

# Best Practices for Chiropractic Care for Older Adults: A Systematic Review and Consensus Update

Cheryl Hawk, DC, PhD,<sup>a</sup> Michael J. Schneider, DC, PhD,<sup>b</sup> Mitchell Haas, DC, MA,<sup>c</sup> Paul Katz, MD,<sup>d</sup> Paul Dougherty, DC,<sup>e</sup> Brian Gleberzon, DC, MHSc,<sup>f</sup> Lisa Z. Killinger, DC,<sup>g</sup> and John Weeks<sup>h</sup>

## ABSTRACT

**Objective:** The purpose of this study was to update evidence-based recommendations on the best practices for chiropractic care of older adults.

**Methods:** The project consisted of a systematic literature review and a consensus process. The following were searched from October 2009 through January 2016: MEDLINE, Index to Chiropractic Literature, CINAHL (Cumulative Index to Nursing and Allied Health Literature), AMED (Allied and Complementary Medicine Database), Alt HealthWatch, Cochrane Database of Systematic Reviews, and Cochrane Registry of Controlled Trials. Search terms were: (manipulation, spinal OR manipulation, chiropractic OR chiropract\*) AND (geriatric OR “older adult\*”). Two reviewers independently screened articles and abstracts using inclusion and exclusion criteria. The systematic review informed the project steering committee, which revised the previous recommendations. A multidisciplinary panel of experts representing expertise in practice, research, and teaching in a variety of health professions serving older adults rated the revised recommendations. The RAND Corporation/University of California, Los Angeles methodology for a modified Delphi consensus process was used.

**Results:** A total of 199 articles were found; after exclusion criteria were applied, 6 articles about effectiveness or efficacy and 6 on safety were added. The Delphi process was conducted from April to June 2016. Of the 37 Delphi panelists, 31 were DCs and 6 were other health care professionals. Three Delphi rounds were conducted to reach consensus on all 45 statements. As a result, statements regarding the safety of manipulation were strengthened and additional statements were added recommending that DCs advise patients on exercise and that manipulation and mobilization contribute to general positive outcomes beyond pain reduction only.

**Conclusions:** This document provides a summary of evidence-informed best practices for doctors of chiropractic for the evaluation, management, and manual treatment of older adult patients. (*J Manipulative Physiol Ther* 2017;xx:1-13)

**Key Indexing Terms:** *Chiropractic; Spinal Manipulation; Aging*

<sup>a</sup> Texas Chiropractic College, Pasadena, TX.

<sup>b</sup> Department of Physical Therapy, University of Pittsburgh, Pittsburgh, PA.

<sup>c</sup> University of Western States, Portland, OR.

<sup>d</sup> Department of Geriatrics, Florida State University College of Medicine, Tallahassee, FL.

<sup>e</sup> New York Chiropractic College, Seneca Falls, NY.

<sup>f</sup> Canadian Memorial Chiropractic College, Toronto, ON, Canada.

<sup>g</sup> Palmer College of Chiropractic, Davenport, IA.

<sup>h</sup> Journal of Alternative and Complementary Medicine, Seattle, WA.

Corresponding author: Cheryl Hawk, DC, PhD, 4300 Bay Area Blvd, #4134, Houston, TX 77058. Tel.: +1-971-806-7302. (e-mail: [cherylkhawk@gmail.com](mailto:cherylkhawk@gmail.com)).

Paper submitted September 29, 2016; in revised form December 10, 2016; accepted February 2, 2017.

0161-4754

© 2017 by National University of Health Sciences. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

<http://dx.doi.org/10.1016/j.jmpt.2017.02.001>

## INTRODUCTION

Aging of the general population is a global phenomenon; the United States is similar to other developed countries in the rapid growth of older age groups.<sup>1</sup> About 15% of people who seek chiropractic care are aged 65 and older.<sup>2</sup> Like other age groups, older adults use chiropractic services most often for musculoskeletal complaints. In addition, as people live longer, increasing emphasis is being placed on their ability to function independently. The World Health Organization states that a key feature of promotion of “healthy aging” is to increase or maintain functional ability.<sup>3</sup> This may allow older people to live independently, which may be of utmost importance to them. Thus, any health care intervention that contributes to a patient’s ability to overcome activity limitations imposed by chronic pain should have a role in the care of older adults.<sup>4</sup>

