

Introduction

This is a summary explanation of why the São Paulo Conference on Clinical Education was held, who attended, the programme, the results and why this event was important for the profession. Dr Paul Carey, President of World Federation of Chiropractic, opened the Conference on October 27, 2002 with these questions:

When patients seek the services of a chiropractor in Brazil or Canada, or Iran or the Netherlands, what standard forms of examination and assessment can they expect? Will the focus of treatment be joint adjustment? What will be the core range of clinical skills that provide a common identity to the practice of chiropractic worldwide?

He then identified three important issues to be addressed by the meeting:

- international agreement upon core clinical methods and skills in chiropractic practice;
- agreement on how to respond to "the dramatic change in environments and opportunities for chiropractic practice today"; and
- consideration of the technical educational questions of how best to integrate pre-clinical and clinical subjects, and to employ innovative active learning methods to give students the required competencies for successful clinical practice.

The Conference proved to be successful on all of these matters, both in the calibre of expert presentations and discussions, and in reaching unanimously agreed consensus statements.

BACKGROUND

This meeting was planned by the World Federation of Chiropractic (WFC - www.wfc.org) whose members are national associations of chiropractors in 77 countries, and the Association of Chiropractic Colleges (ACC - www.chirocolleges.org) whose members are chiropractic schools internationally. It was co-sponsored by the US National Board of Chiropractic Examiners (NBCE - www.nbce.org).

The WFC and ACC had held a successful first joint meeting titled *Philosophy in Chiropractic Education* in Fort Lauderdale, Florida, USA, in November 2000. At that time, and in a subsequent consultation with members of the WFC and ACC, it was agreed that a further

joint conference should be held on clinical education, another area in which the profession needed a strong common direction in this era of rapid change in health care systems, changing professional opportunities for chiropractors, and international expansion of the chiropractic profession.

Dr Jean Moss, President, Canadian Memorial Chiropractic College, Toronto, Canada, and Dr Charles Sawyer, Senior Vice-President, Northwestern Health Sciences University, Minneapolis, USA, were chosen as the Program Directors and led an organising committee whose other members were Dr Jerry Hardee, President, Sherman College of Straight Chiropractic, and Mr David Chapman-Smith, WFC Secretary General.

From two world regions with several colleges newly opened and under development in Europe and Latin America, the venue chosen for the Conference was São Paulo, Brazil. This was principally because Brazil had two new five-year university-based chiropractic programs, at Centro Universitario Feevale, Novo Hamburgo, Rio Grande do Sul (Feevale), and the Universidade Anhembi Morumbi in São Paulo (UAM), and UAM would have its clinic facilities completed and available for inspection at the time of the Conference. A venue in Brazil would also facilitate the attendance of leaders who were developing chiropractic education in Argentina, Chile, Costa Rica, Mexico and other Latin American countries.

ATTENDANCE

The names of registrants for the conference are listed in Appendix A (page). The schools, associations and other organisations represented are given in Table 1. Significant aspects of attendance were:

- There were delegates from 32 schools/programs in 13 countries, which represented the great majority of chiropractic educational institutions worldwide.
- Other organisations represented included the accrediting agencies for Australasia, Canada, Europe and the USA and their international agency, the Council on Chiropractic Education International (CCEI); examining and licensing bodies from Europe and North America; and major national associations from various world regions.
- All these organisations sent their leaders and experts. This reflected the importance of this rare opportunity for all stakeholders in chiropractic education to meet to discuss clinical education and its impact on the future direction and unity of the profession.

For example, Dr James Edwards, Chairman of the Board, American Chiropractic Association (ACA), spoke on behalf of the ACA, the world's largest national association. Dr Jean Robert, Director of the Swiss Chiropractic Institute, presented details of his country's two-year post-graduate clinical internship. Dr Anfinn Kilvær of Norway, President, CCEI, outlined the relationship between accreditation and content of clinical education. Dr Glynn Till, former Head of the Department of Chiropractic, Durban Institute of Technology, gave details of the many opportunities that now exist for chiropractic students in South Africa to receive part of their clinical education in urban and rural hospitals.

