

THE CHIROPRACTIC REPORT

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PROFESSIONAL NOTES

Precise Forces from Chiropractic Manipulation

New research from John Triano MA DC, Texas Back Institute and Albert Schultz PhD, University of Michigan just published in *Spine*, reports that the actual forces reaching the lumbosacral joints during chiropractic adjustment are similar to "those observed in common daily tasks on jobs requiring lifting and twisting movements" - and confirms that these forces are significant but not dangerous.

Triano and Schultz review a number of chiropractic studies measuring external forces applied during chiropractic adjustment but point out that these do not explain the final internal loads transmitted to spinal segments. "None of the experimental methods used thus far have accounted for inertial loading effects, load developed by muscle tension, or the combined force and moment components at the spinal segment". Inertial and muscle tension loads "may enhance or decrease" the impact of applied external loads during adjustment. This study, therefore, was to look at forces transmitted to the spinal segment.

Using specially constructed equipment - a force plate capable of sensing forces and moments about all 3 axes of motion, and positioned under the adjusting surface - Triano and Schultz studied 6 chiropractors each using 3 different techniques on 11 patients. Their work confirms that precise forces at the joint surface are significantly influenced by type of technique and by patient posture. Practitioners do need a blend of techniques, and spinal manipulation is something of subtlety and skill. (Triano J, Schultz AB (1997) *Loads Transmitted During Lumbosacral Spinal Manipulative Therapy*, *Spine* 22(17):1955-1964.)

DEPRESSION IN CHRONIC PAIN PATIENTS

A. INTRODUCTION

"Clinically significant depression may be present in more than 50% of chronic pain patients chiropractors are therefore very likely to have many significantly depressed patients and should be alert to the problem and document the signs and symptoms of depression they have identified and the steps taken to deal with the problem." Linda Carroll PhD, psychologist, *Advances in Chiropractic* (1997).¹

1. A clinician's model or concept of pain will guide how he or she diagnoses and treats the patient. Musculoskeletal pain, especially chronic or long-term pain, may be viewed according to:

a) **A biomedical model.** Here pain is a reflection of physical injury or disease. It has a specific mechanism, and the main responsibility for recovery is on the health professional who must find the cause of pain and correct it.

This model is satisfactory for a minority of patients with acute musculoskeletal pain, where for example there is bone fracture or a major disc herniation. It is now known to be inadequate for most patients with acute, recurring or chronic pain.

b) **A biopsychosocial model.** Under this model pain is not physical or psychological but has elements of both. The patient and the health professional must both understand that, even where there is a clearly demonstrated physical cause of pain, the patient's perception of pain is influenced by factors such as workplace satisfaction, whether the injury is perceived as an employer's fault, marital discord, past similar personal or family experiences and general psychological status including anxiety and depression.

Under this model responsibility for recovery is shared by the health

professional and the patient. Ideally patients should see themselves engaged in self-management with the practitioner as a resource.

2. During the past 10 years the biopsychosocial model has become firmly entrenched and this has had a major impact on medical practice. Rest fails to address any of the three factors in the biopsychosocial model and has been thoroughly rejected, whether bed rest for back pain,^{2,3} or immobilization for neck pain.⁴

Those unfamiliar with chiropractic practice often judge it to be passive care based on spinal manipulation. However it is now established that chiropractic management is effective not only for patients with acute^{5,6,7} but also chronic musculoskeletal pain.^{8,9,10,11}

In the Meade et al trial, the large multi-centre trial from England that reported the effectiveness and cost-effectiveness of chiropractic management for adults with non-specific back pain, the best results were achieved with patients with severe and chronic pain.⁹ This supported the earlier research of Kirkaldy-Willis and Cassidy in Canada,¹⁰ which showed impressive early and long-term results with truly chronic patients with average total disability for seven years when a more precise biomechanical diagnosis is made.

3. To achieve these results, how do chiropractors address psychosocial issues? The answer is apparent to anyone familiar with chiropractic education, philosophy and management. Patient motivation is not only at the heart of a chiropractor's clinical skills, but is the common purpose of the supporting staff - in many offices the patient feels substantially better before meeting the chiropractor, so positive is the reception from the front office.

