



Non-Profit Foundation COME Collaboration

RESEARCH REPORT 2021

Introduction.

The present document reports the scientific publications made during the 2021 by the osteopathic researchers collaborating with the Foundation.

Despite the Covid-19 pandemic, still affecting the normal activities of the Foundation, the research and publication activities on important health and scientific journals have been quite intense during the 2021.

Participation to congresses and conferences was less intense, as the pandemic situation did not allow this opportunity.

The research activity of the authors reflects the mission and the main values of the Foundation, respecting the highest ethical, professional and scientific quality standards.

The keywords for collaborating are: *"multidisciplinary, collaboration, research, social-impact, outcome-based project."*

The Foundation's vision is reported as follows:

“We believe that the knowledge shared through experiences and skills helps to have an independent thought creating hope and genuine solidarity”

Having in mind these words, the authors of the publications reported below, developed and delivery their research studies and papers.

For more information: info@comecollaboration.org and www.comecollaboration.org

See the list of publications below.

Thank you for reading.



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FULL LIST OF PUBLICATIONS

a. Peer reviewed

1. F. Cerritelli, C. Lunghi, J.E. Esteves, P. Vaucher, P.L.S. van Dun, G. Alvarez, M. Biberschick, A. Wagner, O. Merdy, M. Menard, P. Tavernier, C. Clouzeau, A. Risch, N. Ruffini, A. Nunes, R. Santiago, P. Marett, R. Grech, O. Thomson, Osteopathy: Italian professional profile. ***A Professional Commentary by the European community of practice.*** *International Journal of Osteopathic Medicine*, 2021, ISSN 1746-0689, <https://doi.org/10.1016/j.ijosm.2021.03.004>.
2. Santiago, R. J., Esteves, J. E., Baptista, J. S., Magalhaes, A., & Costa, J. T. ***Results of a feasibility randomised controlled trial of osteopathy on neck-shoulder pain in computer users.*** *Complement Ther Clin Pract.* 2021 Nov, 46, 101507. DOI:10.1016/j.ctcp.2021.101507 (Open Access)
3. Alvarez, Gerard, Cristian Justribo, Tobias Sundberg, Oliver P Thomson, and Matthew J Leach. ***A National Cross-Sectional Survey of the Attitudes, Skills and Use of Evidence-Based Practice amongst Spanish Osteopaths.*** *BMC Health Services Research* 21, no. 1 (2021): 130. <https://doi.org/10.1186/s12913-021-06128-6>. (Open Access)
4. Alvarez, Gerard, Rafael Zegarra-Parodi, and Jorge E. Esteves. ***Person-Centered versus Body-Centered Approaches in Osteopathic Care for Chronic Pain Conditions.*** *Therapeutic Advances in Musculoskeletal Disease* 13 (2021): 1–3. <https://doi.org/10.1177/1759720X211029417>. (OpenAccess)
5. Cerritelli, F., C. Lunghi, J. E. Esteves, P. Vaucher, P. L.S. van Dun, G. Alvarez, M. Biberschick, et al. “Osteopathy: Italian Professional Profile. A Professional Commentary by a Group of Experts of the European Community of Practice.” *International Journal of Osteopathic Medicine* 40, no. March (2021): 22–28. <https://doi.org/10.1016/j.ijosm.2021.03.004>.
6. Núñez-Cortés, Rodrigo, Gerard Alvarez, Javier Pérez-Bracchiglione, Rosa Cabanas-Valdés, Jordi Calvo-Sanz, Xavier Bonfill, and Gerard Urrutia. “Reporting Results in Manual Therapy Clinical Trials: A Need for Improvement.” *International Journal of Osteopathic Medicine*, 2021. <https://doi.org/10.1016/j.ijosm.2021.06.002>.
7. Roura, Sonia, Gerard Álvarez, Ivan Solà, and Francesco Cerritelli. “Do Manual Therapies Have a Specific Autonomic Effect? An Overview of Systematic Reviews.” Edited by Andrej M Kielbassa. *PLoS ONE* 16, no. 12. 2021: <https://doi.org/10.1371/journal.pone.0260642>. (Open Access)
8. Thomson, Oliver P., Andrew MacMillan, Jerry Draper-Rodi, Paul Vaucher, Mathieu Ménard, Brett Vaughan, Chantal Morin, et al. “Opposing Vaccine Hesitancy during the COVID-19 Pandemic – A Critical Commentary and United Statement of an International Osteopathic Research Community.” *International Journal of Osteopathic Medicine* 39, no. xxxx (2021): A1–6. <https://doi.org/10.1016/j.ijosm.2021.02.002>.

9. Barsotti Nicola, Chiera Marco, Lanaro Diego, Fioranelli Massimo. "Impact of stress, immunity, and signals from endocrine and nervous system on fascia". *Frontiers in Bioscience, Elite*, 13, 1-36, Jan 1, 2021.
10. Gerard Alvarez, Núñez-Cortés Rodrigo, Solà Ivan, Sitja-Raberte Merce, Azahara Fort-Vanmeerhaeghe, Carles Fernandez, Xavier Bonfilla, Gerard Urrutia. "Sample size, study length, and inadequate controls were the most common self-acknowledged limitations in manual therapy trials: A methodological review". *Journal of clinical epidemiology* 130 (2021) 96-106.
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12. Baroni Francesca, Ruffini Nuria, D'Alessandro Giandomenico, Consorti Giacomo, Lunghi Cristian, "The role of touch in osteopathic practice: A narrative review and integrative hypothesis". *Complementary Therapy in Clinical Practice* 42 (2021) 101277.
13. Lunghi Christian, Iacopini Alessio, Baroni Francesca, Consorti Giacomo and Francesco Cerritelli. "Thematic Analysis of Attitudes Held by a Group of Italian Osteopaths Toward Osteopathic Evaluation, Treatment, and Management in the Neonatal and Pediatric Field: A Qualitative Study".
14. Carnevali Luca, Cerritelli Francesco, Guolo Franco, Sgoifo Andrea "Osteopathic Manipulative Treatment and Cardiovascular Autonomic Parameters in Rugby Players: A Randomized, Sham-Controlled Trial". *Journal of Manipulative and Physiological Therapeutics*, May 2021. Vol.44, n.4
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20. Nguyen C.; Boutron I.; Zegarra-Parodi R.; Baron G.; Alami S.; Sanchez K; Daste K.; Boisson M.; Fabre L.; Krief P.; Krief; Marie-Martine Lefèvre-Colau G.; Rannou F. “Effect of Osteopathic Manipulative Treatment Vs Sham Treatment on Activity Limitations in Patients With Nonspecific Subacute and Chronic Low Back Pain A Randomized Clinical Trial”. *JAMA Internal Medicine*. Published online March 15, 2021. Downloaded From: <https://jamanetwork.com/> by a Assistance Publique – Hopitaux de Paris. User on 03/15/2021
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22. Nguyen C, Boutron I, Zegarra-Parodi R, et al. “Effect of osteopathic manipulative treatment vs sham treatment on activity limitations in patients with nonspecific subacute and chronic low back pain: a randomized clinical trial”. *JAMA Intern Med*. Published online March 15, 2021. doi: 10.1001/jamainternmed.2021.0005. Supplemental Online Content
23. Rannou François: “Statistical analysis plan. EVALUATION OF TWO MANUAL THERAPIES ON THE FUNCTIONAL CAPACITIES OF PATIENTS WITH SUB-ACUTE OR CHRONIC LOW BACK PAIN. A RANDOMISED CONTROLLED TRIAL”. Short title: LC OSTEO -- Ref.: P 110142 - IDRCB 2012-A00167-36 - Ct.gov registration number: NCT02034864. Method Supplement 3. English translation of the study’s original statistical analysis plan.
24. Cayrol Timothée, Draper-Rodi Jerry, Fabre Laurent, Pitance Laurent, van den Broeke Emanuel N. “Stuck in the middle with you: why a broad-brush approach to defining central sensitisation does not help clinicians and patients”.
25. Nunes Alexandre, Petersen Kristian, Espanha Margarida and Arendt-Nielsen Lars “Sensitization in office workers with chronic neck pain in different pain conditions and intensities”. <https://doi.org/10.1515/sjpain-2020-0107> Received June 28, 2020; accepted December 12, 2020; published online February 23, 2021
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community of practice”. International Journal of medicine. Received 5 October 2020; Received in revised form 16 February 2021; Accepted 20 March 2021. journal homepage: www.elsevier.com/locate/ijosm

