

Direction of the Evidence

Locating the Spinal Subluxation

By Ron Feise, DC

Mirtz TA, Morgan L, Wyatt LH, Greene L. An epidemiological examination of the subluxation construct using Hill's criteria of causation. *Chiropr Osteopat* 2009;17:13.

Synopsis. This was a review of current evidence on the epidemiology of the subluxation construct in order to evaluate the subluxation by applying epidemiologic criteria for its significance as a causal factor. PubMed, Cinahl, and Mantis were searched for studies using the key words subluxation, epidemiology, manipulation, dose response, temporality, odds ratio, relative risk, biological plausibility, coherence, and analogy.

The criteria used in this study for causation were strength (strength of association), consistency, specificity, temporality (temporal sequence), dose response, experimental evidence, biological plausibility, coherence, and analogy. Overall, there were no studies that established an acceptable connection of evidence to the chiropractic subluxation construct.

References

1. Najm WI, Seffinger MA, Mishra SI, Dickerson VM, Adams A, Reinsch S, Murphy LS, Goodman AF. [Content validity of manual spinal palpatory exams - A systematic review.](#) *BMC Complement Altern Med* 2003;3:1.
2. Seffinger MA, et al. Reliability of spinal palpation for diagnosis of back and neck pain: a systematic review of the literature. *Spine* (Phila Pa 1976) 2004;29:E413-25.
3. Bronfort G, Haas M, Evans R, Leininger B, Triano J. Effectiveness of manual therapies: the UK evidence report. *Chiropr Osteopat* 2010;18:3.

Research Quality. Overall, this study had good methodological rigor. *Quality Details:* This study used the following: 1) appropriate design; 2) a clearly focused question; 3) appropriate inclusion criteria; 4) a clearly described and thorough search of the literature; and 5) a conclusion that flowed from the evidence.

Conclusion. Evidence is lacking to fulfill the basic criteria of causation.

Comment. Other researchers agree with the finding that there is a lack of supportive evidence for the chiropractic subluxation being associated with any disease process or the creation of suboptimal health conditions requiring intervention. Najm et al. found no palpatory exams with good diagnostic validity, and Seffinger et al. found that spinal palpatory tests lacked reliability.^{1,2} These findings are not in conflict with the benefits of spinal manipulation for musculoskeletal conditions including neck pain, back pain, and headache.³ However, our profession needs quality research to establish clinical tests that can provide practitioners with reliable, valid, and clinical-

ly useful examination protocols.

Warning. Practitioners should not automatically use information from research studies (especially abstracts) to make decisions about patient care because health care literature suffers from inconsistent quality and frequently distorts research findings. Before relying on the findings of a research study, a practitioner should perform a critical appraisal to determine whether the conclusion is supported by the study's data. He or she should also locate and examine previous relevant research in order to integrate the current findings and form a conclusion based on the preponderance of quality evidence. Even conclusions from multiple studies do not provide a definitive answer. Instead, they indicate the *direction* of the evidence. ■

This review is an excerpt from *Direction of the Evidence*, published by the Institute of Evidence-Based Chiropractic, whose aim is the enhanced integration of science into chiropractic. Dr. Feise can be reached at rjf@chiroevidence.com.