Table 1
List of Chiropractic Educational Programmes Represented

Australia	Switzerland
Macquarie University	Swiss Chiropractic Institute
Brazil	United Kingdom
Centro Universitário Feevale	Anglo-European College of Chiropractic
Universidade Anhembi Morumbi	University of Glamorgan
Canada	University of Surrey
Canadian Memorial Chiropractic College	United States of America
Chile	Cleveland Chiropractic Colleges - Kansas and Los Angeles
Corporación Chilena para el Estudio y Desarrollo de la Quiropráctica	Life University
Denmark	Life Chiropractic College West
University of Southern Denmark	Logan College of Chiropractic
France	National University of Health Sciences
Institut Franco-Européen de Chiropratique	New York Chiropractic College
Japan	Northwestern Health Sciences University
Kansai Chiropractic College	Palmer College of Chiropractic
RMIT University Japan Unit	Palmer College of Chiropractic West
Mexico	Parker College of Chiropractic
Universidad Estatal del Valle de Ecatepec	Sherman College of Straight Chiropractic
Netherlands	Southern California University of Health Sciences
Postgraduate Education Program, Netherlands Chiropractic Association	University of Bridgeport School of Chiropractic
South Africa	Western States Chiropractic College
Durban Institute of Technology	
Technikon Witwatersrand	

In summary, the right people were present to discuss current challenges and innovations in chiropractic clinical education, and to forge a consensus on future methods, content and direction.

PROGRAM — GOALS, METHODS AND CONTENT

A complete description of the goals of the meeting and the methods employed appears in the Notice of the Conference (Appendix B on page). To summarise:

Goals

1. To bring together leaders from chiropractic education and practice around the world to discuss current innovations and challenges in chiropractic clinical education, with a view to:
 - Improving and integrating pre-clinical and clinical education.
 - Defining the core common clinical skills for tomorrow's chiropractors internationally, and how to achieve these in today's chiropractic education.
 - Thereby promoting a consistent, clinical approach to chiropractic practice internationally, both at established and newer programs/institutions.
2. To discuss the relationships between:
 - pre-clinical and clinical education;
 - formal and informal (eg extracurricular clubs and seminars for students) undergraduate clinical education; and
 - college education and post-graduate clinical clerkships (eg: as in Europe and South Africa).
3. To discuss the influence of accreditation and licensing requirements on clinical education, and competency assessment.
4. To promote communication and partnerships between chiropractic educational leaders and programs internationally, both at established and newer programs and/or institutions.

5. To understand and review the chiropractic curriculum at each of Latin America's three chiropractic programs, especially innovative aspects developed in response to local conditions.

Methods

1. **Invited lectures.** Lectures from acknowledged experts in key areas.
2. **Selected responses to a Call for Abstracts.** Many short presentations (10-12 minutes) chosen from best responses to an open Call for Abstracts, on innovations and challenges in four areas relevant to clinical education, namely:
 - The Content of Pre-clinical Education (for abstracts chosen see Table of Contents, Day 1 – Session II);
 - The Integration of Pre-clinical and Clinical Education (see Table of Contents, Day 1 – Session III);
 - The Content of Clinical Education (see Table of Contents, Day 2 – Session II);
 - Methods and Locations of Clinical Education (see Table of Contents, Day 3 – Session II).
3. **Discussion and debate.** Widespread opportunity for interaction between the participants was key to the success of the meeting, and was given through the use of panels and liberal allocation of time for questions and answers.
4. **Development of draft consensus statements by a representative expert panel.** From the end of Day 2 a panel began drafting consensus statements that were then reviewed, amended and agreed in the final session of the Conference. Members of this panel were Program Directors, Jean Moss DC MBA and Charles Sawyer DC, and Gabriel Donleavy MA LLB PhD, Principal, Anglo-European College of Chiropractic (UK), Lee van Dusen DC, Dean of Academic Quality Assurance, New York College of Chiropractic (USA), Adrienne Miller MA JD, Dean, Life College of Chiropractic West (USA), Hettie Till MSc DEd, Associate Dean, Undergraduate Studies, Canadian Memorial Chiropractic College (Canada), and David Wickes DC, Senior Vice-President, National University of Health Sciences (USA).

