The Chiropractic Report

www.chiropracticreport.com Editor: David Chapman-Smith LL.B. (Hons.) January 2006 Vol. 20 No. 1

Professional Notes

Best Management for MSDs: New Care Pathways from the UK

In the UK the government's Health and Safety Executive (HSE) has established a Musculoskeletal Disorders (MSD) Priority Program with a goal of achieving a 30% reduction in days lost from workplace injuries and work-related ill health by 2009-2010.

A new expert report commissioned by the HSE for this program reviews current evidence and concludes that "the professionals best placed to provide evidence-based and effective early management of MSDs are chiropractors, osteopaths and musculoskeletal physiotherapists." However even some of them may be inappropriate because of attitudinal barriers – effective management will usually require interdisciplinary cooperation and willingness to work with employers.

The report is titled *Improved Early Pain Management for Musculoskeletal Disorders* and authors are Alan Breen, DC PhD, Jennifer Langworthy, MPhil and Jeffrey Bagust, PhD from the Institute for

continued on page 4

WHO's First Policy Document on Chiropractic

Guidelines for Governments on the Recognition and Regulation of Chiropractic

A. Introduction

THE WORLD HEALTH ORGANIzation (WHO), the division of the United Nations responsible for health advice and policy, released its first policy document on chiropractic health care in November – the *WHO Guidelines on Basic Training and Safety in Chiropractic* (WHO Guidelines).

The Guidelines are written primarily for government health authorities in WHO's 192 member nations. Their objectives are:

• To provide minimum requirements for chiropractic education.

• To serve as a reference for national authorities in establishing an examination and licensing system for the qualified practice of chiropractic.

• To promote the safe practice of chiropractic.

2. Importantly, the Guidelines:

a) Encourage the development of chiropractic health care in all national health systems.

b) Emphasize that chiropractic is an independent health care profession, not a set of techniques that can be learned and practised by other health professionals.

c) Adopt the established international level of chiropractic education in accredited colleges as the appropriate standard for students.

d) Advise that medical doctors and other health professionals interested in providing chiropractic services should requalify and be licensed as chiropractors. Minimum education for medical doctors, after credits for their previous training and practice, should be "not less than 2,200 hours over a two or three year fulltime or part-time program, including not less than 1,000 hours of supervised clinical experience."

e) Review well the philosophy and basic theories of chiropractic, defining the profession and its core terminology (e.g. adjustment and subluxation) in a way that will be seen as appropriate by most in the profession (see para 13 below). This is the result of excellent contributions from many chiropractors and chiropractic organizations during the development of the Guidelines. Most noteworthy contributions here were from Dr. John Sweaney of Newcastle, Australia, a Past-President of the World Federation of Chiropractic (WFC) who was chosen by WHO as its consultant for preparation of the first draft of the Guidelines, and the WFC, which initiated the Guidelines project and has been WHO's official partner throughout.

3. Why are these Guidelines important to individual chiropractors and the profession? This will become increasingly apparent throughout this article, but as examples:

a) For the profession in general these Guidelines, which are a detailed policy document on chiropractic from the most authoritative independent agency on health in the world, confirm the valuable potential role of chiropractic health care in all national health systems. Clear and appropriate recommendations on education, and regulation of chiropractic as a separate and distinct profession, are provided.

b) For chiropractors in countries where education and practice are already regulated by law, the Guidelines support the public funding of chiropractic education, research and clinical practice. In the US, for example, the Department of Health and Human Services is arguing in current litigation that medical doctors and doctors of osteopathy trained in manipulation can provide certain chiropractic services under the Medicare Benefits Program. These Guidelines recommend that only licensed doctors of chiropractic are competent to provide safe and effective chiropractic services.

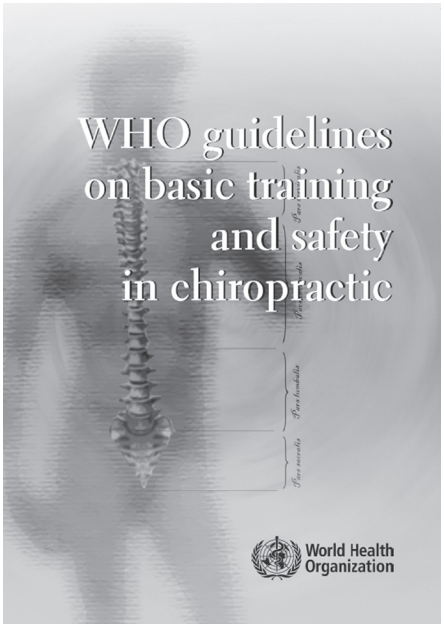
c) For chiropractors in countries where the profession is not yet recognized and regulated by law, the Guidelines recommend to their governments that such law be passed, and that short-term courses for medical doctors and others – such as the 200 hour part-time postgraduate program presently being given to medical doctors in Argentina – are inappropriate, leading to ineffective care and unnecessary risk of harm to patients.