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28. Cerritelli Francesco, Galli Matteo, Consorti Giacomo, D’Alessandro Giandomenico, Kolacz Jacek, Porges Stephen G. “Cross-cultural adaptation and psychometric properties of the Italian version of the Body Perception Questionnaire” PLOS ONE. <https://doi.org/10.1371/journal.pone.0251838> May 27, 2021

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30. Alvarez Gerard, Zegarra-Parodi Rafael and Esteves Jorge E. “Person-centered versus body-centered approaches in osteopathic care for chronic pain conditions” Therapeutic Advances in Musculoskeletal Disease. Letter to the Editor 2021, Vol. 13: 1–3 First Published July 8, 2021 <https://doi.org/10.1177/1759720X211029417>

31. Nguyen Christelle, Zegarra-Parodi Rafael, Boutron Isabell. Letters. LC-OSTEO_JAMA Internal Medicine_Comment & Reply. Published Online: June 28, 2021. doi:10.1001/jamainternmed.2021.3186

32. Cerritelli Francesco, Zegarra-Parodi Rafael, Esteves Jorge E., Lunghi Christian, Baroni Francesca, Jerry Draper-Rodi Jerry “The legacy and implications of the body-mind-spirit osteopathic tenet: A discussion paper evaluating its clinical relevance in contemporary osteopathic care”. International Journal of Osteopathic Medicine. Published: June 02, 2021 DOI:<https://doi.org/10.1016/j.ijosm.2021.05.003>

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34. Cerritelli Francesco, Frasci Martin G., Antonelli Marta C., Viglione Chiara, Vecchi Stefano, Chiera Marco and Manzotti Andrea “A Review on the Vagus Nerve and Autonomic Nervous System During Fetal Development: Searching for Critical Windows”. Front. Neurosci., 20 September 2021 | <https://doi.org/10.3389/fnins.2021.721605>

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36. Cerritelli Francesco, Iacopini Alessio, Galli Matteo, Thomson Oliver. P., Sundberg Tobias, Leach Matthew J. and Adams Jon “Evidence-based practice among Italian osteopaths: a national cross-sectional survey”. BMC Complementary Medicine and Therapies. (2021) 21:252 <https://doi.org/10.1186/s12906-021-03430-y> (Open Access).
37. Bohlen Lucas, Shaw Robert, Cerritelli Francesco and Esteves Jorge E. “Osteopathy and Mental Health: An Embodied, Predictive, and Interoceptive Framework”. HYPOTHESIS AND THEORY article. Front. Psychol., 27 October 2021 | <https://doi.org/10.3389/fpsyg.2021.767005>
38. D'Alessandro Giandomenico, Ruffini Nuria, Iacopini Alessio; Annoni Marco, Kossowsky Joe, Cerritelli Francesco “Overcoming placebo-related challenges in manual therapy trials: The ‘whats and hows’ and the ‘touch equality assumption’ proposals”. International Journal of Osteopathic Medicine. IJOM VOLUME 42, P5-10, DECEMBER 01, 2021
39. Santiago Rui José, Esteves Jorge Eduardo, Baptista Joao Santos, Magalhaes André, Torres Costa José “Results of a feasibility randomised controlled trial of osteopathy on neck-shoulder pain in computer users”. Complementary Therapies in Clinical Practice Volume 46, February 2022, 101507. <https://doi.org/10.1016/j.ctcp.2021.101507>
40. Baroni Francesca, Tramontano Marco, Barsotti Nicola, Chiera Marco, Lanaro Diego and Lunghi Christian “Osteopathic structure/function models renovation for a person-centered approach: a narrative review and integrative hypothesis”. <https://doi.org/10.1515/jcim-2021-0430>. De Gruyter. J Complement Integr Med 2021; aopReceived September 16, 2021; accepted November 2, 2021; published online November 11, 2021
41. Roura Sonia, Alvarez Gerard, Solà Ivan, Cerritelli Francesco “Do manual therapies have a specific autonomic effect? An overview of systematic reviews”. PLOS ONE | <https://doi.org/10.1371/journal.pone.0260642> December 2, 2021
42. Castagna Carmine, Consorti Giacomo, Turinetti Matteo and Lunghi Christian “Osteopathic Models Integration Radar Plot: A Proposed Framework for Osteopathic Diagnostic Clinical Reasoning”. Journal of Chiropractic Humanities. Volume 28, Number C - December 2021.
43. Mhadhbi Hakim, Thierry-Hildenbrand Benoit, Draper-Rodi Jerry, Esteves Jorge E., Menard Mathieu “Pain knowledge and fear-avoidance beliefs of French osteopathy students and educators towards chronic low back pain: An osteopathic educational institution-based cross-sectional survey”. International Journal of Osteopathic Medicine – IJOM. Published: December 22, 2021 DOI: <https://doi.org/10.1016/j.ijosm.2021.12.002>
44. Esteves Jorge E. “Osteopathic care of patients with persistent physical symptoms: an enactive-ecological framework”. Nordic Osteopathic Journal. MEDLEMSBLAD NORSK OSTEOPATFORBUND • NR. 4 • 2021 • 3. ÅRGANG