The reasons why patients respond to this strong motivation in chiropractic practice appear in the various studies reporting high patient satisfaction.¹²⁻¹⁷ Cherkin and MacCornack, in their HMO back pain study in Washington State, which found three times as many chiropractic patients 'very satisfied' with care as medical patients, cited factors favouring chiropractic care as including:

- More information, including the cause of the back pain, recovery time, content of care and instructions on exercise, posture and lifting.
- More concern shown by chiropractors, including time listening to description of pain and belief that pain was real.
- More confidence by chiropractors concerning the correctness of their diagnoses and the effectiveness of their treatments.
- Overall patient perception that chiropractors were much more comfortable and competent in dealing with their problem.¹²

4. However for health care providers, including chiropractors, life is regrettably becoming more complex. With many patients it is no longer sufficient to deal with psychological factors naturally and implicitly. Two major reasons for this are:

- a) The increased understanding, recognition and specialized management of psychological disorders. Would you be surprised to know, for example, that:
 - Studies in North America report that 25% of women have been assaulted by their spouses at least once, and that approximately 20% of women and 5% of men were sexually abused as children. Average abuse was for a period of four years inside the family.^{18,19}
 - For these and other reasons, in the US 15% of the non-institutionalized population suffers from a psychiatric disorder.²⁰
 - At any one time 9-20% of the US population suffers from depressive symptoms, and 5% have a major depressive illness.²⁰
 - Over and above that base rate for depression, 50% of chronic pain patients have clinical depression - 10% of them

had depression first, and 90% developed it during the onset and continuance of chronic pain.²¹

- 10-15% of those with clinical depression commit suicide.
 - There are now more established and effective techniques of self-help and treatments for those suffering from depression.
- b) The increased need to describe and document behavioural factors and what you are doing to address them. This need arises for reasons of reimbursement, interdisciplinary practice and legal protection.

5. This is an area of particular importance to chiropractors. They see many chronic pain patients and are often in a better position than family physicians to observe psychological factors and changes. Family physicians frequently under-diagnose depression and other emotional problems because of their biomedical model, time constraints and reluctance to address emotional issues.^{22, 23}

Chiropractors, in contrast, spend more time with patients each visit and see them more frequently, often have a high level of patient trust, and are therefore in a good position to observe psychological factors and changes. Most chiropractors reading this will have had patients confide in them on matters hidden not only from spouses but also from therapists.

Today chiropractors need to be able to screen for and manage various psychological factors - by themselves where appropriate or through collaborative care and/or referral when necessary. This Report now looks more closely at depression because of its high prevalence in patients with chronic and recurring pain.

B. DEPRESSION - WHAT IS IT?

6. Into the 1970s depression was primarily considered a character flaw or a result of poor upbringing and environment. This means it was not much admitted or talked about, and that a common treatment was Freudian psychoanalysis - now known to be completely the wrong approach to the problem.

Today much more is known about depression - but far from all. The immediate cause is biochemical change in the

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brain, including an insufficient supply of chemical messengers (transmitters) such as serotonin and noradrenaline. These immediate causes can be addressed by medication. Prozac and its family of drugs (Paxil, Zoloft, Luvox, Serzone) increase the levels of serotonin and are known as SSRIs (selective serotonin re-uptake inhibitors).

But what are the underlying causes, why is there biochemical change in the first place? The evidence suggests it is a mixture of genetics and life experience. Damaging events in childhood - for example physical or sexual abuse or parental conflict - disrupt development of chemical pathways in the brain. However, exactly how and to what extent is unknown. What is known is that, for the majority of those who have this illness, it can be overcome by self-management or appropriate treatment.

C. SCREENING FOR DEPRESSION

7. **Self-screening.** Do you have mild, moderate or severe depression - or are your

continued on page 6

Figure 1

Beck Depression Inventory

From *Feeling Good: The New Mood Therapy*, Burns DD, Avon Books, New York.

Instructions: Please read each item carefully and circle the number next to the answer that best reflects how you have been feeling during the past few days. Make sure you circle one answer for each of the 21 questions.