4. Why has WHO developed these Guidelines? They follow earlier guidelines on a similar format for acupuncture, and are part of a wider strategy of support for complementary and alternative health care. WHO is next developing guidelines on osteopathy and other manual therapies. This issue of *The Chiropractic Report* now reviews and summarizes the Guidelines – both their background and content.

B. WHO's TM/CAM Strategy

5. Prior to the last 10 years WHO paid little attention to alternative approaches to health care generally, and chiropractic specifically. That changed in the 1990s when two forces came together:

a) The first, found mainly in the developing world, was what WHO called 'traditional medicine'. This includes traditional Chinese medicine (China), Ayurvedic medicine (India), Unani medicine (Middle East) and a wide variety of herbal, physical and spiritual healthcare approaches found in Africa and Latin America.



This cover of the Guidelines *document features a spine and pelvis superimposed on one of the most famous human images of all time – Michelangelo's David. This is particularly appropriate given funding of the project by the Regional Government of Lombardy, Italy.*

In many countries the majority of people primarily use these traditional medicine (TM) approaches. Leaders from these countries have long called for WHO to put more resources into TM but prior to the last decade the Geneva headquarters only had an office of two staff members and minimal funding. Western medicine dominated the organization.

b) The second force, emerging in the 1990s, was the rise to prominence of complementary and alternative health care in the developed world. New research revealed widespread use and support of chiropractic, acupuncture, homeopathy, naturopathy/herbal medicine and other approaches, which were labelled complementary and alternative medicine (CAM) by health authorities.

Faced with these two forces WHO's Traditional Medicine Team was strengthened. It was now led by Dr. Xiaorui Zhang from Beijing, an influential nominee from China who had previously chaired the Chinese government's National Council for Traditional Medicine. With enhanced funding Dr. Zhang promoted TM/CAM, increased her staff, and in May 2002 launched WHO's first ever policy initiatives expressly supporting TM/CAM – the *WHO Traditional Medicine Strategy 2002-2005* (WHO TM/CAM Strategy). This was formally approved by the Executive Board in January 2003 and by the full Assembly in May 2003.

The WHO TM/CAM Strategy, published in WHO's six official languages (Arabic, Chinese, English, French, Russian and Spanish), specifically includes chiropractic, and the new draft guidelines on chiropractic education arise from it. The Strategy is available electronically in English at:

http://www.who.int/medicines/library/trm/strategytrm.shtml

6. The strategy document opens with these words:

"Traditional, complementary and alternative medicine attract the full spectrum of reactions – from uncritical enthusiasm to uninformed skepticism. Yet use of traditional medicine (TM) remains widespread in developing countries, while use of complementary and alternative medicine (CAM) is increasing rapidly in developed countries. In many parts of the world, policy-makers, health professionals and the public are wrestling with questions about the safety, efficacy, quality, availability, preservation and further development of this type of health care.

It is therefore timely for WHO to define its role in TM/CAM by developing a strategy to address issues of policy, safety, efficacy, quality, access and rational use of traditional, complementary and alternative medicine."[1]

Elsewhere in its Summary of the Strategy, WHO explains that the reasons for the "widespread and growing use" of CAM include "concern about the adverse effects of chemical medicines, a desire for more personalized healthcare and greater public access to health information".[2]

7. The Strategy then describes WHO's role and action steps in more detail. Its role is described as:

- Facilitating integration of TM/CAM into national healthcare systems.
- Producing guidelines for TM/CAM.
- Stimulating strategic research into TM/CAM.
- Advocating the rational use of TM/CAM.
- Managing information on TM/CAM.

Specific action steps include the devel-

The Chiropractic Report is an international review of professional and research issues published six times annually. You are welcome to use extracts from this Report. Kindly acknowledge the source. Subscribers may photocopy the Report or order additional copies (.80 cents each – minimum of 20 copies plus shipping) for personal, non-commercial use in association with their practices. However, neither the complete Report nor the majority or whole of the leading article may be reproduced in any other form without written permission.
Subscription: for rates and order form, see page 8.
For information or orders visit
www.chiropracticreport.com
or telephone 416.484.9601, fax 416.484.9665
email: TCR@chiropracticreport.com

Changes of mailing instructions should be sent to The Chiropractic Report, 203–1246 Yonge Street, Toronto, Ontario, Canada M4T 1W5, telephone 416.484.9601, fax 416.484.9665.
Printed by Harmony Printing Limited, 416.232.1472.

