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Stress Management: An Exploratory Study of Chiropractic Patients

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ABSTRACT

Background: Stress is a recognized variable in the diagnosis, management, and prognosis of musculoskeletal conditions; chiropractic care is reputed to be successful in the management of stress-related visceral conditions. It may be useful for chiropractors to include stress management as a clinical care option.

Objective: To explore screening tools to aid stress self-assessment, investigate patients' perceptions of stress management as a chiropractic care option, and examine which stress-management strategies chiropractic patients perceive as most useful.

Design: A multiphase qualitative study with purposive sampling of chiropractic clinics to maximize the diversity of the patient population. Convenience sampling of patients was undertaken in a Western Australian case study, an inner city, and a national exploratory study. Data for the case study were collected by semistructured interview. Questionnaires and a self-assessed stress-management task were used to collect data from the inner city and national studies. Data was thematically analyzed, and results were triangulated.

Results: The sample size of chiropractic patients in the West Australian case study was 48, 15 in the Western Australia exploratory study and 36 in the national study. A number of chiropractic patients participating in this study perceive themselves to be stressed and were interested in having stress-management strategies included in their chiropractic care. Individual patients preferred different stress-management options. This qualitative study found little justification for routinely using a stress-assessment technique more complex than asking the patient to rate his or her stress level as absent, minimal, moderate, or severe. Exercise, particularly walking, was found to be a prevalent pastime among participants in the case study.

Conclusion: This study was too small to warrant statistical analysis; nonetheless, the results of this study are relevant because some patients believe they would benefit from chiropractic care that includes information about stress-management strategies. (J Manipulative Physiol Ther 2000;23:32-6)

Key Indexing Terms: Stress Management; Chiropractic; Patient Perceptions

INTRODUCTION

People with stress-related conditions routinely seek and obtain chiropractic care. Chronic stress has been linked to clinical conditions ranging from musculoskeletal dysfunctions such as muscle spasm, backache, and fibromyalgia to visceral conditions including intrinsic asthma, menstrual disorders, hypertension, and migraine and tension headaches.[1] An Australian case study found that a percentage of chiropractic patients feel stressed and a substantial number of these patients feel it would be helpful if their chiropractic care included strategies to help them cope with stress.[2] The literature supports routinely including consideration of psychologic factors in the diagnosis and management of neck-shoulder, back, and noncardiac chest pain.[3-8] Stress-management is also effective in a number of clinical conditions.[9] Autogenic training has, for example, been found to have a positive effect on patients with migraine, insomnia, asthma, and hypertension.[10] Progressive muscle relaxation and electromyographic biofeedback–assisted relaxation training, mediation, and hypnosis have been found to benefit mood, self-esteem, and certain biologic indexes in HIV-positive men.[11] A biopsychosocial approach to treatment of patients with asthma found that the majority of patients achieved sustained improvement.[12]

In addition to its effective management of the musculoskeletal system, chiropractic claims a measure of success in the management of stress-exacerbated visceral conditions.[13-15] Although somatovisceral reflexes are postulated to underlie improved visceral function detected after chiropractic care, the exact mechanism remains unproven. The possibility that psychosocial stress and its management may be one factor in the chiropractic management of these conditions has not been discounted. Advances in mind-body medicine suggest that processing within the hervous system does not distinguish between symbols and physical structures and that the neurobiology of the brain can be altered by perceptions,[16,17] explaining why chiropractic patient and practitioner perceptions of improvement are not always supported

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SELF-SCREEN FOR RESIDUAL TENSION

Perform the residual tension test by:

- holding your arm up.
- clasping your fist so firmly that you feel your nails biting into your palm.
- holding this position for minute.

Now relax.

Check your hand:

- if the fingers are straight you are relaxed
- if they are curled you have residual tension.