- | | | | | | | |
|-----|---|---|--|-----|---|---|
| 1. | 0 | I do not feel sad | | 13. | 0 | I make decisions about as well as I ever could |
| | 1 | I feel sad | | | 1 | I put off making decisions more than I used to |
| | 2 | I am sad all of the time and I can't snap out of it | | | 2 | I have greater difficulty in making decisions than before |
| | 3 | I am so sad or unhappy that I can't stand it | | | 3 | I can't make decisions at all anymore |
| 2. | 0 | I am not particularly discouraged about the future | | 14. | 0 | I don't feel that I look any worse than I used to |
| | 1 | I feel discouraged about the future | | | 1 | I am worried that I am looking old or unattractive |
| | 2 | I feel I have nothing to look forward to | | | 2 | I feel that there are permanent changes in my appearance that make me look unattractive |
| | 3 | I feel that the future is hopeless and that things cannot improve | | | 3 | I believe that I look ugly |
| 3. | 0 | I do not feel like a failure | | 15. | 0 | I can work about as well as before |
| | 1 | I feel I have failed more than the average person | | | 1 | It takes an extra effort to get started at doing something |
| | 2 | As I look back on my life, all I can see is a lot of failures | | | 2 | I have to push myself very hard to do anything |
| | 3 | I feel I am a complete failure as a person | | | 3 | I can't do any work at all. |
| 4. | 0 | I get as much satisfaction out of things as I used to | | 16. | 0 | I can sleep as well as usual |
| | 1 | I don't enjoy things the way I used to | | | 1 | I don't sleep as well as I used to |
| | 2 | I don't get real satisfaction out of anything anymore | | | 2 | I wake up 1-2 hours earlier than usual and find it hard to get back to sleep |
| | 3 | I am dissatisfied or bored with everything | | | 3 | I wake up several hours earlier than I used to and cannot get back to sleep |
| 5. | 0 | I don't feel particularly guilty | | 17. | 0 | I don't get more tired than usual |
| | 1 | I feel guilty a good part of the time | | | 1 | I get tired more easily than I used to |
| | 2 | I feel quite guilty most of the time | | | 2 | I get tired from doing almost anything |
| | 3 | I feel guilty all of the time | | | 3 | I am too tired to do anything |
| 6. | 0 | I don't feel I am being punished | | 18. | 0 | My appetite is no worse than usual |
| | 1 | I feel I may be punished | | | 1 | My appetite is not as good as it used to be |
| | 2 | I expect to be punished | | | 2 | My appetite is much worse now |
| | 3 | I feel I am being punished | | | 3 | I have no appetite at all anymore |
| 7. | 0 | I don't feel disappointed in myself | | 19. | 0 | I haven't lost much weight, if any, lately |
| | 1 | I am disappointed in myself | | | 1 | I have lost more than five pounds |
| | 2 | I am disgusted with myself | | | 2 | I have lost more than ten pounds |
| | 3 | I hate myself | | | 3 | I have lost more than fifteen pounds |
| 8. | 0 | I don't feel I am any worse than anybody else | | 20. | 0 | I am no more worried about my health than usual |
| | 1 | I am critical of myself for my weaknesses or mistakes | | | 1 | I am worried about physical problems such as aches and pains, or upset stomach, or constipation |
| | 2 | I blame myself all the time for my faults | | | 2 | I am very worried about physical problems and it's hard to think of much else |
| | 3 | I blame myself for everything bad that happens | | | 3 | I am so worried about my physical problems that I cannot think about anything else |
| 9. | 0 | I don't have any thoughts of killing myself | | 21. | 0 | I have not noticed any recent change in my interest in sex |
| | 1 | I have thoughts of killing myself, but I would not carry them out | | | 1 | I am less interested in sex than I used to be |
| | 2 | I would like to kill myself | | | 2 | I am much less interested in sex now |
| | 3 | I would kill myself if I had the chance | | | 3 | I have lost interest in sex completely |
| 10. | 0 | I don't cry any more than usual | | | | |
| | 1 | I cry more now than I used to | | | | |
| | 2 | I cry all the time now | | | | |
| | 3 | I used to be able to cry, but now I can't cry even though I want to | | | | |
| 11. | 0 | I am no more irritated by things than I ever am | | | | |
| | 1 | I am slightly more irritated now than usual | | | | |
| | 2 | I am quite annoyed or irritated a good deal of the time | | | | |
| | 3 | I feel irritated all the time now | | | | |
| 12. | 0 | I have not lost interest in other people | | | | |
| | 1 | I am less interested in other people than I used to be | | | | |
| | 2 | I have lost most of my interest in other people | | | | |
| | 3 | I have lost all of my interest in other people | | | | |

Scoring: Add up the scores for each of the questions to obtain a total. The highest possible total is 63 - 3 on all 21 questions.

Interpretation of Results:

<i>Total Score</i>	<i>Levels of Depression*</i>
1-10	These ups and downs are considered normal
11-16	Mild mood disturbance
17-20	Borderline clinical depression
21-30	Moderate depression
31-40	Severe depression
Over 40	Extreme depression

* A persistent score of 17 or above indicates you may need professional treatment.

THE CHIROPRACTIC WORLD

NORTH AMERICA

1. **James Parker DC** With the death of Dr. James Parker of Dallas, Texas on November 7, at the age of 71 from complications from heart surgery, the chiropractic profession lost one of its most admired and important former leaders.