ISBN 0836-144

opment of training or education guidelines and the establishment of registration and licensing of providers to support safety, efficacy and quality.

8. Not surprisingly, given Dr. Zhang's background, the first TM/CAM guidelines prepared by WHO under her leadership were in the field of acupuncture and are:

a) *Guidelines on Basic Safety Training and Safety in Acupuncture* (1999) [3] available at: http://www.who.int/medicines/library/trm/acupuncture/ who-edm-trm-99-1 / who-edm-trm-99-1en.shtml)

b) *Acupuncture: Review and Analysis of Reports on Controlled Clinical Trials* (2002) [4].

9. WHO has now moved to the general fields of herbal therapies and manual therapies and, after negotiations between WHO and WFC, as a first step in manual therapies, specifically to chiropractic. Reasons given by Dr. Zhang in her letter dated May 10, 2004 to those in governments, chiropractic associations and others worldwide receiving the draft chiropractic education guidelines for review were:

"Manual therapy is one of the most popularly used forms of TM/CAM. However, most countries have not yet established education, proper training programs, examination and/or licensing systems for this practice. In order to protect patients and to promote qualified practice of TM/CAM, WHO will, in cooperation with professional NGOs, develop a series of basic training guidelines of manual therapies. Among manual therapies, chiropractic is among the most popularly used and some countries already have university education programs set up. For this reason, the basic training guidelines in chiropractic were prepared first amongst other manual therapies."

C. WHO's Chiropractic Guidelines - Development

10. The World Federation of Chiropractic (WFC), which has been a non-governmental organization (NGO) in official relations with WHO since January 1997, representing the chiropractic profession as for example the World Medical Association (WMA), the International Council of Nurses (ICN) and the World Confederation of Physical Therapy (WCPT) represent medicine, nursing and physiotherapy, has been working with WHO on the Guidelines project since 1999. That was the year in which WHO published its acupuncture guidelines. In summary:

a) Having completed the acupuncture guidelines WHO planned to move to the development of guidelines in the general field of manual therapies. The WFC identified the value of starting with guidelines for chiropractic, as the most developed discipline within manual approaches to health care worldwide. When WHO agreed, the WFC provided extensive background information and recommended appropriate experts for WHO to use as consultants. WHO looked for independent funding for the project. In due course this came from the Regional Government of Lombardy in Italy.

b) The consultant chosen by WHO to prepare the original draft of the Guidelines was Dr. John Sweaney of Australia. As a Past-President of the WFC and the Chiropractors' Association of Australia, and a long-term member of the Australasian Council on Chiropractic Education, Dr. Sweaney had considerable experience of the educational and professional issues involved. WHO officials also knew him well and respected his expertise.

c) The first draft of the Guidelines was prepared by early 2004, and what followed was the standard WHO consultation process to produce a policy document in a technical area, namely:

- In May 2004, circulation of a first draft to a wide cross-section of experts for review. Distribution was to experts within the chiropractic profession, in other professions, and in WHO collaborating centres and government Ministries of Health in all world regions. The WFC ensured that all chiropractic educational authorities and all national associations of chiropractors received copies for review.
- In September 2004, circulation of a second draft for similar review.
- In December 2004, consideration of a third draft and approval of final substantive amendments by invited participants and observers at a three-day consultation meeting. This was held from December 2-4, 2004 in Milan, the capital of the Region of Lombardy, Italy.
- Final editing, proofing and printing at WHO Headquarters.

11. The Milan meeting was of central importance to the content of the final Guidelines. It was chaired by Edward Lee, DC, MD, Chairman, Chiropractors' Council, Hong Kong SAR, People's Republic of China (a chiropractor leading the regulatory body in a country with chiropractic legislation and an established chiropractic profession), and Sein Win, MD, Director, Department of Traditional Medicine, Ministry of Health, Myanmar (a physician and Ministry official in a country without chiropractic legislation or services). Those invited by WHO included:

a) Leaders in chiropractic education – such as Dr. Jean Moss, President of the Association of Chiropractic Colleges and the Canadian Memorial Chiropractic College, Toronto, Canada and Dr. Anfinn Kilvaer, Past-President of the European Council of Chiropractic Education and President, Councils on Chiropractic Education International.

b) Chiropractors from countries where the profession is unregulated by law but is now established and developing educational programs – such as Dr. Ricardo Fujikawa, Director, Faculty of Chiropractic, Centro Universitario Feevale in Brazil, Dr. Jean-Pierre Meersseman, Chairman, Education Committee, Asso-

How to get a copy of the WHO Guidelines

Print and electronic copies will be available at the end of January 2006. Until then they are embargoed pending a press conference and formal release of the Guidelines scheduled for late January in Milan, Italy. *Print copies*: WHO and the World Federation of Chiropractic (WFC) will distribute these to all national chiropractic associations, chiropractic educational authorities and participants in the WHO consultation process at the end of January. Others may request copies from Mr. Claude Da Re, TCM Documentation Centre, WHO Geneva at darec@who.int at that time. *Electronic copies*: These will be available from WHO's website www.who.int and the WFC's website www.wfc.org following the formal release scheduled for the end of January.

