

ADVERSE EVENTS DUE TO CHIROPRACTIC AND OTHER MANUAL THERAPIES FOR INFANTS AND CHILDREN: A REVIEW OF THE LITERATURE

Angela J. Todd, MSc,^a Matthew T. Carroll, PhD,^b Anske Robinson, PhD,^c and Eleanor K.L. Mitchell, PhD^{c,d}

ABSTRACT

Objective: The purpose of this study was to review the literature for cases of adverse events in infants and children treated by chiropractors or other manual therapists, identifying treatment type and if a preexisting pathology was present.

Method: English language, peer-reviewed journals and non-peer-reviewed case reports discussing adverse events (ranging from minor to serious) were systematically searched from inception of the relevant searchable bibliographic databases through March 2014. Articles not referring to infants or children were excluded.

Results: Thirty-one articles met the selection criteria. A total of 12 articles reporting 15 serious adverse events were found. Three deaths occurred under the care of various providers (1 physical therapist, 1 unknown practitioner, and 1 craniosacral therapist) and 12 serious injuries were reported (7 chiropractors/doctors of chiropractic, 1 medical practitioner, 1 osteopath, 2 physical therapists, and 1 unknown practitioner). High-velocity, extension, and rotational spinal manipulation was reported in most cases, with 1 case involving forcibly applied craniosacral dural tension and another involving use of an adjusting instrument. Underlying preexisting pathology was identified in a majority of the cases.

Conclusion: Published cases of serious adverse events in infants and children receiving chiropractic, osteopathic, physiotherapy, or manual medical therapy are rare. The 3 deaths that have been reported were associated with various manual therapists; however, no deaths associated with chiropractic care were found in the literature to date. Because underlying preexisting pathology was associated in a majority of reported cases, performing a thorough history and examination to exclude anatomical or neurologic anomalies before applying any manual therapy may further reduce adverse events across all manual therapy professions. (*J Manipulative Physiol Ther* 2015;38:699-712)

Key Indexing Terms: *Chiropractic; Manual Therapy; Safety; Infant; Children; Pediatrics; Patient Harm; Adverse Effects*

A 2010 survey of doctors of chiropractic across Europe and the United States¹ found that 5% to 11% of their client visits were pediatric patients, with an earlier worldwide study reporting in excess of 30 million chiropractic treatments are given to children

annually.² The safety of chiropractic care for infants and children has been questioned by health practitioners and community members.³⁻⁸ In Australia, the Friends of Science in Medicine has called for a ban on chiropractic care for children, claiming that heavy manipulation puts the lives of children at risk⁹ based on the inaccurate reporting of a child having suffered a neck fracture after chiropractic therapy (dural tension technique and cranial therapy). A report by the Australian Health Practitioners Registration Authority (AHPRA)¹⁰ cleared the chiropractor of any wrongdoing when expert radiological evidence showed the child had an undetected congenital cervical spondylolysis and there was no evidence of a fracture. Vohra et al⁸ note that chiropractic management of infants and children safety data is virtually nonexistent, and others also express concern about the lack of beneficial evidence supporting chiropractic care for children.¹¹ This further highlights the stated need for more randomized controlled trials (RCTs).¹ However, in contrast to this reported lack of evidence, Rome¹² insists that there has been a considerable number of research articles and textbooks published in Europe espousing the benefits of manual therapy for children and infants, particularly the work of Biedermann.¹³ A consensus

^a Chiropractor, Private Practice; PhD Student, Department of Rural and Indigenous Health, Faculty of Medicine, Nursing and Health Sciences, School Of Rural Health, Moe, Victoria, Australia.

^b Senior Research Fellow, School of Rural Health–Churchill, Monash University, Churchill, Australia.

^c Lecturer, Department of Rural and Indigenous Health, School of Rural Health, Monash University, Moe, Australia.

^d Lecturer, School of Rural Health–East Gippsland, Monash University, Bairnsdale, Australia.

Submit requests for reprints to: Angela J. Todd, B.App.Sci (Chiro) Grad Dip (Chiro Paed) MBIomedSc, PO Box 1500 Sale, Victoria 3850, Australia. (e-mail: angela@toddchiro.com.au).

Paper submitted June 16, 2014; in revised form August 19, 2014; accepted August 28, 2014.

0161-4754

Copyright © 2015 by National University of Health Sciences.

