

**DO BELIEFS AND KNOWLEDGE ABOUT SPINAL HIGH-VELOCITY LOW-AMPLITUDE (HVLA) MANIPULATIONS DIFFER BETWEEN INDIVIDUALS WITH OR WITHOUT A HISTORY OF SPINAL HVLA MANIPULATION(S) ?**

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**Background:** Spinal High-Velocity Low-Amplitude (HVLA) manipulations have been used for years in the management of patients with spinal pain. Despite the miles of paper on the topic, they generally remain enigmatic for the general population. Furthermore, although strong evidence exists regarding the influence of patients' (mis)beliefs, little is known regarding individuals' knowledge and beliefs about spinal HVLA manipulations.

**Purpose:** The aims of the present work were to investigate individuals' knowledge and beliefs regarding spinal HVLA manipulations and to compare them in participants with or without a history of such manipulations.

**Methods:** Sixty participants (no-HVLA group) without a history of spinal HVLA manipulations (i.e., 20 asymptomatic without history of spinal pain, 20 asymptomatic with a history of spinal pain and 20 with present spinal pain) and 40 (HVLA group) with a history of spinal HVLA manipulation(s) (i.e., 20 asymptomatic with a history of spinal pain and 20 with present spinal pain) were included in the present study. They all attended an individual session during which they were interviewed by means of a standard questionnaire with open questions about their present (or history of) spinal pain as well as about their experience, beliefs and knowledge (e.g., effects, indications, contraindications, risks, the source of the cracking or popping noise commonly reported, etc.) regarding spinal HVLA manipulations.

**Results:** The study population (57 females and 43 males) had a mean age of  $43.5 \pm 15.4$  years old. The participants reporting present spinal pain ( $\geq 70\%$  of low back pain in both groups) had a mean duration of pain of  $13.8 \pm 11.2$  years old. 77.5% of the participants of the HVLA group received more than one manipulation; 87% received the manipulation(s) by an osteopath. No significant differences were observed between the no-HVLA and the HVLA groups regarding the demographic statistics. Most participants in both groups held a positive opinion of the spinal HVLA manipulations: 77.5% and 91.7% of participants in the HVLA and no-HVLA groups reported to be ready to receive them (again) in case it is needed. The knowledge and beliefs about the HVLA manipulations were also similar in both groups: most participants had a wrong or very limited knowledge of the clinical effects, the contraindications, the risks of spinal HVLA manipulations and of the source of the cracking/popping noise ( $>70\%$  participants evoking vertebrae put back into place or a friction between two vertebrae), etc. More than 25% of participants in both groups also reported that patients with long lasting spinal pain could be treated only with spinal HVLA manipulations.

**Conclusion:** The present study points out the positive view of the general population regarding spinal HVLA manipulations but also a lack of knowledge and some misbeliefs about them which might have negative impacts in case of spinal pain. Surprisingly, no differences were observed between individuals who have or have not received manipulations in the past.

**Implications:** Clinicians, especially those performing spinal HVLA manipulations, should be aware of patients' lack of knowledge and misbeliefs related to the manipulations. They should better address these misbeliefs because they might favor kinesiophobia and prevent patients to take an active role in their own treatment.

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