Translations: Currently the Guidelines are in English only. WHO is partway through translations into French and Spanish, which will be available later this year.

continued on page 6

Best Management for MSDs:
New Care Pathways from the UK

continued from page 1

Musculoskeletal Research and Clinical Implementation, Anglo-European College of Chiropractic, Bournemouth. Copies of this report, impressive in terms both of content and conciseness, are available at www.hse.gov.uk/research/rrhtm (click on the numbers 375-400 and select number 399).

The purposes of this new report are to present the current state of the evidence internationally and to propose Care Pathways consistent with that evidence. In a new move Care Pathways are not simply addressed to health professionals. As a reflection of the evidence and contemporary understanding of the dimensions of MSDs there is an employer pathway, an employee pathway, a health professional pathway, and a generic care pathway – addressed to all parties involved in early management of MSDs. Each is clear and simple, comprising one page only.

A concise two-page Executive Summary adds more details to the Care Pathways, summarizing management for back pain, neck pain, shoulder pain and upper limb disorders. The Executive Summary then notes that traditional medical services in primary care in the UK National Health Service (NHS) are not well-configured to make the necessary evidence-based changes to improved clinical care, and concludes:

"Latest evidence and current thinking supports the use of biopsychosocial assessment and intervention in close proximity to work for improved early management of musculoskeletal disorders. The employer and employee have the main roles in this and musculoskeletal practitioners (chiropractors, osteopaths and musculoskeletal physiotherapists) are the most accessible, qualified health professionals to support them".

This new report shows the research arm of the chiropractic profession at the cutting edge of science, policy and clinical management in the field of early pain management of back pain and other musculoskeletal disorders. It should be read in full. Central themes, however, are:

a) A wide range of psychosocial issues are at least as important as physical/biological ones when one considers musculoskeletal disorders (MSDs), the pain and disability they produce, and how this large and important field is handled.

b) Non-clinical services, including those taken by employers and employees in the work setting, are as important as clinical services. Often early management of MSDs does not require a clinical component at all.

c) For the many patients who do require clinical assessment and care, the conventional medical system, with its conventional model of disease, is not very helpful. "Assessment of non-medical obstacles to recovery is problematical and frustrating for health care traditionalists", general practitioners (GPs) have not been able to adapt to evidence-based guidelines for improved care, "inappropriate referral to secondary care for MSDs in general seems to persist", as does frustration and negative feelings towards patients – especially back pain patients. All-important opportunities for early intervention are frequently lost.

d) The professionals best placed to provide evidence-based and effective early management of MSDs, are chiropractors, osteopaths and musculoskeletal physiotherapists. Such management requires:

- Competent screening for serious disease
- A functional assessment
- A ready awareness of the psychosocial factors for poor outcome
- Advice about exercise and activity modification
- Provision of manual therapies.
- Readiness to approach, report and work with employers.

What rings throughout the report, accurately, is that the world is tired of individual groups claiming they have all the answers. It is now plain they do not. There is a new biopsychosocial model calling for a new collaborative approach. Traditional medical practitioners are not well positioned to adapt. Are chiropractors?

Important other items and observations include:

a) In the UK "musculoskeletal disorders and stress are the most commonly reported types of work-related illness . . . representing around three-quarters of cases." (Page 1).

b) See the discussion of the neuromatrix theory of pain, which suggests that "there is a synergy between musculoskeletal pain and emotional stress that can work against recovery" which means that "early reduction of anxiety and distress" should be an integral part of rehabilitation. (9).

c) With respect to back pain, the new European Acute Back Pain and Prevention Guidelines "provide us with the most recent, rigorous and widely-agreed principles currently available" (20). The six evidence-based recommendations for intervention given by the Guidelines include "spinal manipulation for patients who are failing to return to normal activities". (18)

d) During the past decade some national guidelines for management of acute low-back pain have recommended a two-stage approach – waiting until people were failing to achieve recovery by four weeks before moving to other interventions. Importantly, however, this is not supported in the new European Guidelines – because recovery is inhibited by failure to manage the episode of pain optimally in its early stages. (3)

There is review of the research in the UK using chiropractors and/or osteopaths and/or musculoskeletal physiotherapists for patients with back pain. This includes the UK BEAM trial (see the January 2005 issue of this Report) and five other studies. In the town of Wilmslow, where NHS-funded chiropractic services are provided by the Salford Central Cheshire Primary Care Trusts, audited results for patients with musculoskeletal disorders referred to chiropractors show:

- 90% of patients had at least 75% of improvement after 4.05 visits.
- For every 22 patients referred, the service saved the NHS £10,000 (about US$20,000).