b. Non peer reviewed

1. Van Ballart C, van Dun P. Impact of the COVID-19 crisis on the osteopathic practice: results of a Swiss survey and comparison with the Belgian situation, *About Osteopathy*, 2021; 3: 33-35.
2. van Dun P. Gebrek aan evidence - stel u tevreden met een imperfecte medische zorg: het geval van de orthopedische chirurgie, *About Osteopathy*, 2021; 3: 28-30.
- 3.. van Dun P, Roncada G, Simons E. Le Règlement Formation Continue des Ostéopathes: pour permettre des soins de qualité et répondre aux besoins de la profession, *About Osteopathy*, 2021; 3: 20-22.
4. van Dun P, Roncada G, Simons E. Het Reglement Bijscholing voor Osteopaten: kwaliteitszorg mogelijk maken en voldoen aan de behoeften van de beroepsgroep, *About Osteopathy*, 2021; 3: 16-18.
5. van Dun P. Hoe schrijft men een casusverslag in de osteopathische praktijk? Comment rédiger une étude de cas dans la pratique ostéopathique? *About Osteopathy*, 2021; 2: 34-39.
6. van Dun P, Dobbelaere E. Verbreding van de scope of practice betekent niet meteen verdieping van onze osteopathische praktijk *About Osteopathy*, 2021; 1: 21-23.
7. van Dun P, Dobbelaere E. Etendre le champ d'application (scope of practice) de notre profession ne signifie pas immédiatement approfondir notre pratique professionnelle, *About Osteopathy*, 2021; 1: 25-27.
8. van Dun P, Osteopathie bij huilbaby's: de wetenschappelijke onderbouw ontbreekt: Brief aan de redactie, 2021; vol.3, DOI: 10.47671/TVG.77.21.006.

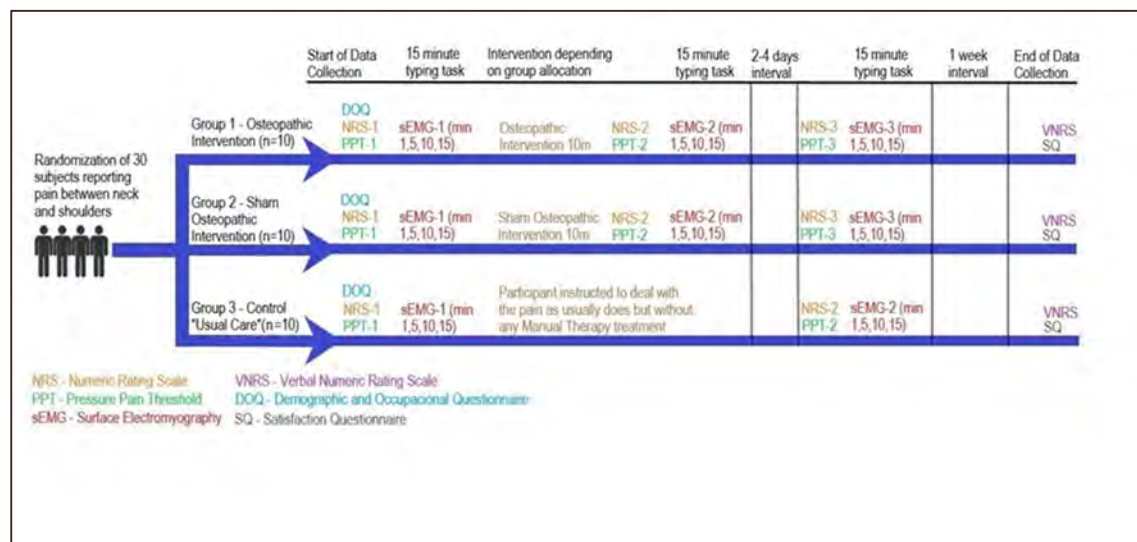
a. LIST OF FULL PUBLICATIONS IN PEER REVIEWED JOURNALS

1. F. Cerritelli, C. Lunghi, J.E. Esteves, P. Vaucher, P.L.S. van Dun, G. Alvarez, M. Biberschick, A. Wagner, O. Merdy, M. Menard, P. Tavernier, C. Clouzeau, A. Risch, N. Ruffini, A. Nunes, R. Santiago, P. Marett, R. Grech, O. Thomson, "Osteopathy: Italian professional profile. A Professional Commentary by the European community of practice". International Journal of Osteopathic Medicine, 2021, ISSN 1746-0689, <https://doi.org/10.1016/j.ijosm.2021.03.004>.

Abstract. Osteopathy became recently regulated as a healthcare profession in Italy. The Italian legislation classifies osteopathy as a healthcare profession, which focuses on health prevention and maintenance with a role in rehabilitation and functional psychosocial recovery. The legislative framework also lays down the osteopathic professional profile. Osteopaths are described as healthcare practitioners who deliver osteopathic person-centered care focused on the musculoskeletal system and the concept of somatic dysfunction. Despite these positive developments in the legislation for osteopathy, the Italian law raises critical points regarding the validity of osteopathic care models, namely the concept of somatic dysfunction and the role of osteopaths in health promotion and prevention. The legislative developments currently occurring worldwide must be informed by a critical appraisal of osteopathic conceptual models and grounded on robust research. In the article, a panel of European osteopaths involved in clinical and academic practice, research and regulation, present this professional commentary to facilitate a critical discussion on the role, competencies and scope of practice of osteopaths in the light of the recently published Italian osteopathic professional profile.

2. Santiago, R. J., Esteves, J. E., Baptista, J. S., Magalhaes, A., & Costa, J. T. Results of a feasibility randomised controlled trial of osteopathy on neck-shoulder pain in computer users. *Complement Ther Clin Pract.* 2021 Nov, 46, 101507. DOI:10.1016/j.ctcp.2021.101507 (Open Access)

Abstract. Computer use is a well-known source of chronic pain, leading to absenteeism and reduced productivity and well-being. This study evaluated the feasibility of conducting a full-scale randomised controlled trial. Several methodological variables defined trial feasibility. **MATERIALS AND METHODS:** Thirty adults, daily computer users reporting pain, were recruited. Data collection took place at LABIOME. Participants were randomised into 1 of 3 parallel groups and received either osteopathic, sham or no treatment. Only the volunteers were blind to group assignments. The primary objective was to study the feasibility and acceptability of the protocol. **RESULTS:** Of 77 participants interested, 30 were included and randomised into three groups of ten. All participants concluded the study, and all the data was analysed. The feasibility outcomes were deemed appropriate. No adverse events or severe side effects were reported or identified. **CONCLUSION:** Studying the efficacy of osteopathic consultation on computer users by conducting an RCT is feasible and safe. With adjustments, a full-scale study can be designed. **TRIAL REGISTRATION:** ClinicalTrials.gov with the identifier: NCT04501575. Date registered August 06, 2020.



3. Alvarez, Gerard, Cristian Justribo, Tobias Sundberg, Oliver P Thomson, and Matthew J Leach. *A National Cross-Sectional Survey of the Attitudes, Skills and Use of Evidence-Based Practice amongst Spanish Osteopaths*. *BMC Health Services Research* 21, no. 1 (2021): 130. <https://doi.org/10.1186/s12913-021-06128-6>. (Open Access)

Abstract. Although evidence-based practice (EBP) is largely supported across healthcare professions, its implementation in manual therapy professions such as osteopathy remains limited and debated. There is currently little knowledge of how Spanish osteopaths relate to EBP.