Content

1. The full program can be found in Appendix A. It dealt with all important aspects of clinical education, and included:

- *Day 1.* The influences of accreditation and pre-clinical education on clinical education, and current innovations in the integration of pre-clinical and clinical education.
- *Day 2.* The influence of licensing requirements on clinical education, and current innovations and challenges in the content of clinical education. In the afternoon there was a tour of the campus of the Universidade Anhembi Morumbi and presentations on curriculum by each of the three Latin American schools.
- *Day 3.* The influence of examining requirements and competency assessment on clinical education, and innovations in methods and locations of delivery of clinical education.

The final plenary session was devoted to discussing and reaching agreement on the consensus statements found in Table 2. These statements arose from the various papers presented and were drafted in preliminary form at the end of Day 2 by an expert panel as already described. The draft consensus statements then received many amendments during discussion in the final session. At the end of the discussion they received unanimous approval. Some participants left prior to the final session, but the great majority were in attendance.

2. For a practical illustration on how the conference worked, let us take, for example, the presentation of Dr William Meeker on Clinical Epidemiology:

- (a) In response to the Call for Papers in the area of Innovations in the Content of Pre-clinical Education, Dr Meeker submitted an abstract for a presentation titled *Teaching Skills That Fit the Needs of the Clinician: An Argument for the Role of Clinical Epidemiology in Teaching Evidence-based Practice*. This was one of five selected for presentation in this category, and may be found at page 27.
- (b) At the conference Dr Meeker delivered a PowerPoint and oral presentation on this subject, giving examples of how important an understanding of

basic concepts of clinical epidemiology was in everyday chiropractic practice — and therefore how important it was that these concepts were taught effectively in chiropractic education.

- (c) His illustrations of these concepts (eg systematic and random error in clinical measurements, and how to understand these and factor them into clinical decisions) were sufficiently persuasive that clinical epidemiology was specifically mentioned in the consensus statements. Statement 12, under the heading Methods of Clinical Education, reads:

Enhancing the critical thinking and clinical decision-making of students are important elements of clinical education, and an appreciation of clinical epidemiology can enhance this set of clinical skills.

3. Similarly, other elements of the consensus statements arise from the other presentations made. The WFC holds an audiotape record of the Conference, but not the various PowerPoint presentations made. The Proceedings are available in printed form and on CD — for ordering information, please visit <http://www.wfc.org/english/resources.asp> or contact the WFC Secretariat at tel: 1-416-484-9978; fax: 1-416-484-9665; e-mail: info@wfc.org.

CONCLUSION

A major achievement at the São Paulo Conference was its demonstration, as at the WFC/ACC Conference on Philosophy in Fort Lauderdale two years beforehand, that the chiropractic profession now has the ability to work in a unified manner to achieve an international consensus on important issues.

The consensus statements on clinical education, however, are a starting point rather than a conclusion. They contain many challenges for the profession, and much work remains to be done to improve the quality and consistency of clinical education in accordance with the principles agreed in São Paulo.

One particular concern, in this era in which differing approaches to clinical education still exist in North American colleges and in which new chiropractic schools are emerging in many countries, is establishing and maintaining a common core of clinical skills in chiropractic practice worldwide. The importance of this consistent approach to practice and identity, important to both patients and the advancement of the profession, was the key point that had been made by WFC President, Dr Paul Carey, in opening the meeting.

Other speakers from various world regions agreed, and all of this is reflected in Consensus Statement 4, the first consensus statement under the subheading Content of Clinical Education:

With respect to patient examination, assessment and diagnosis, there is a wide variance in methods taught and practised, and there would be value in a conference of a similar nature to the current one seeking a consensus that would promote greater consistency in chiropractic education and practice in this area.

Finally we cannot end this introduction without mention of the outstanding conference facilities and organisation at the Pestana Hotel and the superb entertainment programme. These aspects of the meeting made the Conference especially memorable. They were the result of the talents and hard work of our hosts in the Brazilian Chiropractic Association, led by Dr Sira Borges, Past President, Dr Eduardo Bracher, President, Dr Ricardo Fujikawa, Vice-President, and Dr Mitsumasa Nagaya from São Paulo.