• 8 out of 10 patients waiting for orthopaedic appointments did not need them following care by the chiropractors. (46/Case Study 4).

Other Research Notes.

1. **US – Patient Satisfaction**. US researchers have also been busy in the field of effective management of patients with disability from low-back pain. Spine has just published patient satisfaction data from the UCLA Low Back Pain Trial by Eric Hurwitz, DC PhD, Hal Morgenstern, PhD and Fei Yu, PhD.

In this data, drawn from a randomized clinical trial in which 681 low-back pain patients presenting to three Southern California health care clinics received either medical care without and without physical therapy or chiropractic care with and without physical modalities, patient satisfaction with back care was measured on a 40-point scale after four weeks. I note:

• The study reports that "after four weeks of care chiropractic patients were more satisfied than medical patients" and that much of the difference in satisfaction "was explained by the greater amount of information given by chiropractors to their patients".

• A goal of the study was to see whether patient satisfaction was reflected in improved results relative to pain and disability. It was. "Greater satisfaction increased the odds of remission from clinically meaningful pain and disability at six weeks" and "perception of improvement was greater among highly satisfied than less satisfied patients throughout the 18 month follow-up period."

The fact that back pain patients have better satisfaction if they choose chiropractic care is now beyond debate. This has been consistently demonstrated by observational studies and randomized trials – Hurwitz et al. confirm this and give the references. (Hurwitz EL, Morgenstern H, Yu F (2005) *Satisfaction as a Predictor of Clinical Outcomes Among Chiropractic and Medical Patients Enrolled in the UCLA Low Back Pain Study*, Spine 30(19):2121-2128).

2. **Finland – Nurses and Low-Back Pain.** Videman et al. have followed 308 Helsinki nursing students through their education and first five years of practice, and report a lifetime prevalence of back pain of 31% at entry to nursing school, 72% at the end of nursing school and 82% after five years as a nurse.

Accordingly, and unsurprisingly given the nature of their work, back pain is more common in nurses than the general public. Nurses also make an increasing number of care decisions and are well respected by the public. They are less in awe of the medical profession than others. On account of all these facts the chiropractic profession should be arranging lectures on the prevention and management of back pain at nursing conventions and schools, and developing a closer relationship with the nursing profession. (Videman T, Ojakärvi A et al. (2005) *Low-Back Pain Among Nurses: A Follow-up Beginning at Entry to the Nursing School*, Spine 30(20):2334-2341).

Spotlight on Asia

1. **Indonesia:** In November a new chiropractic organization Perhimpunan Chiropraks Indonesia (Perchirindo) was given authority by the government to register chiropractors and regulate the practice of chiropractic in Indonesia. Leaders in formation of Perchirindo have been Dr. Anthony Dawson (Palmer 1990), an Australian who has practised in Indonesia for several years, and Dr. Tinah Tan (RMIT 1999), the only Indonesian amongst the 15 chiropractors presently in practice in Indonesia. Foreigners planning to practise in Indonesia should contact Daud Pranoto, Chairman, Registration Board, Perchirindo at dpranoto2005@yahoo.com.au or dpranoto@telkom.net.

2. **South Korea:** The practice of chiropractic in South Korea is illegal and, under pressure from the medical association, the government is prosecuting chiropractors with real threat of imprisonment. Korea has approximately 120 qualified chiropractors (and over 1000 Korean DCs in the USA, many of whom would return if the law changed), but many MDs, oriental medical doctors, PTs and lay manipulators claim to offer chiropractic services.

The Korean Chiropractic Association (KCA) is strongly led by Dr. Taeg Su Choi (Life) and Dr. Myoung-Seok Park (Palmer). In what was a considerable breakthrough, and in response to pressure from KCA and patients, several congressmen organized a Symposium on Chiropractic at the government's National Assembly on November 8, 2005. Following a welcome from Mr. Won-Ki Kim, Speaker of the National Assembly, there were presentations by Mr. David Chapman-Smith, Secretary-General, World Federation of Chiropractic and Professor Barry Draper from the School of Chiropractic, RMIT University, Melbourne, Australia and then presentations from members of an interdisciplinary panel and the public.

Draft legislation to recognize and regulate the profession is now being prepared, but a long and difficult battle can be expected. The KCA needs all the support it can get – if you are able to help please contact Dr. Choi at chirochoi@chirochoi.com.