Objectives. The main aim of this study was to investigate the attitudes, skills and use of EBP among Spanish osteopaths. A secondary aim was to identify barriers and facilitators for the adoption of EBP in the Spanish osteopathic context.

Methods. National cross-sectional survey of Spanish osteopaths registered and non-registered to an osteopathic association in Spain. Eligible participants were invited by a range of recruitment strategies including email and social media campaigns to complete the Spanish-translated Evidence-Based practice Attitude and utilization Survey (EBASE) anonymously online.

Results. A total of 567 osteopaths completed the survey which represents an approximate response rate of 9%. Participant's attitudes toward EBP were largely positive. Most respondents agreed or strongly agreed that EBP was necessary in the practice of osteopathy (89.6%) and that professional literature and research findings were useful to their day-to-day practice (88.9%). Levels of perceived skill in EBP were reported as low to moderate with lowest levels for items related to 'research conduct'. Except reading/reviewing professional literature and using online search engines to find practice-related literature, participant engagement in all other EBP-related activities was generally infrequent. The perceived proportion of clinical practice that was based on clinical research evidence was reported to be very small. Main barriers to EBP uptake included a lack of clinical evidence in osteopathy and insufficient skills for applying research findings. Main facilitators of EBP uptake included access to full-text articles, internet at the workplace and online databases.

Conclusions. Spanish osteopaths were largely supportive of evidence-based practice, had low to moderate skills in EBP and engaged in EBP activities infrequently. Formal regulation of the profession in Spain and the inclusion of osteopathic programs into the university sector would potentially improve EBP skills and use.

4. Alvarez, Gerard, Rafael Zegarra-Parodi, and Jorge E. Esteves. *Person-Centered versus Body- Centered Approaches in Osteopathic Care for Chronic Pain Conditions*. *Therapeutic Advances in Musculoskeletal Disease* 13 (2021): 1–3. <https://doi.org/10.1177/1759720X211029417>. (OpenAccess).

Abstract. (the first two paragraphs of the article are reported). We read with great interest the recently published study by Coste et al.¹ The authors reported no benefit of osteopathic treatment in a sample of patients with fibromyalgia (FM) and, therefore, concluded that its use was not recommended.¹ We argue that their findings were expected given their lack of rationale for evaluating the benefits of a single therapeutic approach in the care of individuals with this chronic pain syndrome.

In this multicenter randomized controlled trial, the osteopathic ('real') intervention consisted of a strict protocol of manual techniques routinely applied for each patient.¹ No justification was provided regarding their choice of the specific techniques used in the study. In addition to this concern about the selected techniques, the actual study protocol raises other concerns about the lack of rationale for applying this kind of manual approach for a chronic pain condition like FM and about the authors' reductionist and biomechanical-based understanding of what constitutes osteopathy and osteopathic treatment.

5. Cerritelli, F., C. Lunghi, J. E. Esteves, P. Vaucher, P. L.S. van Dun, G. Alvarez, M. Biberschick, et al. "Osteopathy: Italian Professional Profile. A Professional Commentary by a Group of Experts of the European Community of Practice." *International Journal of Osteopathic Medicine* 40, no. March (2021): 22–28. <https://doi.org/10.1016/j.ijosm.2021.03.004>.

Abstract. Osteopathy became recently regulated as a healthcare profession in Italy. The Italian legislation classifies osteopathy as a healthcare profession, which focuses on health prevention and maintenance with a role in rehabilitation and functional psychosocial recovery. The legislative framework also lays down the osteopathic professional profile. Osteopaths are described as healthcare practitioners who deliver osteopathic person-centered care focused on the musculoskeletal system and the concept of somatic dysfunction. Despite these positive developments in the legislation for osteopathy, the Italian law raises critical points regarding the validity of osteopathic care models, namely the concept of somatic dysfunction and the role of osteopaths in health promotion and prevention. The legislative developments currently occurring worldwide must be informed by a critical appraisal of osteopathic conceptual models and grounded on robust research. In the article, a panel of European osteopaths involved in clinical and academic practice, research and regulation, present this professional commentary to facilitate a critical discussion on the role, competencies and scope of practice of osteopaths in the light of the recently published Italian osteopathic professional profile.

6. Núñez-Cortés, Rodrigo, Gerard Alvarez, Javier Pérez-Bracchiglione, Rosa Cabanas-Valdés, Jordi Calvo-Sanz, Xavier Bonfill, and Gerard Urrutia. "Reporting Results in Manual Therapy Clinical Trials: A Need for Improvement." *International Journal of Osteopathic Medicine*, 2021. <https://doi.org/10.1016/j.ijosm.2021.06.002>.

Abstract. Background. The number of randomized clinical trials (RCTs) for manual therapy (MT) has increased exponentially in recent years but the quality of reporting is heterogeneous.

Objective. To assess the quality of the reporting of results in RCTs manual therapy, both in the text and in the graphs. Study design Methodological review.

Methods. We reviewed a random sample of 120 RCTs in MT published between 2000 and 2020 in indexed journals. We identified the primary outcome for each trial, and evaluated the completeness and correctness of reporting of results in the text and in the graphs.

Results. Forty per cent of the RCTs explicitly identified the primary outcome and 47.5% reported a sample size calculation. In 46.7% of the trials, the reporting of between groups comparisons was complete (including effect size and precision). Only 29.2% used the confidence interval as a measure of precision. Fifty-eight per cent of the trials reported significant differences in the results, and 30.8% reported a value of clinical relevance for at least one variable of the study. Forty-seven per cent reported the primary outcome graphically but only 19.6% of the graphs were self-explanatory and 66.1% had problems of visual clarity.

Conclusions. Our findings suggest that the reporting of the results in MT trials is generally incomplete and graphics are often poor. These shortcomings could affect the interpretation of the results and their application in clinical practice. Improvements are needed in the reporting of results in order to advance clinical practice and research in manual therapy.

7. Roura, Sonia, Gerard Álvarez, Ivan Solà, and Francesco Cerritelli. "Do Manual Therapies Have a Specific Autonomic Effect? An Overview of Systematic Reviews." Edited by Andrej M Kielbassa. PLoS ONE 16, no. 12. 2021: <https://doi.org/10.1371/journal.pone.0260642>. (Open Access).

Abstract. Background. The impact of manual therapy interventions on the autonomic nervous system have been largely assessed, but with heterogeneous findings regarding the direction of these effects. We conducted an overview of systematic reviews to describe if there is a specific autonomic effect elicited by manual therapy interventions, its relation with the type of technique used and the body region where the intervention was applied.