<http://dx.doi.org/10.1016/j.jmpt.2014.09.008>

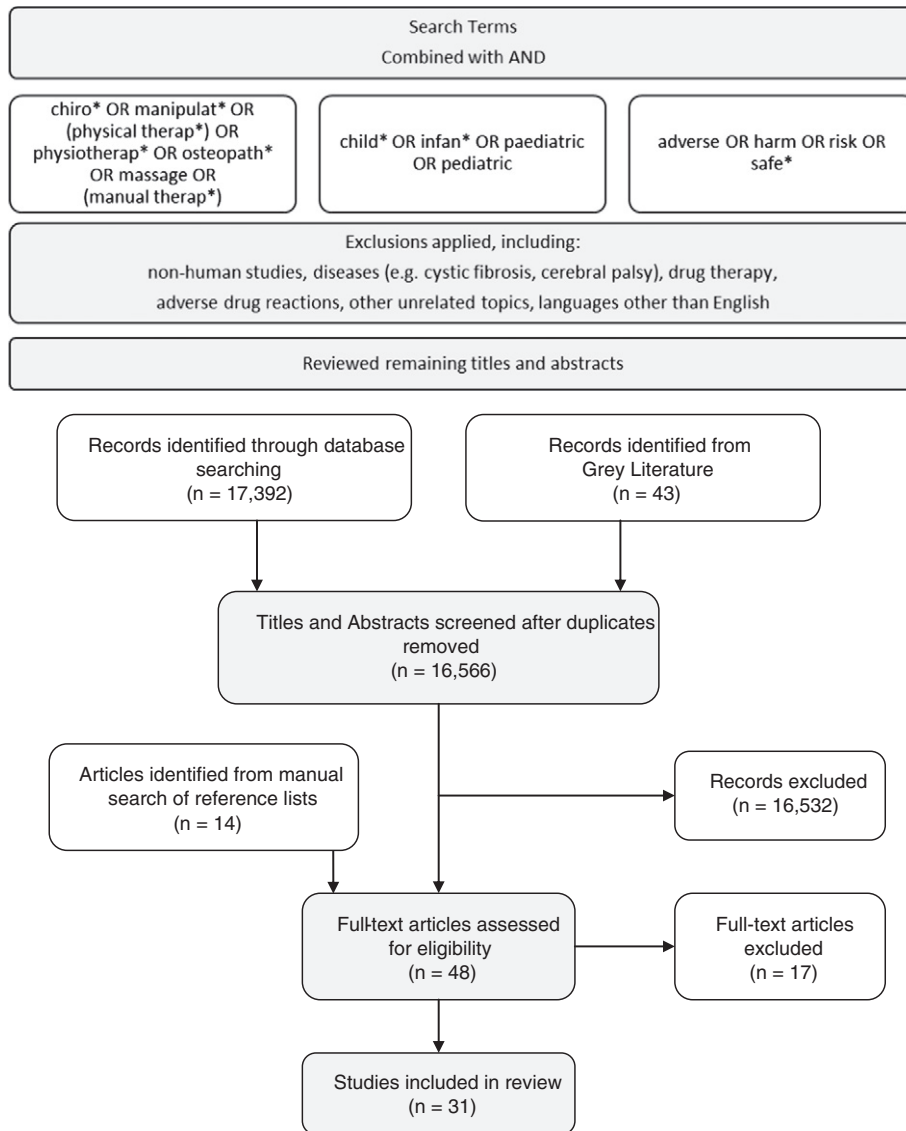


Figure 1. Search strategy.

document¹⁴ supported the recommendation for standards of chiropractic care developed for children and clearly outlined best practice for the chiropractic care of infants, children, and adolescents, including when a therapeutic trial is reasonable, using evidence-based practice, as well as altering technique selection and application based upon the unique anatomy and physiology of infants, children, and adolescents.

It is not clear if the publicized concerns about the safety of chiropractic and other manual treatments for infants and young children are supported by published evidence. Therefore, the purpose of this review is to examine all reported cases of serious adverse events caused by practitioners who apply manual therapies (ie, chiropractors/doctors of chiropractic, physical therapists, medical physicians,

doctors of osteopathy, and other manual therapists) when caring for infants and children, with particular focus on the types of treatment applied, the field of the treating practitioner, and whether a preexisting, undiagnosed pathology was present.^{8,15}

METHODS

The scientific literature was systematically searched using the terms summarized in Figure 1 in the locations listed in Table 1. The search of published peer-reviewed articles and gray literature included events documented by any manual therapy health provider (ie, chiropractors/

Download English Version:

<https://daneshyari.com/en/article/2620502>

Download Persian Version:

<https://daneshyari.com/article/2620502>

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