3. **Taiwan.** In October 2003 Taiwan passed legislation declaring spinal manipulation a medical act and, as in Korea, the practice of chiropractic is now illegal. In response there has been a major legislative campaign by the Taiwan Chiropractic Doctors' Society led by President, Dr. Albert Lee (LACC/SCUHS), and TCDS Secretary Dr. Ming-Shan Chiang (Palmer West). As a result a draft Chiropractic Bill passed first reading in the Legislature in November.

However the Taiwan Medical Association is responding aggressively with legislators and in the media and there is clearly a battle ahead. In late November TCDS representatives met with government leaders, including Minister of Health Dr. Sheng Mou Hou, and a major press conference, convened by legislators and featuring a number of patients including a famous TV star, led to strong media support for the chiropractic case.

If you can help the 30 pioneering DCs in the TCDS fighting for the recognition of the profession in Taiwan please contact Dr. Albert Lee at Albrtlee@tpts8.seed.net.tw.

ciation of Italian Chiropractors and Dr. Koichi Nakagaki from Kokusai Chiropractic School in Japan.

c) Representatives of manual medicine (e.g. Dr. Vladimir Shoukhov, Moscow, Russian Federation) and osteopathy (e.g. Dr. Boyd Buser, American Osteopathic Association, Chicago, USA and Mr. Michael Fox, Chief Executive, Prince of Wales's Foundation for Integrated Health, London, England).

d) Government officials – such as Dr. Sassan Behjat, Coordinator, Office of Complementary and Alternative Medicine, Ministry of Health, Abu Dhabi, United Arab Emirates (a country with law to regulate chiropractic practice) and Dr. Maurizio Amigone, Deputy Director-General, Directorate-General of Health, Lombardy Region, Milan (a representative of the host country).

e) The World Federation of Chiropractic was represented by Dr. Anthony Metcalfe of England, President and Mr. David Chapman-Smith of Canada, Secretary-General. Dr. Yannick Pauli of Switzerland represented the World Chiropractic Alliance.

f) Rapporteurs, responsible for recording the decisions of the meeting were WHO consultant Dr. John Sweaney and Dr. Martin Camara of the Philippines, a chiropractic board member of the government-affiliated Philippine Institute of Traditional and Alternative Health Care.

With respect to process of the meeting, all invitees (40 participants and observers) were free to comment on the draft Guidelines as they were reviewed paragraph by paragraph. As an example, one representative of manual medicine argued that the suggested duration of training for physicians wishing to requalify as chiropractors was too long. Educational experts from each of the chiropractic and osteopathy professions advanced detailed reasons why that was not so, and after full discussion no changes were made to the relevant paragraphs.

D. WHO's Chiropractic Guidelines - Content

12. **Introduction.** In the introduction WHO's coordinator for the Guidelines project and the overall TM/CAM Strategy, Dr. Zhang, explains why WHO is providing advice on minimum education standards and regulation to governments. Chiropractic "is now practised worldwide and regulated by law in some 40 national jurisdictions". It "offers potential for cost-effective management for neuromusculoskeletal disorders". However its popularity may lead to "commercial exploitation of chiropractic education and practice which is a significant and growing problem in some countries", and a system of licensing based on minimum standards as now given by WHO will ensure confidence and "avoid the practice of chiropractic by unqualified persons."

The Guidelines, says Dr. Zhang, now give national health authorities in countries where chiropractic is unregulated, and where first courses of chiropractic education are being established, recommendations on education and sample programs. Government authorities are encouraged to consult the Councils on Chiropractic Education International (CCEI – www.cceintl.org) concerning evaluation of educational programs being developed in their countries.

13. **Philosophy and Basic Theories of Chiropractic.** Prior to discussing details of training programs, the Guidelines give brief historical information on the origins of the profession and its name – "The term "chiropractic" derived from Greek roots to mean *done by hand,* originated with Palmer and was coined by a patient, the Reverend Samuel H Weed". The philosophy and basic theories of chiropractic are then summarized as follows:

"Chiropractic is a health care profession concerned with the diagnosis, treatment and prevention of disorders of the neuromusculoskeletal system and the effects of these disorders on general health. There is an emphasis on manual techniques, including joint adjustment and/or manipulation, with a particular focus on the subluxation.

WHO's Milan Consultation meeting. Some of the 40 invited participants appear above, including Project Coordinator Dr. Xiaorui Zhang of WHO (centre)*, WFC President Dr. Anthony Metcalfe, England* (to the right of Dr. Zhang)*, Dr. Jean Moss, Canada, then President, Association of Chiropractic Colleges* (4th from left in front row) *and Dr. Anfinn Kilvaer, Norway, Past-President, European Council on Chiropractic Education and Council on Chiropractic Education International* (tallest figure in back row towards the right). *Co-Chairs of the meeting were Dr. Sein Win, Myanmar* (far left) *and Dr. Edward Lee, Chairman, Chiropractors' Council Hong Kong* (2nd from right in front row). *WHO consultant for the project was Dr. John Sweaney of Australia* (extreme right, middle row).