Dr. Parker and his Foundation were driving forces sustaining the profession from the 1950s to the 1980s, and many chiropractors cite Dr. Parker's personal example and inspiration as the foundation for their continued practice during earlier and difficult times for them and the profession. His unquenchable fire of enthusiasm came from personal experience - as a youth he was greatly incapacitated for many years by asthma and poor eyesight, conditions that resolved dramatically under chiropractic care.

He attended Palmer College, practised in Illinois then Texas, opening a network of 18 clinics, then embarked on the practice management, publishing and speaking career that made him one of the most influential leaders in the profession.

Dr. Parker's name will be best remembered in the future through the Parker College of Chiropractic in Dallas, founded by him in 1984. The College, has grown rapidly and now has 1300 students. The College was the fitting site of many of the ceremonies held to celebrate Dr. Parker's achievements and to mourn his passing.

2. **Public Relations.** Until now there has never been a unified, sustained public relations drive for chiropractic in the United States. Details of a new, multi-year public relations campaign, led jointly by the American Chiropractic Association (ACA) and the International Chiropractors' Association (ICA), were first announced at meetings of the Congress of Chiropractic State Associations (COCSA) and the Association of Chiropractic Colleges (ACC) in November.

Following extensive focus group testing this campaign will have two main themes in 1998 - firstly the level of education and licensure of a doctor of chiropractic and secondly the published evidence on patient satisfaction. The focus group research has shown that these are the two areas of information that will most likely lead people to try chiropractic care for the first time. Advertising will comprise one page advertisements and insert booklets in major magazines throughout 1998. The goal is profession-wide support for an image campaign which will last a minimum of 3 years and significantly alter US public perception and use of the chiropractic profession.

3. **ACA Booklet for Primary Care Physicians.** The continuing dominance of managed care plans in the US means that many primary care physicians (PCPs) have the power of decision of whether patients should consult a chiropractor. The American Chiropractic Association has an excellent new booklet titled *Chiropractic Professionals: Part of Your Managed Care Team* targeted at PCPs and describing the role of chiropractic care in an interdisciplinary team. For more information contact the ACA at 1701 Clarendon Blvd., Arlington VA 22209, Tel. 703-276-8800 Ext. 219, Fax. 703-243-2593.

4. **Association For Catholic Chiropractors (AFCC).** The AFCC, founded in 1997 has made a promising start and may be of interest to you. President is Dr. Karen Shields-Wright, a chiropractor from Greenwich, Connecticut who is currently completing a doctorate in religious studies. In two trips to the Vatican in 1997 Dr. Shields-Wright met with leaders of the Catholic church's extensive international health care program to plan international partnerships. AFCC Vice-President is Dr. Tom Davis from Northwestern Chiropractic College and there is an impressive interprofessional advisory board. For more information contact Dr. Karen Shields-Wright, AFCC, 106 Hunting Ridge Road, Greenwich, CT 06831, USA. Tel/fax. 203-552-0628, E-mail ACC@discovemet.net.

EUROPE

1. **Research.** *Bedrest vs Advice to Stay Active for Low-back Pain.* A literature review by Waddell, Feder et al just published in the *British Journal of General Practice* summarizes the findings of 10 trials of bedrest and 8 trials of advice to stay active as treatments for patients with low-back pain and concludes "consistent findings show that bedrest is not an effective treatment for acute low-back pain but may delay recovery." Some patients with acute back pain "may be confined to bed for a few days, but that should be seen as an undesirable consequence of their pain and not a treatment."

All of these trials except one are from European countries, where it is still common medical practice to prescribe bedrest. Amazing statistics given are that "9% of adults consult their family doctor annually with back pain in the UK" - that is almost 1 in 10 each year - and "low-back pain now accounts for 4% of primary care consultations, 5% of hospital out-patient referrals and 14% of Department of Social Security benefits for chronic incapacity" in the UK. (Waddell G, Feder G et al (1997) *Systematic Reviews of Bed Rest and Advice to Stay Active for Acute Low Back Pain*, Br J General Practice, 47:647-652).

Chronic Musculoskeletal Disorders - Leading Cause of Disability in The Netherlands. There is much greater public and medical focus on cancer than on chronic musculoskeletal disorders. The latter, however, are far more common and provide much greater levels of disability and cost to society. This is shown graphically in a new national survey from the Netherlands.

