

Beyond Back Pain

A NEW MODEL FOR HEALTH CARE

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An important shift in models of health care has been evolving in the midst of the turmoil that characterizes health care delivery in the US today. One fundamental change is based on the growing realization that the biomedical model, the cornerstone of contemporary medicine, offers too limited of an approach to health. As Ebrall, BAppSc(Chiro)¹ noted in 1994, "Medical treatment is more correctly viewed as disease care, not health care. It is disease oriented service. Primary medical care's emphasis is on the treatment of defined illness." At the same time as the scope of biomedicine is criticized for being too narrow, chiropractic and wellness care are gaining in popularity and acceptance with the consuming public and in credibility within the scientific community. In fact, a 1995 article by Shekelle, MD, PhD,² reported that chiropractors have made enormously deep inroads into the back care marketplace, serving as the primary providers for 40 percent of back pain episodes. He found that patient retention is remarkable: chiropractors retained 92 percent of their patients who experienced a second episode of back pain. He notes that this clearly indicates how "extremely popular" they are with their patients.

This article will review and contrast the biomedical model with a chiropractic viewpoint and describe the recently proposed "health related quality of life model." This new paradigm, discussed in the current literature, is functionally oriented and broad enough in scope to support and embrace a more holistic model of health. I hope this information will provide chiropractors with an understanding of the current changes in models of health care and offer them a contemporary approach and orientation to patient education, one well supported by recent literature and based on the observations and conclusions of many prominent researchers in the health services.

The Biomedical Model

In 1995 Wilson, MD, MSc, and Cleary, PhD,³ reviewed the biomedical model, describing it as an approach which focuses on etiology and pathologic processes involved in disease. Its research is directed at molecular, genetic and cellular mechanisms. Disease is mediated by changes in function of cells, organs, and organ systems. Although biomedicine's approach has proven to be an effective

method for studying the mechanisms of disease and developing interventions to combat specific pathologic processes, it is limited in scope. Korr, PhD,⁴ explained in 1991 that biomedical research is based on the premise that understanding of the body can best be achieved by studying its parts and processes, taking them apart and reducing them to their components. Korr cautions that this reductionist paradigm is incomplete. It gives little importance to the organism as a whole and the environment in which the parts operate. He notes that by reducing the organism to its component parts, reductionist research conceptually eliminates the very entity it seeks to understand. What is lost is the organizational complexity, the interaction and interplay of the parts which cannot be understood nor predicted from the properties of the individual components.

Mootz, DC, DABCO,⁵ agrees with these concerns, noting in 1995 that in the process of analyzing complex systems by breaking them into components, scientists divide nature into pieces that are unnatural or meaningless -- a process of fragmentation. Scientists may assume that they can generalize from simplified, reductionist models to real world phenomena. In fact, such generalizations are exceedingly difficult.

In practice, the analytical approach of biomedicine is evident in the basic principle, "diagnosis dictates treatment." Identification of the specific causative agent is critical, because each agent gives rise to a specific disease, which necessitates a specific treatment. As Stephen Seater, CAE,⁶ executive director of FCER noted in 1995, the focus in medicine is on disease and the body is reduced to components. Medicine mostly wages war on maladies after they have manifested and against agents that transmit them. Standard medicine lacks any focus on the whole person.

In 1993, Coulter, PhD,⁷ added his voice to this choir of concern, explaining that the focus in medicine is on symptoms and specific etiologies, its purpose: to seek the cause and cure of disease entities. "The doctor intervenes between the patient and the disease. In medicine, the concept of disease has supplanted that of wellness."

Such reservations are echoed in the words of other critics of biomedicine. Both Hawkins, PhD,⁸ and Jamison,⁹ MD, PhD, EdD, offered similar criticisms about the limited focus of biomedicine. They each express concern that the focus on molecular biology and microscopic levels of disease ignores other significant factors associated with health and illness, such as patient attitude, and the healing potential of caring and empathy. The human role and social conditions of disease are disregarded. The model depersonalizes the doctor/patient relationship because the patient's perspective and experience of illness is dismissed as irrelevant to diagnosis and management. This, both authors complain, explains the dehumanization and depersonalization in orthodox medicine which places the disease rather than the patient at the center of focus.

