"Chiropractic Spinal Manipulation of Children under 12": Safer Care Victoria's independent review

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In August of 2018, the Minister of Health for the State of Victoria in Australia commissioned an independent review of spinal manipulation in children. This commission was the result of video footage of a chiropractor treating an infant that appeared in social media. The review, "Chiropractic Spinal Manipulation of Children under 12: Independent Review" was published in October 2019 and is available at http://bit.ly/SCVpaediatric. The World Federation of Chiropractic (WFC) published a report November 1, 2019, that summarized the review and is available at the WFC website.

The review's findings were based on a systematic review of the evidence on both safety and effectiveness by Cochrane Australia and online interviews with parents and practitioners.

Spinal manipulation was defined, for this review, as "any technique delivered by any health professional that involves a high velocity, low amplitude thrust beyond the physiological range of motion, impacting the spine, within the limits of anatomical integrity."[1,p.2]

Safety

The review reported that its "extensive search identified very little evidence of patient harm occurring in Australia. In particular, there were no patient complaints or practitioner notifications that arose from significant harm to a child following spinal manipulation."[1,p.3]

The scarcity of any evidence of harm was attributed to the fact that chiropractors rarely use spinal manipulation, as defined for the review, for children younger than two years and modify their manipulative techniques to avoid high-velocity, low-amplitude thrust techniques.

Effectiveness

The Cochrane review included 13 studies which addressed chiropractic treatment of children with these conditions: colic, enuresis, back/neck pain, headache, asthma, otitis media, cerebral palsy, hyperactivity and torticollis. The conclusion was that there was little evidence for spinal manipulation for any of these conditions, although there was unclear but favorable evidence for spinal manipulation possibly decreasing crying time (colic) and wet nights (enuresis).

Public opinion

In contrast to the conclusions of the Cochrane review, which only considers the highest quality evidence–and in this case was restricted to a very short list of studies–99.7% of the 21,824 general public parents who had used chiropractic care for children reported that their experience was positive, with 98% reporting that symptoms had improved. The 0.3% whose experience was negative experience listed the main reasons for this as cost, excessive x-ray use, perceived pressure to avoid medications or other health professionals. Parents strongly expressed their right to choose their children's care. They most commonly reported seeking care for their children for:

- Posture
- Colic
- Neck pain
- Breastfeeding issues
- Back pain
- Headache

Chiropractic practitioners

Of the 2315 Australian DCs who responded to the online interviews, 80% treat infants aged 0-3 months and 88% children aged 0-24 months.

With respect to outcomes of care, it is noteworthy that the DC respondents did not express outcomes in terms of condition resolution ("cure"). Instead, they reported functional improvement, with the most commonly reported positive outcomes in child patients being (in order of frequency): *pain relief, improved sleep quality, more relaxation, better feeding/latching, and improved mobility.*

Take-home messages

Everyone agrees that chiropractic care is low risk.

This is a welcome message to the public and to any practitioners who care for children! In this, there is no dissonance among public, practitioner and research opinions and conclusions. Of course, *low risk* is not *no risk*, and so risks and benefits must be weighed. It appears that the public weighs the benefits higher than the risks, but the public health experts do not–and therefore recommend against wellness care for children.

There is a gap between the findings of the Cochrane review and the perceptions of chiropractic patients and practitioners in terms of effectiveness.

The reason for this gap may be in large part due to the reality of the chiropractic clinical encounter, which is not exclusively spinal manipulation. Chiropractors also

provide positive support to parents and children; diet, exercise and lifestyle advice; a high-touch approach (which is therapeutic in its own right)–along with various types of spinal manipulation and mobilization. We don't know whether one of these factors is effective on its own; it may be that the unique combination is what "works." On the other hand, randomized controlled trials, the "gold standard" of research, require that an "active" intervention be isolated as much as possible from every other aspect of the clinical encounter–which is quite likely why patients and parents experiencing real-life chiropractic practice report much more positive outcomes than are found in highly controlled and highly artificial research settings.

Another factor may be that a very basic premise of chiropractic practice differs from that of biomedicine: chiropractic focuses on a *patient* whose function is suboptimal, rather than on curing a *disease*. Thus an infant who has colic or a child with asthma would not be treated for a disease; the practitioner would assess him or her for musculoskeletal restrictions and use manual techniques to correct them. Consequently, the treatment might be different for different children. Again, this makes it difficult to conduct a highly controlled experimental study in which all patients must have the same treatment.

Conclusion

We as chiropractors should endeavor to continue providing the highest standard of safety to all our patients, including children, and follow "best practices," which include attention to the best available scientific evidence, to do so.[2-5] We should also be honest and cautious in making claims about "treating" specific diseases or conditions and "curing" them. Science hasn't advanced enough to determine exactly which elements of the clinical encounter are most important in helping infants and children function more optimally–and it's quite likely that it is a combination of many of these elements. Until it does, we need to continue to guard young patients' safety above all else, and continue to provide high-touch manual care to improve their ability to achieve optimal function.

Our responsibilities are to our young patients, to follow the tenets of integrating best evidence with best clinical practices and continuing to support those in our field who are designing and developing research protocols and data collection to help support our outcomes with an evidence base.

References

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