

# ACA PEDIATRICS COUNCIL

## POSITION STATEMENTS

### Topic: Safety of Chiropractic Care for Children

- 1) **Doctors of chiropractic receive a physician-level education.**
  - a) Doctors of chiropractic are physicians with a 4-year doctorate degree and over 4500 hours of study in subjects including anatomy, physiology, neurology, biomechanics, orthopedics, radiology and nutrition.
  - b) Training includes coursework on examination, diagnosis and patient management, including appropriate referral and co-management.
  
- 2) **Chiropractic care is utilized by millions of children.**
  - a) A 2012 study of 20 European countries found children represented 8.1% of European chiropractic practices.<sup>1</sup>
  - b) A 2007 study in the journal *Pediatrics* estimated there were 30 million annual pediatric visits to doctors of chiropractic in the U.S.<sup>2</sup>
  - c) Another study, also in *Pediatrics*, estimated that 14% of chiropractic visits were for pediatric patients.<sup>3</sup>
  - d) In 2008, the CDC reported that chiropractic was the most common form of doctor-directed complementary or alternative medicine used by children in the U.S.<sup>4</sup>
  - e) A 2004 survey estimated 31% of Canadian children visited a doctor of chiropractic.<sup>5</sup>
  
- 3) **Despite high utilization rates, the incidence of adverse events is rare.**
  - a) A 2014 review of compensation claims over a nine-year period in Denmark and Norway (where chiropractic care is part of the national health plans) found that - while children regularly consult doctors of chiropractic and up to 35% of pediatric patients in Denmark are infants - the number of compensation claims for adverse events in the pediatric age group in both countries was zero.<sup>6</sup>
  - b) A 2014 review examined all published cases of serious adverse events in infants and children caused by practitioners of manual therapies – doctors of chiropractic, doctors of osteopathy, medical doctors, physical therapists, etc. The authors found 12 reported cases of serious adverse events (seven of which involved a chiropractor) and three reported deaths (none of which involved a chiropractor) in over 115 years of literature. The authors concluded, “Published cases of serious adverse events in infants and children receiving chiropractic (and other) manual therapy are exceedingly rare. There have been no cases of deaths associated with chiropractic care reported in the academic literature to date.”<sup>7</sup>
  - c) A 2011 literature review of adverse events related to pediatric chiropractic care found “...no serious adverse event has been reported in the literature since 1992... The application of modern chiropractic paediatric care within the outlined framework is safe.”<sup>8</sup>

- d) A 2008 study of pediatric patients under 3 years of age (73% of whom were under 13 weeks) who had received a total of 5242 chiropractic treatments at a teaching clinic over a three-year period found no serious adverse events.<sup>9</sup>
  - e) A 2007 literature review of spinal manipulation in children found a total of five reported cases of serious adverse events and no deaths related to pediatric chiropractic care in a 110-year period.<sup>1</sup>
- 4) Since doctors often combine a variety of treatment options for their patients, it is useful to compare the rates above to the incidence of adverse events for other commonly used pediatric medical interventions.**
- a) A 2009 review of adverse events related to medication use in children found the mean number of visits by children to the emergency department due to adverse drug events was 131,142 *per year*. The most frequently implicated drugs were antibiotics.<sup>10</sup>
  - b) Another study estimated that drug therapy is associated with an average of 243 deaths *per year* in children less than 2 years of age.<sup>11</sup>
- 5) The safety record of chiropractic care is supported by the insurance industry.**
- a) Malpractice insurance premium rates are based upon risk – the higher the risk of injury from a given treatment, the higher the malpractice insurance rates for providers of that specialty.
  - b) Doctors of chiropractic have the lowest malpractice insurance rates of all primary health care providers in the United States (including medical doctors and osteopaths), meaning the services provided by a doctor of chiropractic carry the lowest risk of harm.
  - c) Doctors of chiropractic who treat children have the same malpractice insurance rates as those who treat adults, meaning pediatric chiropractic care carries no increased risk.
- 6) Studies show chiropractic care can help infants and children with various health issues such as nursing difficulties, colic and asthma.**
- a) A 2012 study of colicky babies found daily crying time decreased by 48% in those babies who received chiropractic care compared to 18% in babies who received no chiropractic treatment.<sup>12</sup>
  - b) In a 2009 study of babies aged 2 days -12 weeks with feeding problems referred by a hospital or lactation consultant to a chiropractic teaching clinic, 78% of the babies were able to exclusively breastfeed after 2-5 treatments within a 2-week period.<sup>13</sup>
  - c) A 2001 study of children with asthma found when chiropractic manual therapy was added to standard medical treatment for pediatric asthma, "...children rated their quality of life substantially higher and their asthma severity substantially lower."<sup>14</sup>
- 7) Parents who bring their children to a chiropractor are highly satisfied with the care and experience.**