In addition to managing musculoskeletal symptoms, doctors of chiropractic (DCs) may also provide a diverse

range of services to aging patients and may play an important role as a member of the health care team.<sup>5</sup> One role for DCs may be as a first-contact provider, managing both the initial assessment and management of the older adult's complaint. One recent study indicated that when the supply of DCs in a particular geographic region is greater, primary care medical visits decrease in the Medicare population in that region.<sup>6</sup> This supports that older adults may use chiropractic as the sole management for common musculoskeletal complaints.<sup>7</sup> However, chiropractors co-manage patients' conditions with other providers, particularly for older adults, who often have multiple comorbidities.<sup>6</sup> Doctors of chiropractic may play a role as members of a health care team, either in a small clinical setting or in a large system such as the Veterans Affairs (VA) clinical system.<sup>8,9</sup> Regardless of the role that the DC is providing, she or he must provide care that is both evidence based and patient centered.<sup>10</sup>

To provide older adults with the best possible care, the body of evidence for both safety and effectiveness of chiropractic care should be evaluated. This is true for musculoskeletal conditions and the other roles that the DC may play in assessing and managing disease prevention.<sup>11-13</sup> At this time, the scientific evidence has important gaps for chiropractic management of the aging population. In such cases, expert opinion may be useful in establishing best practices. In the current era of evidence-based practice, guidelines and best practice documents must be re-evaluated at regular intervals to remain current with the evidence base.<sup>14</sup> The purpose of this study was to update previously published evidence-based recommendations<sup>5</sup> on the best practices for chiropractic care of older adults.

## METHODS

### Project Overview

The project was composed of a systematic literature review and a formal consensus process to update the 2010 recommendations. An investigator experienced in systematic reviews (M.H.) led the review process to rate and summarize the relevant literature, emphasizing new evidence published after the original consensus document was developed. Based on the results of the systematic review, the Project Steering Committee revised the previous recommendations. A multidisciplinary panel of experts representing expertise in practice, research, and teaching in a variety of health professions serving the older adult population rated the revised set of recommendations. The RAND Corporation/University of California, Los Angeles (UCLA) methodology for a modified Delphi process was used to reach consensus. We chose an a priori level of agreement of 80% for acceptance.

### Human Subject Considerations

The project was approved by the University of Western States Institutional Review Board. Participants signed a consent form prior to the start of the Delphi process.

### Steering Committee

The Steering Committee (SC) was responsible for drafting and approving the original seed statements and for revising statements as per the Delphi panelists' comments, for statements on which agreement was not reached. The SC was composed of the project director and co-director, 3 DCs either teaching geriatrics courses or working with geriatric patients, a medical physician specializing in geriatrics, and a journal editor.

### Systematic Review

Literature that had been published since the beginning of the original consensus project was reviewed; thus, the start date for the search was October 1, 2009, and the end date was January 31, 2016. Our literature search was designed to answer 2 general questions: (1) "What is the effectiveness of chiropractic care, including spinal manipulation, for conditions experienced by older adults?" (2) "What are the adverse events associated with chiropractic care including spinal manipulation among older adults?" To state question 1 in terms of PICO (Population, Intervention, Comparison, Outcome): the population was older adults (aged 65 and older); the interventions were chiropractic care or spinal manipulation; type of comparison group and outcome were unspecified so as not to be exclusive. We did not specify outcomes in great detail because we intended only to summarize relevant findings; we did not plan to pool data because of the expected heterogeneity of studies. Actual outcomes included changes in pain, function, and/or quality of life. The inclusion and exclusion criteria for effectiveness and efficacy studies are illustrated in Figure 1.

**Search Strategy.** The following databases were included in the search: MEDLINE Complete, Index to Chiropractic Literature, CINAHL, AMED (Allied and Complementary Medicine Database), Alt HealthWatch, Cochrane Database of Systematic Reviews, and Cochrane Registry of Controlled Trials. Search terms were: (manipulation, spinal OR manipulation, chiropractic OR chiropract\*) AND (geriatric OR "older adult\*"). Two reviewers independently screened articles and abstracts. We did not extract further data.

The literature search on safety was conducted at the same time as the search effectiveness, using the same databases. The rationale for broadening the inclusion criteria was that studies of harm are not typically designed as randomized trials and often are published as individual case reports or cases series. Search terms were: (manipulation, spinal OR manipulation, chiropractic OR chiropract\* OR manual therapies) AND (geriatric OR "older adult\*") AND (harm OR risk OR adverse event\* OR adverse effect\*). An additional hand search was conducted.

**Evaluation of Articles.** To address the general question about effectiveness, we evaluated the literature using several validated rating tools, depending on the type of study. Systematic reviews were rated with the AMSTAR checklist<sup>15,16</sup>; randomized controlled trials (RCTs) with the

Download English Version:

<https://daneshyari.com/en/article/5564142>

Download Persian Version:

<https://daneshyari.com/article/5564142>

[Daneshyari.com](https://daneshyari.com)