The Health Related Quality of Life Model

In contrast, the health-related quality of life model (HRQL) places the patient's function and well-being rather than a disease at its center of focus. This patient-oriented paradigm, reviewed by Wilson and Cleary¹⁰ in 1995, is gaining increasing acceptance and influence. It offers a sound foundation in the current literature to substantiate a chiropractic approach to health care. In both the HRQL and chiropractic models, improvements of the whole person (physical, social, and role function, general health and well-being) are considered to be essential goals of health care. Accurate ways of measuring

these complex behaviors, a major focus of the HRQL model, is crucial in evaluating the severity of health problems and the effectiveness of treatment. From this vantage point, biochemical measures (white cell counts, serum albumins, and hematocrits, and clinical measures such as orthopedic and neurologic exams) are regarded as too limited in their ability to evaluate health status to be the sole determinants of the effectiveness of care. Conventional biologic measures do not accurately reflect nor correlate well with changes in the functional status of patients. Deyo, MD, MPH,¹¹ explained in 1990 that the association between physical and lab measures, and more relevant human activities (ability to sit, stand, sleep, work, travel, etc.) is weak, so functional status should be assessed in its own right. Triano, DC, MA,¹² agreed, stating in 1995 that the correlation between physical exam findings and the ability to perform activities of daily living is poor, so measures of functional status should be assessed as directly as possible.

The rise of the functionally oriented HRQL model is indicative of a major shift in defining the mission of health care. Nelson, DSc,¹³ noted this change in 1990, stating that the emphasis has been expanded from focusing primarily on the biological function of separate organ systems to encompass global, physical, and social function. In 1994, Hansen, DC,¹⁴ described the changes in very practical terms, stating that in today's patient centered management, it would be inadequate for chiropractors to merely report improvements in range of motion, reflexes or malposition on radiograph. Instead, it is expected that there be documentation of worthwhile changes in functional status of the patient to assure reimbursement for services. Jose, PhD,¹⁵ commented in 1991 that patient-oriented outcomes, such as functional status and quality of life, are at least as important as health care outcomes that evaluate changes in a patient's biological functioning or underlying pathology. It no longer suffices to focus simply on pathology, we want to know more about how the patient is functioning and feeling. In 1994 Anderson, MD, PhD,¹⁶ explained how functional measures have affected the evaluation of surgical outcomes by orthopedists. He noted that traditionally the main focus of orthopedic outcomes has been technical: Were screws appropriately placed? Did the fracture heal? Now the focus has shifted to the patient. Is the patient satisfied with the operation? Is the patient's functional ability normalized?

As the HRQL model gains increasing influence, and the acknowledgement that whole person function is an important gauge of effective health care, chiropractic's functional model emerges as a conservative, mainstream, first choice approach to achieve these goals for many neuromusculoskeletal conditions. In fact, the authoritative AHCPR clinical guidelines, Acute Low Back Problems in Adults,¹⁷ recommended only spinal manipulation as an intervention for both "symptomatic relief and functional improvement." Many literature reviews by health economists,¹⁸⁻¹⁹ epidemiologists²⁰ and other health services researchers have documented that chiropractic consistently improves patient function in a safe, conservative, and cost-effective manner; reducing the incidence of hospitalization, surgery, and the use of medications. All this is achieved with extremely high patient satisfaction, as even the recent critical Carey, MD, MPH,²¹ article acknowledged.

An understanding of the HRQL model allows chiropractors to develop an educational approach which is both attractive and soundly grounded in current concepts and opinions as published in the scientific journals by experts from many disciplines.

The next edition of this column will examine practical ways of translating this information into attractive, effective teaching methods for patients, health professionals, attorneys, jurors and other

audiences with whom chiropractors need to communicate and educate.

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