The survey assesses how much disability in the Dutch population is attributable to six chronic conditions. The levels of disability, calculated on the two criteria of prevalence and strength of association with disability (i.e. how much disability the average case causes), were musculoskeletal diseases (25.6%), neurological disorders (4%), lung diseases (2.4%), heart diseases (1.6%), diabetes (1.1%) and cancer (0.2%). (Picavet HJS, Geertrudis AM et al (1997) *The Contribution of Six Chronic Conditions to the Total Burden of Mobility Disability in the Dutch Population*, Am J of Public Health, 87(10):1680-1682).

2. **The UK - Education.** The chiropractic profession is growing rapidly in the UK and two new university-based chiropractic educational programs opened their doors in September. The first, at the University of Glamorgan in Wales, is a full 5 year undergraduate program and has a first year class of 46 students. (Contact: *Susan King DC, Principal, Welsh Institute of Chiropractic, University of Glamorgan, Pontypridd CF37 1DI, Wales, Tel. 44-1443-480480 Fax. 44-1443-482285*). The second is a program for health science graduates, with cross credits is of approximately 2-1/2 years duration, and is at the University of Surrey. It has opened with 12 students. (Contact: *Joseph Morley, DC PhD, Course Director, University of Surrey, Stirling House Campus, Stirling Road, Surrey Research Branch, Guildford, Surrey GU2 5RF, England, Fax. 44-1483-300339*). The largest and most established chiropractic college in the UK is the Anglo-European College of Chiropractic in Bournemouth which is affiliated with the University of Portsmouth.

3. **Spain - Prosecutions.** The increase in numbers of chiropractors in Spain, where there is no law recognizing and regulating chiropractic practice, is now being seen as a threat by medical interests and led in 1997 to the first prosecutions against chiropractors. In June Dr. Penny Teshak, a duly qualified chiropractor who previously practised under licence in Denmark and has practised for 12 years in Malaga, Spain without previous incident, was prosecuted after referring a patient to a medical radiologist for diagnostic spinal x-rays. She had done this many times previously without incident. This led to a conviction and sentence of 6 months imprisonment, which was confirmed on appeal on October 20, even though there was no patient complaint or any allegation of harm. The

court gave Dr. Teshak 15 days to leave the country which she did. The Spanish Chiropractic Association now advises a second prosecution, against Dr. Mauricio Sandino of Valencia. This is on a complaint of the physiotherapy profession claiming practice of physiotherapy without a licence. Spain currently has 60-70 chiropractors. They have busy practices and there is widespread medical referral of patients, but there is no legal protection or recognition. Now there is the fear that chiropractic practices will be threatened by coordinated legal action.

ASIA/PACIFIC

1. **Australia - An Important New Text on Managing Back Pain.** *Clinical Anatomy and Management of Low-Back Pain* (Butterworth Heinemann, Oxford, 1997), edited by Australians Lynton Giles DC PhD, a chiropractor and KP Singer PT PhD, a physical therapist, is a thought-provoking text of considerable educational, clinical and professional significance. It is interdisciplinary, international and symptomatic of the completely new back pain marketplace in which chiropractic must reposition itself in the years ahead.

Contributors are leading chiropractic, osteopathic, medical and physiotherapy researchers from Australia, Europe (England, Finland and Sweden), Egypt, Japan and North America (Canada and the United States). In his foreword John Frymoyer, Dean of Medicine, University of Vermont says:

".... Allopathic physicians finally are becoming aware that manipulative treatment has scientifically proven efficacy as manipulation continues to grow as a focus for conservative management there is the need to clearly define in the continuum of low back disorders where manipulation is effective, and where it's not."

"The authors recognize that the multiple disciplines need a common language built around the traditional and new understanding of pathoanatomy as well as psychosocial events which shape our individual response to pain stimuli and how this influences functional capacity ... I am heartened that the editors and writers of this volume have addressed (the management of low-back pain) around the basic model of interdisciplinary collaboration."

This new text is Volume 1 in a series - the next volumes will deal with the thoracic and cervical spines - with which Butterworth Heinemann is trying to provide a common text for chiropractic, medical, osteopathic and physical therapy students in a number of countries. Many of the superb chapters on clinical anatomy are written by Giles, who is Research Director, National Centre for Multidisciplinary Studies of Back Pain, Townsville General Hospital, Queensland, and Singer, Honorary Research Fellow, Royal Perth Hospital Western Australia.