Methods. We conducted an overview according to a publicly registered protocol. We searched the Cochrane Database of Systematic Reviews, MEDLINE, EPISTEMONIKOS and SCOPUS, from their inception to march 2021. We included systematic reviews for which the primary aim of the intervention was to assess the autonomic effect elicited by a manual therapy intervention in either healthy or symptomatic individuals. Two authors independently applied the selection criteria, assessed risk of bias from the included reviews and extracted data. An established model of generalisation guided the data analysis and interpretation.

Results. We included 12 reviews (5 rated as low risk of bias according the ROBIS tool). The findings showed that manual therapies may have an effect on both sympathetic and parasympathetic systems. However, the results from included reviews were inconsistent due to differences in their methodological rigour and how the effects were measured. The reviews with a lower risk of bias could not discriminate the effects depending on the body region to which the technique was applied.

Conclusion. The magnitude of the specific autonomic effect elicited by manual therapies and its clinical relevance is uncertain. We point out some specific recommendations in order to improve the quality and relevance of future research in this field.

8. Thomson, Oliver P., Andrew MacMillan, Jerry Draper-Rodi, Paul Vaucher, Mathieu Ménard, Brett Vaughan, Chantal Morin, et al. "Opposing Vaccine Hesitancy during the COVID-19 Pandemic – A Critical Commentary and United Statement of an International Osteopathic Research Community." *International Journal of Osteopathic Medicine* 39, no. xxxx (2021): A1–6. <https://doi.org/10.1016/j.ijosm.2021.02.002>.

Abstract. Background. Despite continuing vaccine controversies, little is known about the trajectory of change in vaccine confidence over time. The current study examined whether there are subpopulations among the New Zealand public with diverging trajectories of confidence in the safety of childhood vaccinations from 2013 to 2017.

Methods. Using longitudinal survey data from the New Zealand Attitudes and Values Study, latent class growth models identified subpopulations with distinct rates and directions of change in vaccine confidence from 2013 to 2017 (N= 12,423; 11,912; 12,009; 10,254). The demographic profiles of these subpopulations were examined.

Findings. Most New Zealanders' (60%) maintained strong vaccine confidence throughout the years (i.e. vaccine believers), but 30% expressed decreasing confidence over time (i.e. vaccine skeptics). Around 10% were former skeptics who had low vaccine confidence in 2013 but showed increasing confidence thereafter. Men, Europeans/Others, those more educated and living in more affluent regions were more likely to be vaccine believers. Relative to former skeptics, women, older individuals and those with lower education were more likely to be vaccine skeptics.

Interpretation. Attitudes toward the safety of childhood vaccinations are becoming increasingly polarized in New Zealand. Roughly 30% of the population are becoming more concerned about vaccine safety over time, 10% are becoming more confident, whereas 60% show consistent high vaccine confidence. It is vital to further investigate the key contributors to decreasing confidence among vaccine skeptics and implement target interventions.

9. Barsotti Nicola, Chiera Marco, Lanaro Diego, Fioranelli Massimo. "Impact of stress, immunity, and signals from endocrine and nervous system on fascia". *Frontiers in Bioscience, Elite*, 13, 1-36, Jan 1, 2021.

Abstract. The stress response, by virtue of release of glucocorticoids and catecholamines and by modifying the endocrine, neural, and immune responses, can impact the function of the fibroblasts and myofibroblasts that reside throughout the body and more specifically in the fascia, a ubiquitous and multi-functional connective tissue that supports the body. In the present paper, we review these stress-induced responses relying on psychoneuroendocrineimmunology

10. Gerard Alvarez, Núñez-Cortés Rodrigo, Solà Ivan, Sitja-Raberte Merce, Azahara Fort-Vanmeerhaeghe, Carles Fernandez, Xavier Bonfilla, Gerard Urrutia. "Sample size, study length, and inadequate controls were the most common self-acknowledged limitations in manual therapy trials: A methodological review". *Journal of clinical epidemiology* 130 (2021) 96-106.

Abstract. Objectives: The aim of this study was to quantify and analyze the presence and type of self-acknowledged limitations (SALs) in a sample of manual therapy (MT) randomized controlled trials. Study Design and Setting: We randomly selected 120 MT trials. We extracted data related to SALs from the original reports and classified them into 12 categories. After data extraction, specific limitations within each category were identified. A descriptive analysis was performed using frequencies and percentages for qualitative variables.

Results: The number of SALs per trial article ranged from 0 to 8, and more than two-thirds of trials acknowledged at least two different limitations. Despite its small proportion, 9% of trials did not report SALs. The most common limitation declared, in almost half of our sample, related to sample size (47.5%) followed by limitations related to study length and follow-up (33.3%) and inadequate controls (32.5%).

Conclusion: Our results indicate that at least two different limitations are consistently acknowledged in MT trial reports, the most common being those related to sample size, study length, follow-up, and inadequate controls. Analysis of the reasons behind the SALs gives some insights about the main difficulties in conducting research in this field and may help develop strategies to improve future research. 2020 Elsevier Inc. All rights reserved. Keywords: Self-acknowledged limitations; Manual therapy; Reporting; Quality; Transparency; Guidelines.

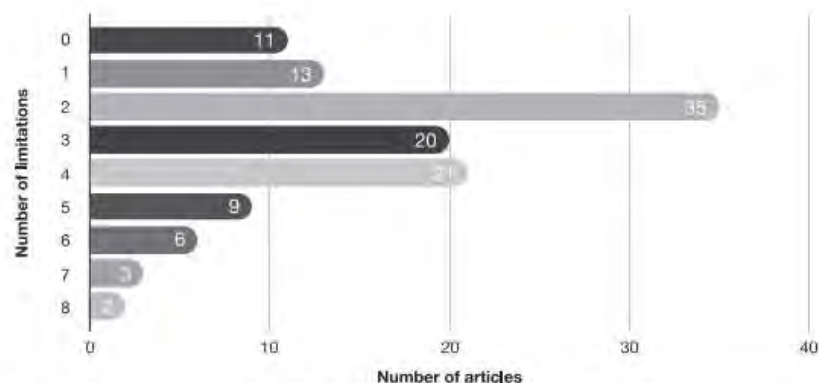


Fig. 1. Number of limitations reported in the articles ($n = 120$).

11. Tramontano Marco, Consorti Giacomo, Morone Giovanni, Lunghi Christian. “Vertigo and Balance Disorders – The Role of Osteopathic Manipulative Treatment: A Systematic Review”. *Complementary Medicine Research*. DOI:10.1159/000512673

Abstract. Background: Balance disorders are among the most frequent reasons for consultation and referral to specialist care. Osteopathic Manipulative Treatment (OMT) can influence the proprioceptive system by inducing alterations in the proprioceptive stimuli, hence affecting postural control. Objective: The present systematic review aimed to explore the effects of OMT in managing patients with vertigo and balance disorders. Methods: MEDLINE (PubMed), ScienceDirect, and Google Scholar were searched. Clinical trials and prospective observational studies were considered. Only studies that considered OMT as the main intervention, provided alone or combined with other interventions, were included. The methodological quality of the evidence was assessed with a modified version of the Newcastle-Ottawa Scale. Results: Five studies that enrolled a total of 114 subjects met our inclusion criteria. Overall, it has been observed that there is a positive effect on balance disorders through different outcomes in all of the included studies. Only two studies (9 subjects) mentioned low to moderate adverse events after OMT. Conclusions: OMT showed weak positive effects on balance function, encouraging the connection of conventional medicine and evidence-based complementary medicine for integrative clinical practice and inter-professional work. However, full-sized adequately powered randomized trials are required to determine the effectiveness of OMT for vertigo and balance disorders.

