



CHIROPRACTIC AND GERIATRICS: CARE FOR THE AGING

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With the population aged 65 and older expected to double between 2011 and 2030, the health care needs that will be created by this rapid population increase will place great demands on the country's already-challenged health care system.¹ The elderly tend to suffer from chronic conditions, and often have many health problems that increase the complexity of their medical. Much of the elder population suffer from musculoskeletal conditions, such as nonspecific back and joint pain and osteoarthritis, all of which are common causes of disability and decreased function in the elderly.²

CHIROPRACTIC, A PROFESSION APART

Chiropractic is a profession apart. After acquiring three or more years of undergraduate education, doctors of chiropractic are trained in private professional institutions, most having little interaction with other health professionals. Therefore, among health professionals, little is known of the depth and breadth of chiropractic training, role and scope of practice.

The term "chiropractic", coined by the profession's founder D.D. Palmer, means "hands on healing". Chiropractic is known for its hands-on approach to health care, with the chiropractic adjustment (sometimes referred to as spinal manipulative treatment) at its core (1, 2, 3). Chiropractic is a health care discipline that emphasizes the inherent recuperative powers of the body to heal itself without the use of drugs or surgery. The practice of chiropractic focuses on the relationship between structure (primarily the spine) and function (as coordinated by the nervous system) and how that relationship affects the preservation and restoration of health. In addition, doctors of chiropractic recognize the value and responsibility of working in cooperation with other health care practitioners when in the best interest of the patient (4).

All accredited chiropractic college curricula must include at least one course with a focus on the health care needs of the geriatric population (5). The typical course in geriatrics or gerontology at a chiropractic college involves an estimated 30 hours of classroom time (6, 7).

USE OF CHIROPRACTIC HEALTH SERVICES

Over the past decade, interest in complementary and alternative medicine (CAM) in healthcare has increased with significant increases in public demand for CAM services (8). Americans' out-of-pocket expenditures on CAM health services were an estimated \$22 billion in 1997 (8). Chiropractic is, by far, the largest "alternative" health care profession, and in a recent comprehensive government survey two-thirds of all patients who sought care from a licensed CAM provider visited a doctor of chiropractic (8-12).

Even though most chiropractic patients *initially* seek care with a complaint of back pain, many *established* chiropractic patients continue to see their chiropractor for wellness or preventive-type care (13, 14). Patients of chiropractic usually see both a doctor of chiropractic and another health care provider concurrently, but for different conditions (14). The 1994 Agency for Health Care Policy and Research guidelines for acute low back pain recommended chiropractic manipulative treatment as one of the most useful, evidence-based interventions for adults with low back pain (15). Since musculoskeletal complaints are extremely common later in life, the numbers of geriatric chiropractic visits are destined to rise in congruence with recent trends in population demographics and CAM use.

DOCTORS OF CHIROPRACTIC AND INTERDISCIPLINARY TEAMS

Multidisciplinary teams have become a hallmark of many elder health programs, reflecting the growing consensus that no single discipline has all of the resources or expertise needed to appropriately care for the elderly and their health needs.

In 1994, the US government funded a study of the role of doctors of chiropractic in interdisciplinary healthcare, particularly in rural, underserved areas (16, 17). Before this time, little was known of the

1. U.S. Census Bureau 2004.

2. AGS Panel. The management of chronic pain in older persons. J Am Geriatric Soc 1998; 46(5): 635-51.

chiropractor's role in interdisciplinary healthcare, and even less was published on this topic. Since that time, the chiropractic presence on interdisciplinary teams appears to be increasing. Through US Health Resources and Services Administration funding, several projects have been undertaken to increase awareness among doctors of chiropractic regarding interdisciplinary issues and incorporate interdisciplinary elements into chiropractic educational models (17-25).

Chiropractic care is an active care model that is multi-factorial, in that it may incorporate prevention, exercise, health and wellness promotion along with the alleviation of pain (condition-based care). But, chiropractic is not the entire picture in geriatric health care. For some time now, the health care needs of the elderly have been looked after, in parallel, by a variety of practitioners. Older patients instinctively seek the care of multiple health care providers. They may see a medical doctor for periodic check-ups and for medications, a pharmacist to dispense their medications, a dentist for their teeth, a podiatrist for their feet, a chiropractor for their back, and a nurse for general assistance at home.