The four chapters on management of low-back pain of mechanical origin are medical and surgical (US physicians Knolmayer, McAllindon and Wiesel from the Georgetown University, Washington DC), chiropractic (Stephen Burns DC and Dale Mierau DC, Saskatoon, Canada), osteopathic (McCline, Clarke, Walker and Burton, British DOs) and physiotherapy (Edmondson and Elvey, Australian PTs). The latter three chapters all place considerable emphasis on spinal mobilization and manipulation and illustrate the degree of overlap in scope of practice.

Chapter 22 on chiropractic management by Drs. Burns and Mierau is generally excellent. Unlike the recent multidisciplinary back pain guidelines from the US and the UK, this chapter emphasizes that the goals of manipulation are not only pain relief but also increased function. To quote Burns and Mierau:

"The functional effect of joint cavitation is increased freedom of movement ... manipulation and mobilization are distinct therapies and have different effects on joint function. Practitioners look for increased range of spinal motion following manipulation and consider it an important determinant of a successful treatment".

Indications in favour of manipulative therapy given by Burns and Mierau include "intervertebral disc disease, spinal stenosis (central or lateral), LBP with spondylolisthesis and post-operative LBP." For those interested in promoting medical referrals this is an excellent, concise explanation of chiropractic management for reading by medical colleagues.

WORLD FEDERATION OF CHIROPRACTIC.

The World Federation of Chiropractic (WFC) formed in 1988 and representing national chiropractic associations throughout the world, is rapidly expanding in size and influence as it enters its second decade. Some developments of interest include:

- **www.wfc.org.** The WFC now has a website under this name in its three official languages of English, French and Spanish - for information on chiropractic and the Federation, and contact addresses for chiropractic associations in over 80 countries, visit the site.

- **Associate Members.** Voting members of the WFC are national associations. However the many corporate and individual associate members now include most chiropractic colleges. Colleges with Corporate Patron (\$10,000) and Corporate Benefactor (\$5,000) memberships are Cleveland, Life, Life-West, National, Northwestern, Palmer and Parker.

- **World Health Organization.** In January 1997 the WFC became an NGO or non-governmental organization in official relations with the World Health Organization (WHO) and for details on this and what it means for the chiropractic profession visit the WFC's website. The WFC is also a member of the Council of International Organizations of Medical Sciences (CIOMS), an agency affiliated with WHO which represents many international organizations of health professionals.

As an example of the WFC's representation of chiropractic in the international health care and health policy world, the WFC will present a half day seminar on chiropractic issues at the World Congress of Medical Law in Hungary in August 1998 which will include papers on the appropriateness of cervical manipulation (Scott Haldeman DC MD PhD), informed consent (David Chapman-Smith, LLB (Hons)), and ethical and legal issues on inter-referral of patients between chiropractic and medical doctors in developed countries (Niels Nilsson DC PhD) and developing countries (Sira Borges DC MD). The Congress will be attended by 700 academic and government leaders from over 50 countries.

- **1999 World Chiropractic Congress - Auckland, New Zealand.** Have you ever planned a trip to New Zealand - now is the time to act. The next WFC Congress is to be held from May 20-22, 1999 in Auckland and is titled *Traditional and New Approaches to Chiropractic Practice*. It is being co-sponsored by the New Zealand Chiropractic Association and the Chiropractors' Association of Australia and will include a wide variety of technique and other seminars. One highlight will be the re-enactment of part of the hearings of the historic New Zealand Commission of Inquiry into Chiropractic (1978-79), featuring the Commissioners and some of the original witnesses. Mark off those dates now.

feelings of sadness or irritability simply within the normal ups and downs of life?

This is something you can explore yourself. The most reliable questionnaire is the Beck Depression Inventory the BDI - see (Figure 1) developed by Dr. Aaron Beck, Professor of Psychiatry, University of Pennsylvania Medical School and made widely available to the public in the best-selling book *Feeling Good: The New Mood Therapy* by David Burns MD who did his postgraduate study in mood disorders under Professor Beck.²⁴

Scoring and interpretation of the BDI are given in Figure 1.

It is designed to be used repeatedly. Burns' advice to those who are applying his self-help techniques for depression is "take the BDI test at regular intervals to assess your progress objectively. I suggest a minimum of once a week. Compare it to weighing yourself regularly when on a diet."

8. Screening in Chiropractic Practice.

Chiropractors are not qualified to make, or interested in making, a specific diagnosis of depression or other psychiatric disorder. However they will want to screen for signs and symptoms of depression firstly as part of good health care (attending to the patient's general well-being), secondly because depression has a significant impact on the treatment plan and its effectiveness, and thirdly because depression is responsive to appropriate treatment.