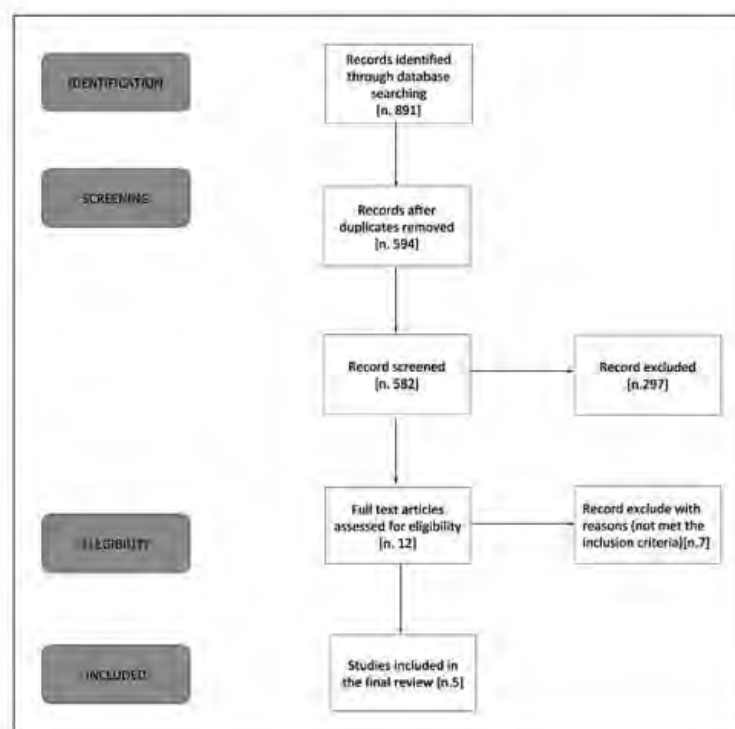


Fig. 1: Flowchart of study selection

12. Baroni Francesca, Ruffini Nuria, D'Alessandro Giandomenico, Consorti Giacomo, Lunghi Cristian, "The role of touch in osteopathic practice: A narrative review and integrative hypothesis". *Complementary Therapy in Clinical Practice* 42 (2021) 101277.

Abstract. introduction: Osteopathy relies on a touch-based approach to promote health. This narrative review aims to analyse the role of touch in clinical osteopathic practice.

Methods: A database search was conducted using MEDLINE, EMBASE, PEDro and Google Scholar. Peer-reviewed papers without specifying limits on dates and design were included.

Results: 47 articles met the inclusion criteria and were used to elucidate two main themes: Biological and psychological effects of touch; Touch in the context of osteopathic clinical reasoning.

Discussion: Touch is one of the tools to achieve a collaborative interaction with the patient, to substantiate clinical

information, and to detect somatic dysfunctions: neuro-myofascial active areas that might act as an osteopath patient interface to transmit the biological and physiological effects of touch.

Conclusion: The findings of the review support a shared decision-making process, in which touch is one of the osteopath-patient dyad 's leading communication tools to develop a tailor-made osteopathic approach.

Table 1

Literature research.

| Search strategy | (((“Decision Making, Shared”[Mesh]) OR (“Touch”[Mesh] OR “Touch Perception”[Mesh] OR “Therapeutic Touch”[Mesh]) OR (“Mechanoreceptors”[Mesh] OR (“Skin”[Mesh]) OR (“Subcutaneous Tissue”[Mesh]) OR (“Connective Tissue”[Mesh]) OR (“Fascia”[Mesh])))) AND (((“Musculoskeletal Manipulations”[Mesh]) OR (“Osteopathic Physicians”[Mesh] OR “Manipulation, Osteopathic”[Mesh] OR “Osteopathic Medicine”[Mesh])) | |
|----------------------------|---|--|
| Selected papers (n. 47) | Biological and psychological effects of touch (n.25) | Touch in the context of osteopathic clinical reasoning (n.25) |
| | Amoroso-Borges et al., 2018 ³⁴ Casals-Gutiérrez et al., 2020 ³³ Cerritelli et al., 2020 ³⁰ Chaitow, 2009 ²² Chaitow, 2014 ²⁰ Chaitow, 2018 ²³ Comedine et al., 2015 ³⁹ Dugailly et al., 2014 ³⁸ D’Alessandro et al., 2016 ³¹ Elkins and Jerome, 2012 ¹⁷ Fryer, 2011 ²⁷ Fryer, 2017 ³² Fryer, 2017 ³³ Gracovetsky, 2016 ²⁶ Gyer et al., 2019 ³⁰ Hohenschurz-Schmidt et al., 2016 ²⁸ Lederman, 2017 ²⁵ McGlone et al., 2017 ⁴ Parravicini et al., 2017 ¹⁹ Pelletier et al., 2018 ²⁹ Ponzo et al., 2018 ²³ Simmonds et al., 2012 ²¹ Stecco et al., 2016 ²⁴ Tamburella et al., 2019 ³⁶ Tuzzi, 2015 ¹⁸ | Basile et al., 2017 ³³ Bicalho et al., 2020 ⁵¹ Chaitow, 2009 ²² Consorti et al., 2018 ⁵² Danca, 2003 ⁶² Esteves and Spence, 2014 ⁴³ Fryer et al., 2005 ⁵⁶ Fryer et al., 2010 ⁴⁸ Fryer, 2006 ⁵⁷ Fryer, 2016 ⁴⁴ Fryer, 2017 ³⁷ Hruby, 2016 ⁴³ Johnson, and Kartz, 2003 ⁷ King et al., 2018 ⁶⁰ Liem, 2014 ²⁰ McIntyre et al., 2018 ⁴⁰ Paidet and Fryer, 2009 ⁵⁴ Roots et al., 2016 ⁴² Spasato and Bjerså, 2017 ⁴⁷ Spring et al., 2001 ²⁸ Sutton et al., 2013 ³⁹ Tamburella et al., 2019 ³⁶ Thomson et al., 2014 ⁴¹ Thomson et al., 2014 ⁵² Turner and Holmryd, 2016 ⁴⁶ |

13. Lunghi Christian, Iacopini Alessio, Baroni Francesca, Consorti Giacomo and Francesco Cerritelli. "Thematic Analysis of Attitudes Held by a Group of Italian Osteopaths Toward Osteopathic Evaluation, Treatment, and Management in the Neonatal and Pediatric Field: A Qualitative Study".