Much of the development of frailty can be delayed with an integrated approach to health care, with a focus on prevention. Exercises and healthful activities of daily living, as recommended by doctors of chiropractic and other health professionals, have been shown to improve functional status, decrease depression, prevent heart disease, decrease arthritic pain and improve function in persons with osteoarthritis. Maintenance of good nutrition in older persons is also a key element of a healthy lifespan and is typically recommended by doctors of chiropractic. The use of certain nutritional supplements may decrease coronary artery disease and numerous other health concerns. Chiropractic treatments, as we have observed in practice, can provide dramatic positive results as well in our older patients. All members of geriatric health care teams have an important role to play. However, if providers all independently contribute a piece to geriatric healthcare, without communicating across disciplinary lines, a great opportunity for the enhancement and efficiency of that care is lost. (26)

Older patients are often our most complex patients, possessing multiple musculoskeletal and systemic complaints, and they frequently rely on numerous medications. Given such complexity, providers should, ideally, be open to collaboration for the overall good of the patient. As our society ages, increased use of complementary and alternative healthcare services (including chiropractic), and an increase in the inclusion of doctors of chiropractic on interdisciplinary geriatric healthcare teams is almost certain. (26)

PAIN: A CLOSER LOOK

It is estimated that one-third of the population in economically developed countries suffers from chronic pain, and that spinal pain affects up to 80% of the U.S. population at some point in their lifetime (27). It has been reported that chronic pain may be more prevalent in the elderly population (28, 29, 30). About 20-50% of the elderly population living within the community suffers from pain. Statistics indicate that chronic pain in the elderly is an area of growing clinical need (28). Unfortunately, the high prevalence of chronic conditions and chronic pain in the elderly does not correspond with the proportion of elderly receiving treatment (31). Chronic pain in the elderly also may lead to depression, social isolation, functional decline and disability. In older pain patients, there is also associated morbidity and mortality from urinary and fecal incontinence, falls and pressure ulcers (32).

MAKING THE CASE FOR INTEGRATED CARE

Chronic pain is a multidimensional experience with sensory, affective and cognitive-evaluative components, each of which interacts with and contributes to the final pain response. The assessment and treatment of pain in the elderly, therefore, requires a holistic approach with sensitivity to the special concerns of this population (31).

Up to 50% of the community dwelling elderly and 80% of institutionalized elderly suffer from chronic pain and a large proportion of these individuals do not receive any form of pain treatment (31,32). This problem has only been exacerbated by the fact that the elderly have been systematically excluded from multidisciplinary pain rehabilitation programs that are known to be clinically effective (33).

The main reasons for the increased use of CAM are for chronic conditions and pain management. Chiropractic care was classified as one type of CAM (34). According to Astin in his 1998 JAMA article, anxiety, back problems and chronic pain were the most common health problems for which alternative care was sought (35).

The goals of multi-faceted (integrated) approaches to chronic pain programs are to:

1. Minimize pain;
2. Increase physical function;
3. Improve psychological well-being;
4. Reduce reliance on health care providers; and
5. Reduce reliance on pain-related medications. (33)

Such multidisciplinary chronic pain programs have a documented history of clinical efficacy (33). A meta-analysis of the efficacy of multidisciplinary pain treatment centers revealed that sample groups receiving multimodal treatment for chronic pain are superior to no-treatment, waiting list, and single-discipline treatments such as medical treatment or physical therapy. The geriatric population benefits from multidisciplinary chronic pain rehabilitation programs comparably or greater than younger chronic pain patients, even with initially greater clinical impairment (36, 37).

ROLE FOR CHIROPRACTIC CARE IN THE AGING AND RURAL POPULATIONS

Chiropractic is the most commonly used form of provider-delivered complementary health care, with 11% of American adults seeking care annually (8). Currently, more than 30% of patients with low back pain seek chiropractic care and 17% of chiropractic patients are over age 65 (11,12,38). At this rate, based on 2004 US Census figures, nearly half of all chiropractic patients will be over age 65 with the approach of the baby boomers reaching old age. Although, use of chiropractic varies by region, some studies have found it to be more frequently used in rural medically underserved areas, where there is often a shortage of health care professionals to care elderly needs.