Jean Moss DC MBA
Charles Sawyer DC

Program Directors

Mr David Chapman-Smith
Gerard Clum DC
John Sweaney DC
WFC Education Committee

Table 2
WFC/ACC Conference on Clinical Education — Consensus Statements

Introductory Matters

- 1 This is an era of significant change in health sciences education, both in the content and methods of education. Reasons for this include:
- 2 Evidence that a variety of newer teaching methods may be more effective than traditional teaching programs which place emphasis upon lectures in separate subject areas and upon a division between pre-clinical and clinical education.
 - (a) The growth of knowledge and the evolution of health care systems is occurring at such a speed that the acquisition of effective learning skills is now as important as the teaching of content.
 - (b) More highly educated students with higher expectations necessitate more effective learning and assessment methods.
 - (c) Changes in consumer awareness with respect to health care issues, and changes in the balance of power in the doctor/patient relationship.
- 3 To respond to this need for change in an effective manner, and to enhance the quality of chiropractic education, chiropractic educational institutions should:
 - (a) Be conversant with the field of health sciences education in general, learning from and contributing to its development.
 - (b) Collaborate more fully with one another.
 - (c) Consult with other stakeholders in chiropractic education, including professional associations, and accrediting, examining and licensing bodies. These other stakeholders should act to facilitate and encourage the necessary innovations and changes in regulations and standards affecting chiropractic education.
- 4 A major goal of chiropractic education, of importance to the clinical and professional competencies required of chiropractors in the more complex health care environment of today and tomorrow, should be the development of sound critical thinking, problem-solving and independent learning abilities.

Content of Clinical Education

- 5 With respect to patient examination, assessment and diagnosis, there is a wide variance in methods taught and practised, and there would be value in a conference of a similar nature to the current *one* seeking a consensus that would promote greater consistency in chiropractic education and practice in this area.
- 6 With respect to modes of care:
 - (a) Programs should reflect the continuing central role of adjustment techniques in chiropractic education and practice.
 - (b) Curriculum content should include other modes of care and clinical competencies that are evidence-based and meet the primary needs of patients using chiropractic services. Examples referred to at this conference include rehabilitative exercises, occupational health as it relates to the prevention and management of neuromusculoskeletal disorders, and sports chiropractic.
- 7 With respect to research, students should learn to perform, interpret and apply research, in part through involvement in original research projects.
- 8 There should be course content that prepares students for the more complex and diversified environments in which chiropractors may practice, including an understanding of the roles of other health professionals and third party stakeholders, and how to communicate with them effectively.

Methods of Clinical Education

- 9 Chiropractic programs should focus more attention on developing an integrated curriculum, particularly through the early introduction of clinical content, and through presenting basic science instruction in a way that emphasizes the content and concepts necessary for clinical decisions that are common in chiropractic practice.
- 10 Clinical education should be initiated very early in the curriculum, with opportunities to observe and participate as appropriate in patient care.
- 11 There should be early development of psychomotor skills.
- 12 Instructional and active learning strategies for improving clinical education that were discussed at this conference include case studies, interdisciplinary patient care, and modular curriculum structure.
- 13 Enhancing the critical thinking and clinical decision-making of students are important elements of clinical education, and an appreciation of clinical epidemiology can enhance this set of clinical skills.
- 14 Upon graduation students are now entering many different practice environments and they must leave our programs and institutions more informed about the realities of developing and maintaining successful practices in these varied environments.
- 15 Several papers presented at this conference focused attention on the importance of creating opportunities for students to work with clinical faculty in community practice settings. The advantages of *such* external clinical experience include:
 - (a) Opportunities to become more informed about the realities of managing a chiropractic practice.
 - (b) Experience working with health care professionals from other disciplines.
 - (c) Contact with patients having a wide range of clinical problems.
- 16 An extended period of structured supervised clinical experience either as part of the degree requirements or prior to unsupervised clinical practice should be encouraged.