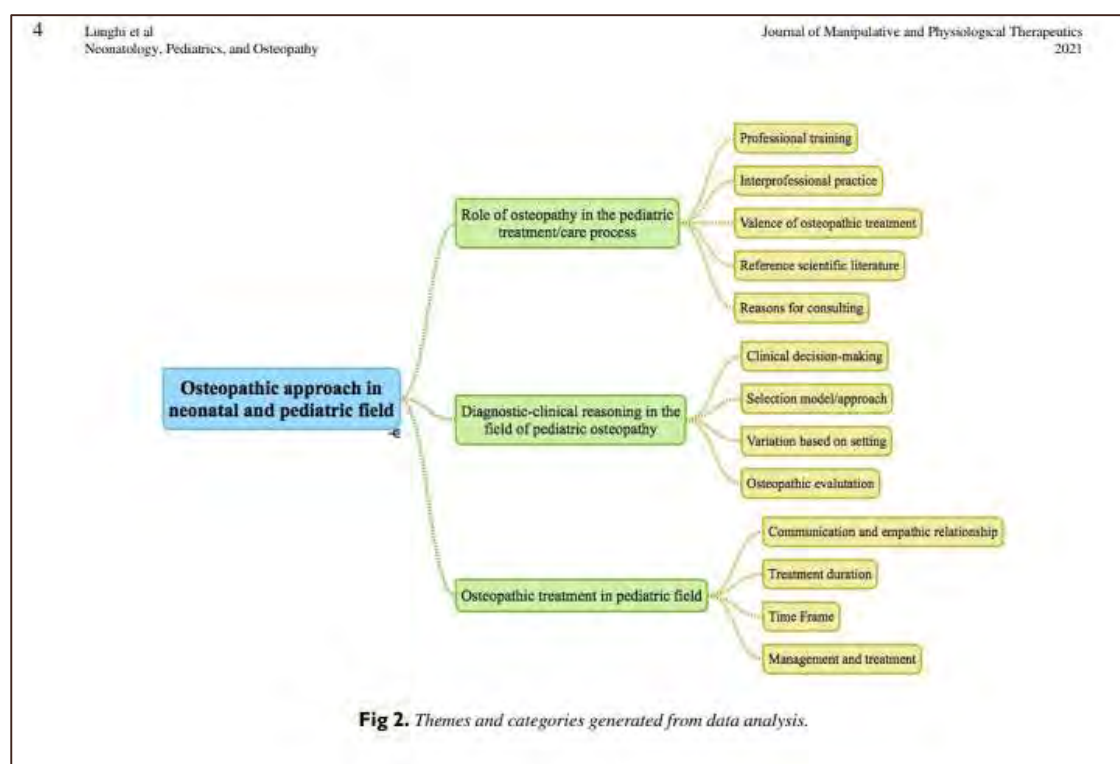
Abstract. Objective: The purpose of this study was to investigate the attitudes held by a group of Italian osteopaths toward osteopathic evaluation, treatment, and management in the neonatal and pediatric field.

Methods: A thematic analysis with elements of grounded-theory approaches was used. Purposive sampling was used to recruit expert osteopaths in the neonatal and pediatric field. Data were gathered from July 2017 to January 2018 by individual semi-structured interviews and transcribed verbatim. A thematic analysis of the data was then performed. The Consolidated Criteria for Reporting Qualitative Research checklist was used to structure the design of this qualitative study.

Results: Eight osteopaths participated. Data analysis generated 3 main themes: the role of the osteopath in the collaborative process of care, osteopathic diagnostic-clinical reasoning in the neonatal and pediatric field, and osteopathic treatment in the neonatal and pediatric field.

Conclusion: The present study highlights that Italian osteopaths may prefer interprofessional and integrative activities aimed at supporting adaptive capacity and resilience for pediatric patients. (J Manipulative Physiol Ther 2021;00;1-12)

Key Indexing Terms: Osteopathic Medicine; Neonatology; Intensive Care Units; Pediatrics; Manipulation, Osteopathic.



14. Carnevali Luca, Cerritelli Francesco, Guolo Franco, Sgoifo Andrea “Osteopathic Manipulative Treatment and Cardiovascular Autonomic Parameters in Rugby Players: A Randomized, Sham-Controlled Trial”. *Journal of Manipulative and Physiological Therapeutics*, May 2021. Vol.44, n.4

Abstract. Objective: The purpose of this study was to investigate the effects of osteopathic manipulative treatment (OMT) on cardiovascular autonomic parameters after a rugby match.

Methods: Resting and reactivity (ie, response to orthostasis) measures of mean arterial pressure, heart rate, and heart rate variability were assessed in 23 male players after a single session of OMT, both 18 to 20 hours after a rugby match and in a corresponding no-match condition, in a randomized, sham-controlled, crossover design.

Results: Signs of reduced heart rate variability and elevated mean arterial pressure and heart rate were found 18 to 20 hours after a rugby match compared with the no-match condition. A significant increase in heart rate variability and a significant reduction in mean arterial pressure were observed after OMT in both the after-match and no-match conditions. Heart rate and heart rate variability responses to orthostasis were not affected by previous match competition, but were significantly larger after OMT compared with sham treatment.

Conclusion: This study suggests the presence of cardiovascular autonomic alterations in rugby players after a competitive match, which may be indicative of prolonged fatigue and incomplete recovery. In these players, favourable changes in cardiovascular autonomic parameters were observed following a single session of OMT. (*J Manipulative Physiol Ther* 2021;44;319-329)

Key Indexing Terms: Heart Rate; Manipulation, Osteopathic; Arterial Pressure; Autonomic Nervous System; Cardiovascular System; Fatigue; Homeostasis.