Most often, especially among the elderly, patients will utilize chiropractic care for health conditions that other medical providers do not address (14, 39). Well over 90% of chiropractic patients' chief complaints are musculoskeletal, usually spine-related back pain, neck pain and headache, with osteoarthritis one of the more common conditions seen by doctors of chiropractic (40,41,42). Since chronic pain (usually musculoskeletal in nature) is one of the most common factors affecting function in older people, chiropractic care is highly relevant to any investigation of health status of the elderly. In fact, the 1998 guidelines on the management of chronic pain in older persons, developed by the American Geriatrics Society (AGS) panel, listed chiropractic care among the non-pharmacologic strategies for pain management, which carries few adverse effects (43). However, it should be noted that the AGS panel listed only one citation to support its recommendation pertaining to chiropractic, an Iowa study of the rural elderly published in 1985 (43). Today there are other studies that support the panel's findings.

CHIROPRACTIC RESEARCH ON AGING AND GERIATRIC CARE

While few chiropractic research efforts have focused on the care of aging patients, the practice-based studies summarize a few key points about chiropractic and geriatrics: 1. The vast majority of geriatric patients under chiropractic care are receiving health promotion and prevention recommendations about physical activities, nutrition and injury prevention (13,14); and 2. The patients who received chiropractic care in addition to traditional medical services in the long-term care setting had fewer hospitalizations and used fewer medications than patients receiving medical care only (44).

CHIROPRACTIC CARE FOR AGING PATIENTS

In clinical decision-making regarding the chiropractic care of aging patients, health status is more important than chronological age. Since geriatric patients come into chiropractic and medical practices with widely ranging levels of bone density, frailty and overall health status, it would be inappropriate to adopt a “one size fits all” care protocol for geriatric care. Fortunately, there is a wide range of chiropractic approaches, and some could be perceived as more suitable for certain patients and specific scenarios (45-48). While chiropractic is sometimes associated with the ‘popping’ or ‘cavitation’ of the spinal joints, numerous conservative management procedures including low force and soft tissue techniques have been developed within chiropractic as gentler alternatives. Many of these procedures offer potentially suitable options for older or frailer patients in need of chiropractic care (46, 48, 49).

CONCLUSIONS: CLINICAL CHIROPRACTIC GERIATRIC PRACTICE

Doctors of chiropractic are well positioned to play an important role in health promotion, injury/disease prevention, and on geriatric care teams due to their conservative patient centered practice style and holistic philosophy. The bottom line in aging care is that *someone* in the health care area *must* provide health promotion/preventive services to older patients before the baby-boom generation profoundly overwhelms our health care system. Chiropractic services are safe, effective, low cost and receive high rates of patient satisfaction (1, 10, 11, 50-52). In the managed care environment, time pressures on allopathic providers may preclude them from spending sufficient time discussing health promotion and prevention with their patients. Chiropractic care is based on an active care model. Along with the hands-on nature of chiropractic care, a strong doctor-patient relationship is forged in which health and lifestyle recommendations may be comfortably and effectively discussed.

Relative to musculoskeletal care in elderly patients, chiropractic adjustments (spinal manipulative treatment) are recommended by the Agency for Health Care Policy and Research (15) for the care of acute low back pain, and the American Geriatric Society Panel Guidelines for the Management of Chronic Pain state that non-pharmaceutical interventions such as chiropractic may be appropriate (43). Most geriatric health care providers have a limited number of options to offer patients with these complaints. Various chiropractic procedures are available as safe alternatives to drugs and surgery for musculoskeletal complaints in the older patient. Due to the prevalence of these conditions in older patients, and the success of chiropractic in caring for these patients, interdisciplinary geriatric health care teams should include a doctor of chiropractic to better facilitate a more active, healthy, aging society.

Doctors of chiropractic, who are heavily trained in health assessments, diagnosis, radiographic studies, health promotion and prevention, are excellent candidates to provide many primary health care services to aging patients. This is particularly important to a nation that is straining to provide adequate geriatric healthcare in rural areas and those areas with medical provider shortages. (53-54).

Continued improvements in geriatric education, and an increase in research and publication on chiropractic care of the aging patient are essential. As stated by Montes and Johnston in the Journal of Health Education,

“Training, as well as continual upgrading of the competencies for health educators, must include ways of dealing with the great disparities in health among populations, especially those most vulnerable and underserved. Faculty too must be prepared in ...this ever-changing health care delivery system.” (55)

In a rapidly aging society, doctors of chiropractic, (along with other health professionals) are well suited to provide optimal health care to this important segment of our society and assist them in maintaining active, quality-based lifestyles.

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