The concepts and principles that distinguish and differentiate the philosophy of chiropractic from other health care professions are of major significance to most chiropractors and strongly influence their attitude and approach towards health care.

A majority of practitioners within the profession would maintain that the philosophy of chiropractic includes but is not limited to concepts of holism, vitalism, naturalism, conservatism, critical rationalism, humanism and ethics.

The relationship between structure, especially the spine and musculoskeletal system, and function, especially as coordinated by the nervous system, is central to chiropractic and its approach to the restoration and preservation of health.

It is hypothesized that significant neurophysiological consequences may exist as a result of mechanical spinal functional

disturbances described by chiropractors as subluxation and the vertebral subluxation complex.

Chiropractic practice emphasizes the conservative management of the neuromusculoskeletal system, without the use of medicines and surgery. Bio-psychosocial causes and consequences are also significant factors in management of the patient.

As primary contact health care practitioners, chiropractors recognize the importance of referring to other health care providers when it is in the best interest of the patient."

Various technical words are defined in a Glossary of Terms, including:

"***Adjustment***. Any chiropractic therapeutic procedure that ultimately uses controlled force, leverage, direction, amplitude and velocity, which is applied to specific joints and adjacent tissues. Chiropractors commonly use such procedures to influence joint and neurophysiological function."

"***Subluxation****. A lesion or dysfunction in a joint or motion segment in which alignment, movement integrity and/or physiological function are altered, although contact between joint surfaces remains intact. It is essentially a functional entity, which may influence biomechanical and neural integrity."

** This definition is different from the current medical definition in which subluxation is a significant structural displacement, and therefore visible on static imaging studies.*

14. **Acceptable Levels of Education and Retraining.** To meet the individual needs of all countries two levels of education are given – full and limited. Within each level different recommendations and sample programs are given for:

a) Students choosing chiropractic as their primary health care training

b) Students with previous university-level health care qualifications (e.g. medical doctors and physical therapists).

c) Students with little formal training but some years of clinical experience as 'chiropractors' in countries where chiropractic education and practice are not yet regulated.

The recommended duration of education in these various programs is summarized in Table 1. Limited programs are meant to be temporary and "should be replaced by appropriate fulltime programs as soon as it is practical to do so". They are designed for countries where chiropractic is not yet regulated, to establish a "minimal registerable standard" when legislation is introduced and as a first step to a full program. (For examples from Brazil and Japan see paragraphs 16 and 17 below).

15. **Full Education**. The Guidelines outline a core syllabus in terms of:

- Educational objectives. See Table 2 for the core knowledge and skills given as "the basis of chiropractic in its role as a health care profession".
- Clinical skills
- Basic and pre-clinical science components
- Clinical science components
- Chiropractic science components
- Patient management interventions
- Clinical recordkeeping and other documentation
- Research, critical-thinking and clinical decision-making skills

16. **Category II A Limited Programs.** These are designed for countries without an established chiropractic profession or legal recognition of chiropractic practice, and where the social,

Table 1: Acceptable Levels of Education and Re-training

Category I – Full Education

A. For persons without previous medical or other health care professional education. After completion of entry requirements not less than 4200 student/teacher contact hours in four years of full-time education, including not less than 1000 hours of supervised clinical training.

B. For medical doctors and other health care professionals. Duration of training depends upon credits from previous education and experience, but not less than 2,200 hours over a two- or three-year full-time or part-time program, including not less than 1000 hours of supervised clinical experience.

Category II – Limited Education

This approach should be employed as an interim measure to establish the availability of chiropractic services. A full chiropractic educational program for students choosing chiropractic as their primary career should be implemented as soon as it is practical to do so.

A. For medical doctors and others who have completed university-level training as a health care practitioner. Not less than 1800 hours over a two- or three-year full-time or part-time program, including not less than 1000 hours of supervised clinical experience.

B. For persons with limited training and no formal qualifications who are practising as "chiropractors" in a country where practice is unregulated. For those meeting admission requirements, typically completion of some form of structured program and two to three years of clinical experience, not less than 2,500 hours in a full-time or part-time program, including not less than 1000 hours of supervised clinical experience.