- a) In the 2008 study noted above that examined 781 pediatric patients under 3 years of age (73% of whom were under 13 weeks) who received 5242 chiropractic treatments over a 3-year period, 85% of parents reported improvement in their children's symptoms.<sup>6</sup>

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<sup>1</sup> Marchand AM. Chiropractic care of children from birth to adolescence and classification of reported conditions: an internet cross-sectional survey of 956 European chiropractors. *J Manipulative Physiol Ther* 2012;35(5):372-380.

<sup>2</sup> Vohra S, Johnston BC, Cramer K, Humphreys K. Adverse events associated with pediatric spinal manipulation: a systematic review. *Pediatrics*. 2007;119:275-283.

<sup>3</sup> Kemper KJ, Vohra S, et al. American Academy of Pediatrics. The Use of Complementary and Alternative Medicine in Pediatrics *Pediatrics* 2008; 122(6):1374-1386

<sup>4</sup> Barnes PM, Bloom B, et al. Complementary and Alternative Medicine Use Among Adults and Children: United States, 2007 National Health Statistics Reports. Centers for Disease Control and Prevention. December 10, 2008, (No. 12).

<sup>5</sup> Goldman RD, Vohra S. Complementary and alternative medicine use by children visiting a pediatric emergency department. *Can J Clin Pharmacol*. 2004;11:e245–e256

<sup>6</sup> Jevne J et al. Compensation claims for chiropractic in Denmark and Norway 2004-2012. *Chiropractic and Manual Therapies* 2014;22:37.

<sup>7</sup> Todd AJ, Carroll MT, et al. Adverse events due to chiropractic and other manual therapies of infants and children: a review of the literature. *J Manipulative Physiol Ther* 2014: article in press.

<sup>8</sup> Doyle, M.F. Is chiropractic paediatric care safe? A best evidence topic. *Clinical Chiropractic* 2011;volume 14, issue 3, pp. 97 – 105.

<sup>9</sup> Miller JE, Benfield K. Adverse effects of spinal manipulation therapy in children younger than 3 years: a retrospective study in a chiropractic teaching clinic. *Jour Manip Physiol Ther* 2008;31(6):419-422.

<sup>10</sup> Bourgeois FT, Mandl KD et al. Pediatric Adverse Drug Events in the Outpatient Setting: An 11-Year National Analysis *Pediatrics* 2009;124:e744-e750.  
[www.pediatrics.org/cgi/content/full/124/4/e744](http://www.pediatrics.org/cgi/content/full/124/4/e744)

<sup>11</sup> Moore TJ, Weiss SR, Kaplan S and Blaisdell CJ. Reported adverse drug events in infants and children under 2 years of age. *Pediatrics* 2002;110:e53.

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<sup>12</sup> 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(8):600-607.

<sup>13</sup> Miller JE, Miller L, et al. Contribution of Chiropractic Therapy to Resolving Suboptimal Breastfeeding: A Case Series of 114 Infants *J Manipulative Physiol Ther* 2009;32(8):670-674.

<sup>14</sup> Bronfort G, Evans RL, Kubic P, Filkin P. Chronic pediatric asthma and chiropractic spinal manipulation: A prospective clinical series and randomized clinical pilot study. *Jour Manip Physiol Ther* 2001; 24(6): 369-377.