Significant depression is very effectively treated with psychotherapy or natural or prescription antidepressants (see below). The chiropractor's role with such patients is to refer to the family physician or an appropriate mental health practitioner, documenting observations made and steps taken to deal with the problem. The two most effective methods of screening are:

a) *Patient interview.* This may be at initial investigation with a new patient, later when signs become more apparent and patient trust has been established, or both. Thorough patient observation on interview is superior to any self-report questionnaire completed by the patient.

Many of the typical signs of depression are evident from the Beck Depression Inventory (BDI). Psychologist Dr.

Linda Carroll reviews typical signs and symptoms and draws attention to the following:

i) Prolonged feelings of sadness, hopelessness and loss of interest in previously enjoyed activities. (However "in some individuals you may see more irritability than sadness, and many report increased aches and pains rather than sadness.")

ii) Significant weight change - either loss or gain.

iii) Sleep disturbances - either insomnia or hypersomnia. (Many depressed people "complain that they cannot seem to get enough sleep ... and of being fatigued all the time" even without unusual activities or physical exertion).

iv) Brooding or excessive worrying - about pain, physical health, or other things.

v) Preoccupation over past and present failings, and anticipation of future failings.

vi) Alcohol or other substance abuse - this "is more common in depressed individuals".

b) *Patient questionnaire.* A number of these are used in chiropractic practice, including some like the Zung Questionnaire which are somewhat outdated and little used by psychologists and psychiatrists. In the opinion of Dr. Gregory Hamovitch, clinical psychologist, Canadian Memorial Chiropractic College, Toronto, the BDI is as good as any but, if used, should be administered with these things in mind:

i) The BDI should not be used until after a thorough patient interview on issues relevant to depression. The BDI is not seeking basic factual or demographic information and should not therefore be distributed as simply one more intake document. It includes questions on private matters, including thoughts of suicide, and various sections will not be completed unless the patient has been brought to an appropriate level of trust and understanding.

ii) Use of the BDI, and an interview on psychological factors including depression, is to *screen* the patient, not to form a specific *diagnosis*. (And in these days when clinical notes are more open to sub-

poena and view by third parties, you will want to be careful to just mention signs and symptoms and your management response rather than any conclusion on whether the patient has depression.)

iii) For any clinician it is appropriate to make minor modifications to the BDI, altering or deleting some questions if this makes use of the questionnaire easier in practice. (Remember to amend scoring accordingly.)

iv) Particularly in cases of borderline to moderate depression, use the test repeatedly with a frequency based on your observation of your patient.

9. **Suicide Assessment.** See Carroll's recent review titled *Psychological Problems Encountered in Chiropractic Clinical Practice*¹ for practical advice on suicide assessment, important because many chiropractic patients have depression, up to 15% of people with depression commit suicide, chiropractors should be able to recognize and take appropriate steps if there is an emergency, and "most suicidal individuals are actually relieved to be able to talk about this problem."

Clinicians unfamiliar with suicide assessment are often afraid to ask questions, Carroll observes, fearing patients will become angry or be given the thought of suicide, but this is wrong - most people considering this decision "have some ambivalence and will readily admit" their thoughts. Carroll recommends that clinicians enquire more closely if many of the following factors are present together:

- age over 45
- divorced, separated, widowed or single
- poor economic status
- recent losses (loss of a job or a spouse or new disability)
- previous attempts; and
- recent discharge from hospital.

A good opening question is "Are things getting so bad that you ever think about suicide?" If the answer is yes progress to questions on frequency, duration and intensity of suicidal thought, and then questions on a specific plan. Where in-

icated call a family member and/or the patient's family physician.

D. TREATMENT FOR DEPRESSION

10. **Self-management - Cognitive Therapy.** *Feeling Good: The New Mood Therapy* by psychiatrist Dr. David Burns²⁴ strongly recommends self-treatment using the principles of cognitive therapy (CT), especially for those with mild to moderate depression on the BDI test. CT is an organized set of mood control techniques based on three principles:

- That all your moods are created by your thoughts (cognitions) - your perceptions, mental attitudes and beliefs.
- When you are feeling depressed you imagine things are worse than they are, and then truly believe this. (A problem of 'mental slippage').
- Through the use of CT techniques you can become objective and appreciate your beliefs are a major distortion of reality. This new understanding is the foundation for improvement.