Extracted from WHO Guidelines (2005)

Table 2: WHO Guidelines – Core Educational Objectives for Chiropractors (Section 4.4)

He/she should possess a comprehensive understanding and command of the skills and knowledge that constitute the basis of chiropractic in its role as a health care profession, as follows:

- achieve a fundamental knowledge of health sciences, with a particular emphasis on those related to vertebral subluxation and the neuromusculoskeletal systems;
- achieve a comprehensive theoretical understanding of the biomechanics of the human locomotor system in normal and abnormal function and, in particular, possess the clinical ability needed for an expert assessment of spinal biomechanics;
- appreciate chiropractic history and the unique paradigm of chiropractic health care;
- achieve a level of skill and expertise in manual procedures, emphasizing spinal adjustment/manipulation, regarded as imperative within the chiropractic field;
- possess the ability to decide whether the patient may safely and suitably be treated by chiropractic or should be referred to another health professional or facility for separate or comanaged care.

legal and economic climate when chiropractic education is first introduced requires that initial students are health professionals retraining as chiropractors. One example of this is Brazil. When chiropractic education was introduced in the 1990s, at Feevale University in Novo Hamburgo in partnership with Palmer College of Davenport, Iowa, USA, various educational requirements in the country and social and financial realities necessitated an initial two- to three-year part-time postgraduate program for medical doctors and other health professionals. However that temporary program was then followed by a full, five-year academic program for qualifying high-school graduates. Today Brazil has 860 chiropractic students in two university programs, the second being at the University Anhembi Morumbi in Sao Paulo, and Category II A limited educational programs are no longer necessary or appropriate.

17. **Category II B Limited Programs.** These are designed for countries where the practice of chiropractic is not regulated by law, and where persons without formal or university-level education have established practices as 'chiropractors'. When formal chiropractic education is being introduced, and/or the government is considering legal regulation of chiropractic practice and grandfathering of the 'chiropractors', there is a case for limited education programs. Again, this is on a temporary basis and as a step towards the development of full education.

Japan is an example of such a country. There is no legal regulation of chiropractic practice, there are approximately 100 practising chiropractors who are graduates of full programs in accredited colleges in North America and Australia, and some thousands of 'chiropractors' who have graduated from short courses of varying quality offered by small private schools in Japan. Category II B limited upgrade programs have been offered to locally trained 'chiropractors' – e.g. by RMIT Japan in Tokyo, by the Kokusai Chiropractic School in Osaka in partnership with Cleveland College from the USA, and by the Kansai Chiropractic School in Kurashiki in partnership with Murdoch University of Australia. RMIT Japan has now developed full education, Kokusai and Kansai are progressing towards that goal, and in due course Category II B education will end to be completely replaced with full education.

18. **Safety.** Part 2 of the Guidelines looks more closely at safety and contraindications to spinal manipulative therapy. It is consistent with clinical guidelines developed by the profession.[5,6] The review of adverse reactions is balanced. With respect to cervical manipulation it is noted that in experienced hands this treatment "gives beneficial results with few adverse side effects". "Serious complications" are described as "very rare" – the research authorities quoted give a range of 1 in 5 million to 1 in 400,000 treatments.

E. Conclusion

19. The popularity of chiropractic health care is leading to inadequate educational programs for lay persons, physicians and other health professionals in an increasing number of countries where chiropractic education and practice is not yet regulated by law. As noted by WHO, commercial exploitation is a significant and growing problem – and sadly sometimes involves the activities of duly qualified chiropractors.

In this context WHO's new Guidelines are both timely and important. They are important to governments and the public they serve as detailed recommendations on chiropractic education that provide the basis for safe and effective chiropractic services. They are important to the chiropractic profession as independent endorsement from WHO, the world's foremost authority on health policy, of the potential value of incorporating chiropractic health care in all national health care systems. TCR

References

1 *WHO Traditional Medicine Strategy 2002-2005,* WHO/EDM/TRM/2002.1, World Health Organization, Geneva, 1. Available electronically at www.who.int/medicines/library/trm/strategy-trm.shtml

2 *Traditional Medicine – Growing Needs and Potential, WHO Policy Perspectives on Medicines*, No. 2, Mo.2, May 2002, World Health Organization, Geneva.

3 *Guidelines on Basic Training and Safety in Acupuncture*, WHO/EDM./TRM/99.1 (1999), World Health Organization, Geneva. Available electronically at www.who.int/medicines/library/trm/acupuncture/ ho-edm-trm-99-1/who-edm-trm-99-1en.shtml

4 *Acupuncture: Review and Analysis of Reports on Controlled Clinical Trials* (2002), World Health Organization, Geneva.

5 Haldeman S, Chapman-Smith D, Petersen DM, (1992) eds. *Guidelines for Chiropractic Quality Assurance and Practice Parameters.* Gaithersburg, MD, Aspen Publishers.

6 Henderson DJ et al. (1994) eds. *Clinical Guidelines for Chiropractic Practice in Canada*. Journal of the Canadian Chiropractic Association (Suppl.), 38(1).