Rate your level of residual tension:

ABSENT MINIMAL MODERATE SEVERE

Fig 1. *Self-screen for residual tension.*

STRESS MANAGEMENT OPTIONS: PERCEIVED INTEREST

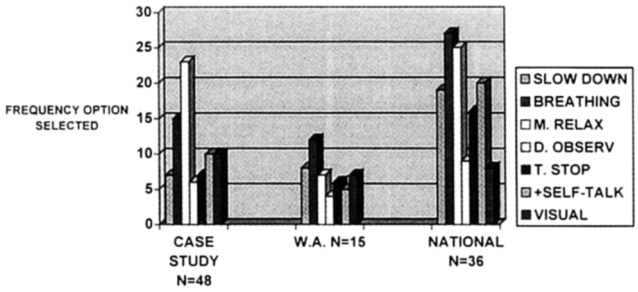

Fig 2. *Stress-management options: perceived interest.*

by objective measurement.[18] Furthermore, the chiropractor's ability to use the consultation, not merely the adjustment, as a wellness trigger may be mediated through the ability of the practitioner to enhance the patient's personal perception of successfully coping with his or her disorder.[19] Perceived control is regarded as a significant factor in coping with stress.[20] The selective inclusion of stress-management techniques in chiropractic care may further enhance the perceived control of chiropractic patients and add a new dimension to chiropractic care.

This exploratory study was undertaken to ascertain the type of stress-management techniques chiropractic patients perceived as useful and to provide chiropractors with some insight into the stress and stress-management perceptions of a diverse group of chiropractic patients.

METHOD

A qualitative study of stress management in chiropractic patients, involving sampling of chiropractic clinics, was undertaken. To maximize the diversity of the patient population, practices in diverse geographic and socioeconomic areas were included. Convenience sampling of patients was undertaken in 3 discrete studies. Data from each study were initially analyzed independently to identify trends. Thematic analysis was then undertaken and the results triangulated.

A case study was undertaken in Western Australia in coastal communities north and south of Perth. Chiropractic patients seeking care at these 2 chiropractic practices completed a semistructured interview to ascertain their stress levels and the type of stress-management techniques they considered helpful. Patients were asked to assess their overall stress level on a scale of 1 through 10. They were made aware of symptoms consistent with acute, persistent, cognitive, emotional, and physical stress and asked to rate their stress in each of these dimensions. Patients were then given a list of stress-management strategies and asked to identify which strategies they believed useful. The exercise habits of patients were also documented. Patients who agreed to participate but were unable to complete the interview during their scheduled chiropractic appointment were telephoned at their convenience. Fifty patients were invited to participate and 48 agreed.

The case study was complemented by 2 exploratory studies in which participants were invited to complete a questionnaire to ascertain their self-perceived stress levels. They were also given detailed information on stress-management techniques including performing fewer daily tasks and taking more time to complete those tasks (slowing down), 2 types of breathing exercises, 5 strategies for muscle relaxation, detached observation, halting of negative thoughts (thought-stopping), verbal self-encouragement (positive self-talk), and visualization with guided imagery. Participants were asked to indicate which of these stress-management strategies they thought they may use, which they actually tried, and which they believed they would continue to use on a long-term basis. Patients were asked to mail the results of this self-study to the investigator in the provided envelope.

One exploratory study included patients seeking care at an inner-city practice. A chiropractor practicing in Perth was asked to distribute the questionnaire and associated stress self-management information to 30 patients. To obtain the best possible outcome and illustrate a situation of maximal patient compliance, only patients who readily expressed interest in participating in a stress-management study were to be included. In addition to rating their general stress levels and ascertaining their acute, persistent, cognitive, emotional, and physical stress levels, these patients were asked to complete the modified somatic section of the Distress and Risk Assessment Method (DRAM) questionnaire and to assess their residual tension (Fig 1). Fifteen patients completed the Western Australian exploratory study.

The second exploratory study drew its study population from the Australian Capital Territory and 4 other Australian states: New South Wales, Victoria, Queensland, and South Australia. Eighty questionnaires were distributed to the chiropractic clinics participating in the national study. These questionnaires were given to patients who had previously expressed interest in information about stress management. Less than half of these patients indicated they would be interested in undertaking stress self-management. In addition to general stress self-assessment questions, patients in this exploratory study were asked to complete the entire DRAM questionnaire. The DRAM, composed of the modified somatic and Zung questionnaires, is a first-stage sociopsychologic screening procedure recommended as an aid to clinical appraisal of patients in orthopedic, back, and pain