

By Elise G. Hewitt, DC

Doctors of chiropractic have likely been treating children since the inception of the profession. With the evidence base for our profession growing, new studies support both the safety and efficacy of pediatric chiropractic care.

Joyce Miller, et al. performed a single-blind, randomized, controlled trial evaluating the efficacy of chiropractic manual therapy for colicky infants.<sup>1</sup> The infants were randomized into three groups: 1) treatment with parent blinding; 2) treatment with parent aware; and 3) control group receiving no treatment, with parent blinding. (Parent blinding means parents are unaware of whether or not their infant receives treatment.)

The authors designed an ingenious method to blind the parents. Blinded parents placed their infant on the examination table, and then sat behind a screen, so they could hear, but not see, the intervention. The clinician then recited the same scripted words for all blinded patients, though the clinician only treated infants in the treatment groups, leaving infants in the non-treatment group untouched.

To evaluate the results during the ten-day treatment period, parents filled out a 24-hour diary, recording crying time, as well as their impression of overall change. Infants in both treatment groups decreased their crying time by 44 percent (blinded) and 51 percent (non-blinded), while infants in the no-treatment control group reduced their crying time by 18 percent.

Lack of parental blinding has been cited in the past as a source of bias in studies of chiropractic care for colicky infants, implying that parents with knowledge of treatment report less crying. The results of this latest study address this by showing that parental blinding does not influence outcomes, since there were no significant differences in reported crying time between those parents blinded and not blinded.

Miller, et al. concluded, "This study found that excessively crying infants were at least five times as likely to cry significantly less if they were treated with chiropractic manual therapy than if they were not treated."

Dr. Miller's results indicate that chiropractic may help colicky babies cry less. But is it safe to treat children with chiropractic manual therapy?

Dr. Doyle addressed this question in his 2011 literature review.<sup>2</sup> He found that no serious adverse events have been reported in the scientific literature since 1992. He concluded, "The application of modern chiropractic pediatric care within the outlined framework is safe. A reasonable caution to the parent/guardian is that one child per 100 to 200 attending may have a mild adverse event, with irritability or soreness lasting less than 24 hours, resolving without the need for additional care beyond initial chiropractic recommendations."

Children represent a substantial portion of chiropractic patients. In a 2008 study published in the journal *Pediatrics*, Kemper, et al. reported up to 14 percent of all chiropractic visits were for pediatric patients.<sup>3</sup> Vohra, et al. estimated that there were 30 million pediatric visits to the chiropractor in 1997.<sup>4</sup>

Since Dr. Doyle found no published cases of serious adverse events in the past 20 years, given such large pediatric chiropractic utilization rates, it is quite reasonable to conclude that modern pediatric

chiropractic care is safe. Using Dr. Miller's colic study as an example, pediatric chiropractor manual therapy has been shown to be very helpful for children and their families.

If you would like to keep abreast of the latest research regarding pediatric chiropractic, become a member of the ACA's Pediatrics Council by visiting <http://acapedscouncil.org>.

#### References

1. Miller JE, Newell D, et al. Efficacy of chiropractic manual therapy in infant colic: a pragmatic single-blind, randomized controlled trial. *J Manipulative Physiol Ther.* 2012;35:600-607.
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3. Kemper KJ, Vohra S, Walls R, the Task Force on Complementary and Alternative Medicine and the Provisional Section on Complementary, Holistic, and Integrative Medicine The Use of Complementary and Alternative Medicine in Pediatrics. *Pediatrics.* 2008;122;1374-1386.
4. Vohra S, Johnston BC, Cramer K, Humphreys K. Adverse events associated with pediatric spinal manipulation: a Dr. Hewitt is president of ACA's systematic review. *Pediatrics.* 2007;119:275-283.