CT is of well-proven effectiveness at all levels of depression. In the first randomized controlled trial at the University of Pennsylvania in 1976:

- a) 44 severely depressed patients were randomly placed in two treatment groups - one receiving CT (number 19) and the other the widely used antidepressant drug Tofranil (n 25). At that time no form of psychotherapy was shown to be as effective as drugs, which had therefore become standard treatment.
- b) These patients, 75% of whom were suicidal and had experienced chronic or recurring depression for an average of 8 years, received 12 weeks of treatment. Blinded observers assessed results during the treatment phase, at 12 weeks, and during a 12 months follow-up period.
- c) Results were that CT was significantly superior in terms of early results (two weeks) at the end of treatment (12 weeks) and throughout the follow-up year. At 12 weeks, 15 of 19 receiving CT had recovered quickly, only 5 of 25 in the medication group.

Subsequent trials have confirmed an established place for CT, both as a single intervention and as a combined approach to enhance the effectiveness of antidepressants drugs.^{25,26,27}

11. **Psychotherapy.** Two fundamentally different approaches are:

- a) Psychotherapy directed at listening to and sympathizing with the patient. This is wrong for patients with depression, especially a chronic pain patient who is magnifying or somatizing pain as a result. To quote US psychiatrist and orthopedic surgeon George Becker "it is a grievous error to 'help' the patient learn to 'live with' or 'accept' the pain."²⁸
- b) More dynamic, insight-oriented therapy. The most widely used approaches are:
 - i) Cognitive therapy - discussed above in the context of self-management (para 10).

- ii) Interpersonal therapy - focusing on specific problems related to dealing with other people.

12. **Antidepressant Medications.** Some are strongly sedating (e.g. Amitriptyline (Elavil)), some moderately so (Doxepin (Sinnequan) and Imipramine (Tofranil)) and some are energizing (Fluoxetine (Prozac)). Prozac and other SSRIs have become popular because they have fewer side effects than older depressants, not because they are more effective. About 70% of patients respond to SSRIs but one of the criticisms, as with medication for many conditions and as already discussed above, is that they do not address the underlying causes of depression. Cognitive therapy does and is therefore frequently used in combination with medication.

13. **Alternative Natural Products.** The most popular alternative to medical treatments is St. John's Wort which has been used for many years in Europe to combat depression. This natural antidepressant is extracted from a yellow flowering plant and is now in wide use in North America.

William LaValley MD, a prominent complementary medicine practitioner in Canada, prescribes antidepressants for severely depressed patients but St. John's Wort for those with mild to moderate depression.²⁹ Rif Kamil MD, a staff psychiatrist at Toronto's Clarke Institute of Psychiatry also uses St. John's Wort for patients with mild to moderate depression and reports "the response rate is roughly the same as for antidepressant drugs - around 30-40%."²⁹ Cost is less and side effects are fewer. The US National Institutes of Health recently announced funding for a new trial to compare the effects of SSRIs, St. John's Wort and a placebo pill on a population of 300-400 patients with depression.

E. CONCLUSION

14. This Report has reviewed depression and its management because chiropractors see many patients with chronic pain every day and half of these patients have some level of clinical depression. As chiropractors practise more frequently in interdisciplinary and managed care settings it is likely they will see more patients with depression. In summary:

- a) Even though clinical depression is common, most patients - those with moderate to mild depression or less - can be managed with standard chiropractic care. This includes strong and repeated components of motivation, education and support, and emphasizes self-coping and early return to activities. That is why the research reports that chronic pain patients have high levels of satisfaction and clinical success under chiropractic care.
- b) Clinicians must, however, be alert to the possible presence of depression with every chronic pain patient, allow for this for their examination and history, and be prepared to deal with it. They should appreciate that some patients will require specialized psychological and medical services, and should know how to gain access to these in their community. A number of new patients will present complaints of pain that are largely or solely signs of depression or other psychological or psychiatric disorders. Multiple areas of pain, and prior use of many practitioners, are common signs of such disorders.

c) Depression is only one of a number of psychosocial factors which may be present, including:

i) Personal beliefs and attitudes that modify pain perception (e.g. patients who passively expect the clinician to 'fix' the problem will need different management from those who already accept that good health, and recovery from pain now, require their active participation; a patient whose brother or sister has died of a difficult-to-diagnose cancer may suspect the same problem, and have anxiety you need to discover and manage).

ii) Somatoform disorders (e.g. hypochondriasis, where a patient is preoccupied with health and converts fear into pain and disability. These are the patients who mark pain throughout the body - and sometimes off it - on pain diagrams).

iii) A history of abuse.

iv) Employment factors.

d) Good management of a patient requires a good model of pain - and today this must be a biopsychosocial model that addresses the multiple physical and psychological causes that exist for each individual. TCR

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