: History and Evolution of a New Profession', Moseby Year Book, St. Louis MO.

SUBSCRIPTION AND ORDER FORM
(6 bi-monthly issues). Year commences November.

Check One

| | | |
|--|---|--------------------------|
| US and Canada (your currency) | 1 year \$ 70.00 | <input type="checkbox"/> |
| | 2 years \$130.00 | <input type="checkbox"/> |
| Australia and NZ (your currency) | 1 year \$ 95.00 | <input type="checkbox"/> |
| | 2 years \$180.00 | <input type="checkbox"/> |
| Europe / elsewhere | 1 year US\$ 75.00/£40 | <input type="checkbox"/> |
| | 2 years US\$140.00/£76 | <input type="checkbox"/> |
| Quebec (issues in French or English) | 1 year \$110.00 (Prices include a new 7% GST - Goods & Services Tax). | <input type="checkbox"/> |

Name _____

Address _____

City _____ State _____ Province _____

Country _____ Postal Code _____ Zip _____

Tel. No. () _____

PLEASE CHECK ONE

Visa Card Number _____

Master Card Exp. Date _____

Check/Cheque Enclosed

Payable to: The Chiropractic Report
3080 Yonge Street, Suite 3002, Box 39
Toronto, Ontario M4N 3N1 Canada
Tel: (416) 484-9601 Fax: (416) 484-9665

2. Despite recent trends the great majority of chiropractors are still male (86.7%) and white (95.5%). However the increasing number of graduates with university degrees means that today the majority of chiropractors (53.7%) have a university degree besides their chiropractic training. Most (74.6%) have no chiropractic postgraduate certification or specialty training, but the most common specialty training is in orthopedics (9.9%), sports chiropractic (4.2%) and radiology (2.3%).

3. There is detailed information on patients, and conditions treated. Patients reflect all socio-economic groups and are also listed according to gender, age, ethnic origin and presenting condition.

4. An interesting fact that emerges from a wealth of information on diagnostic and treatment procedures is that "determining the presence of pathology or other significant findings from xray examination" was not only performed routinely, but was also rated by responding chiropractors as "highest in importance" of all 45 clinical activities performed by them. 'Importance' was measured numerically as a product of frequency of use X perceived risk if performed poorly or omitted.

5. From the table below, which lists treatment procedures, it can be seen that the great majority of chiropractors use Diversified adjustive techniques (91.1%) and therapeutic exercises (95.8%). Would you have guessed the four techniques used by a majority of chiropractors? They are Diversified, Gonstead, Cox and Activator. Overall, responding practitioners used an average of 5.7 specific adjustive technique systems in their practices.

The average number of supportive or non-adjustive treatment procedures used by chiropractors is 12.3 - and for the 12 such treatment methods used by two-thirds or more of the profession, see the table below.

How to Order: Job Analysis of Chiropractic, which contains a copy of the survey form used, can be obtained at a price of US\$10.00 (includes shipping within North America) by mailing a check or money order to the National Board of Chiropractic Examiners, 901 54th Avenue, Greeley, Colorado 80634-9928. U.S.A.

| Chiropractic Treatment Procedures | | Primary Approach | |
|-----------------------------------|--|------------------|------|
| | | | % |
| | | Full Spine | 93.3 |
| | | Upper Cervical | 1.7 |
| | | Other | 5.0 |

| Adjustive Techniques | | Non-Adjustive Techniques | |
|---------------------------|------|-------------------------------|------|
| | % | | % |
| Diversified | 91.1 | Corrective/Therap. Exercise | 95.8 |
| Gonstead | 54.8 | Ice Pack/Cryotherapy | 92.6 |
| Cox/Flexion-Distraction | 52.7 | Bracing | 90.8 |
| Activator | 51.2 | Nutritional Counseling, etc. | 83.5 |
| Thompson | 43.0 | Bedrest | 82.0 |
| SOT | 41.3 | Orthotics/Lifts | 79.2 |
| NIMMO/Tonus Receptor | 40.3 | Hot Pack/Moist Heat | 78.5 |
| Applied Kinesiology | 37.2 | Traction | 73.2 |
| Logan Basic | 30.6 | Electrical Stimulation | 73.2 |
| Cranial | 27.2 | Massage Therapy | 73.0 |
| Palmer Upper Cervical/HIO | 26.0 | Ultrasound | 68.8 |
| Menc | 23.4 | Accupressure/Meridian Therapy | 65.5 |
| Pierce-Stillwagon | 19.7 | Casting/Taping, Strapping | 48.2 |
| Other | 15 | Vibratory Therapy | 42.0 |
| Pettibon | 6.3 | Homeopathic Remedies | 36.9 |
| Barge | 4.1 | Interferential Current | 36.7 |
| Grostick | 3.4 | Direct Current, etc. | 26.9 |
| Toftness | 3.3 | Diathermy | 26.7 |
| Life Upper Cervical | 2 | Infrared Baker, etc. | 19.0 |
| NUCCA | 1.5 | Whirlpool/Hydrotherapy | 12.7 |
| | | Acupuncture | 11.8 |
| | | Other | 9.6 |
| | | Biofeedback | 7.1 |
| | | Paraffin Bath | 6.9 |
| | | Ultraviolet Therapy | 3.3 |