

Evidence in Action

Is Chiropractic Care Really Safe for Kids?

By Michelle Barber, DC

ABSTRACT: In this column, educators and researchers from Palmer College of Chiropractic explore questions of clinical interest to *JACA Pages* readers. We offer tips on weighing and making good use of evidence as part of the everyday practice of chiropractic.

Doctors of chiropractic (DCs) often recommend treatments for infants and children when clinically indicated. It seems completely logical to practitioners that parents would want their children to experience the benefits of chiropractic care beginning early in life. The chiropractic belief system emphasizes the importance of maintaining proper spinal alignment as a means of prevention, as well as maintaining good health. Many adult patients have embraced this chiropractic lifestyle, yet when DCs encourage treatments for children, a common response is, “Is that really safe?” or “I don’t know. That seems like it could be danger-

ous.” While many practitioners assure patients that chiropractic care is both efficacious and safe for children, what does the evidence actually tell us about its safety?

AN EVIDENCE-BASED APPROACH: Rather than simply asserting confidently that chiropractic care is safe for children, you could instead do a quick and simple search of the literature for evidence. You turn to a popular search engine, PubMed (www.ncbi.nlm.nih.gov/pubmed), and enter the search terms chiropractic, children and safety. This fast, easy search turns up 24 results. Not only that, but the first result seems to be just the ticket.¹

YOU FIND THE FOLLOWING STUDY: Todd AJ, Carroll MT, Robinson A, Mitchell EK. Adverse events due to chiropractic and other manual therapies for infants and children: A review of the literature. *J Manipulative Physiol Ther.* 2014 Oct

30. pii: S0161-4754(14)00178-X. doi: 10.1016/j.jmpt.2014.09.008. [Epub ahead of print]

OBJECTIVE: The purpose of this study was to review the literature for cases of adverse events in infants and children treated by doctors of chiropractic or other manual therapists. The focus was on identifying treatment type and preexisting pathologies.

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 one 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 three deaths that have been reported were associated with various manual therapists; however, no deaths associated with chiropractic care have been 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.



Dr. Michelle Barber, MSW, is an assistant professor in the Life Sciences Department at Palmer College of Chiropractic, Davenport, Iowa.

What Does This Mean to You?

Previously, there has been a lack of specific evidence regarding the safety of chiropractic treatments for children. Many other health professionals have suggested to parents that chiropractic care of children is dangerous and should not be performed. Doctors of chiropractic have attempted to assure parents and children that treatments were safe based primarily on a firm belief and trust in the profession.

After perusing this very recent systematic review, it certainly seems to indicate that the number of adverse events occurring in children in response to chiropractic treatments is extremely low. Armed with these data, DCs can now speak to skeptics and critics with an informed point of view based on current research evidence, and not just personal beliefs. In fact, the conclusion offered by the authors of the review is very well-stated and could be used as the linchpin of the conversation with parents who express concern: "There have been no cases of deaths associated with chiropractic care reported in the academic literature to date."

Furthermore, the very few cases of injury/adverse outcomes were associated with underlying pathologies. The authors of the study recommend that practitioners perform "a thorough history and examina-

tion to exclude anatomical or neurologic anomalies before the provision of care." Finally, it is worth noting that the adverse incidents that did occur were associated with high-velocity, extension and rotational thrusts, so it would be judicious and prudent for doctors of chiropractic to exercise caution and to avoid the combination of extension and rotation during the delivery of chiropractic treatments to children. Equipped with this knowledge, doctors of chiropractic can now educate, inform and assure parents with a new level of confidence that chiropractic care is very likely to be safe for children. ■

Note on terms used:

Systematic Review: A systematic review is a critical assessment and evaluation of all research studies that address a particular clinical issue. The researchers use an organized method of locating, assembling and evaluating a body of literature on a particular topic using a set of specific criteria. A systematic review typically includes a description of the findings of the collection of research studies.²

References

1. Todd AJ, Carroll MT, Robinson A, Mitchell EK. Adverse events due to chiropractic and other manual therapies for infants and children: A review of the literature. *J Manipulative Physiol Ther.* 2014 Oct 30. pii: S0161-4754(14)00178-X. doi: 10.1016/j.jmpt.2014.09.008. [Epub ahead of print]
2. Agency for Healthcare Research and Quality Glossary of Terms (<http://effectivehealthcare.ahrq.gov/index.cfm/glossary-of-terms>). Accessed online 14 April 2015.



ENGAGE. LEAD. UNITE.
Making Change Matter

NATIONAL CHIROPRACTIC LEADERSHIP CONFERENCE
Hyatt Regency on Capitol Hill ★ Washington, D.C.

SAVE THE DATE
February 24–27, 2016