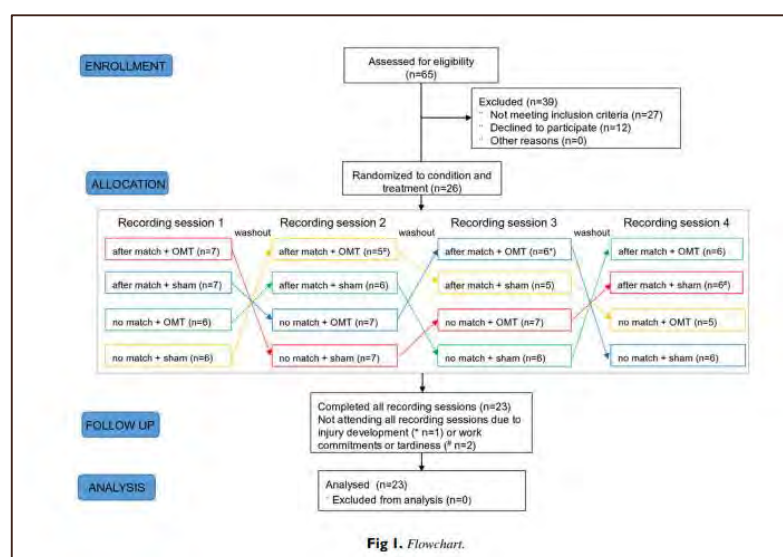
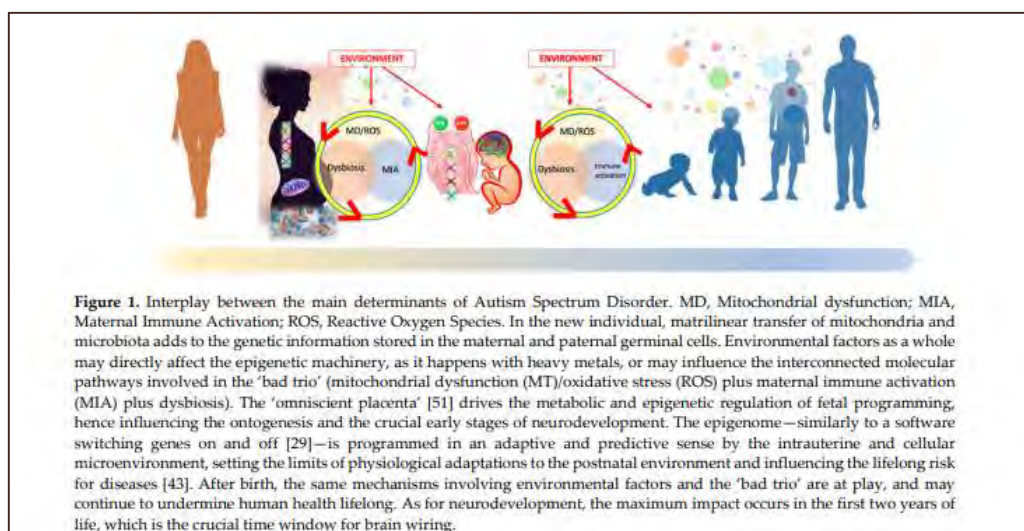


Fig 1. Flowchart.

15. Panisi Crisitina, Guerini Franca Rosa, Abruzzo Provvidenza Maria, Balzola Federico, Biava Pier Mario, Bolotta Alessandra, Brunero Marco, Burgio Ernesto, Chiara Alberto, Clerici Mario, Croce Luigi, Ferreri Carla, Giovannini Niccolò, Ghezzi Alessandro, Grossi Enzo, Keller Roberto, Manzotti Andrea, Marini Marina, Migliore Lucia, Moderato Lucio, Moscone Davide, Mussap Michele, Parmeggiani Antonia, Pasin Valentina, Perotti Monica, Piras Cristina, Saresella Marina, Stoccoro Andrea, Toso Tiziana, Vacca Rosa Anna, Vagni David, Vendemmia Salvatore, Villa Laura, Politi Pierluigi and Fanos Vassilios. "Autism Spectrum Disorder from the Womb to Adulthood: Suggestions for a Paradigm Shift". *Journal of Personalized Medicine*. MDPI, 2021, 11, 70.

Abstract. The wide spectrum of unique needs and strengths of Autism Spectrum Disorders (ASD) is a challenge for the worldwide healthcare system. With the plethora of information from research, a common thread is required to conceptualize an exhaustive pathogenetic paradigm. The epidemiological and clinical findings in ASD cannot be explained by the traditional linear genetic model, hence the need to move towards a more fluid conception, integrating genetics, environment, and epigenetics as a whole. The embryo-fetal period and the first two years of life (the so-called 'First 1000 Days') are the crucial time window for neurodevelopment. In particular, the interplay and the vicious loop between immune activation, gut dysbiosis, and mitochondrial impairment/oxidative stress significantly affects neurodevelopment during pregnancy and undermines the health of ASD people throughout life. Consequently, the most effective intervention in ASD is expected by primary prevention aimed at pregnancy and at early control of the main effector molecular pathways. We will reason here on a comprehensive and exhaustive pathogenetic paradigm in ASD, viewed not just as a theoretical issue, but as a tool to provide suggestions for effective preventive strategies and personalized, dynamic (from womb to adulthood), systemic, and interdisciplinary healthcare approach. Keywords: Autism Spectrum Disorder (ASD); pathogenesis; prevention; epigenetics; immune activation; gut dysbiosis; mitochondrial impairment; oxidative stress; metabolomics; machine learning.



16. Baroni Francesca, Mancini Damiana, Tuscano Silvia Clara, Scarlata Simone, Lunghi Christian, Cerritelli Francesco and Haxton Jason “Osteopathic manipulative treatment and the Spanish flu: a historical literature review”. *Neuromusculoskeletal Medicine (OMT)*. J Osteopath Med 2021; 121(2): 181–190

Abstract. Context: The Spanish flu pandemic of 1918 was approached with a variety of management techniques available at that time, including osteopathic care in addition to standard medical care.

Objective: To analyze the osteopathic manipulative treatment (OMT) techniques used for the management of patients affected by the Spanish flu according to four themes: the principles and procedures used, frequency and length of OMT, reported side effects, and advice for patients.

Methods: A structured review of the literature was performed by hand-searching texts at the Museum of Osteopathic Medicine International Center for Osteopathic History in Kirksville, Missouri, and online via PubMed (National Library of Medicine), ScienceDirect (Elsevier), and Google Scholar (Google, Inc). The literature search was carried out between February and March 2020. Three keywords were selected from the medical subject headings database of the National Library of Medicine: manipulation, osteopathic; influenza pandemic, 1918–1919; epidemics. Articles were then reviewed for relevance by screening for articles published between 1900 and 1940 that contained at least 1 of the following keywords in their title: Spanish influenza, flu, epidemic, grippe, pneumonia, or osteopathic management/ treatment. All articles that provided information about OMT and advice met the inclusion criteria. Articles that did not report descriptions of manipulative intervention were excluded.

Results: Our search yielded 63 articles: 23 from the handsearch and 40 from the electronic search. No electronic source was selected for the review because none met inclusion criteria. A total of 16 articles from the handsearched set met inclusion criteria and were analyzed according to the four main themes stated in the objective. The range of OMT approaches reported to be administered to patients with Spanish flu suggests that early osteopathic physicians treated patients with this disease using OMT in addition to offering advice on healthy lifestyle behaviors.

Conclusion: Conclusions from this study are limited by the historical and descriptive nature of the data gathered, which lacked the rigor of modern-day scientific studies. However, this review could lead to future research inquiries on the effectiveness of these approaches. Osteopathic physicians and osteopaths should embrace their historical osteopathic heritage by continuing the work of our predecessors and combining their hands-on experience and osteopathic principles with modern medical treatment and rigorous scientific standards.

Keywords: OMT; osteopathic manipulative treatment; pandemic; Spanish flu.



Figure 1: Patient receiving osteopathic manipulative treatment for expanding the chest, as found in Barber⁶⁸ at the Museum of Osteopathic Medicine (public domain).



Figure 2: Patient receiving osteopathic manipulative treatment for raising the false ribs, as found in Barber⁶⁹ at the Museum of Osteopathic Medicine (public domain).

17. Cerritelli Francesco, Chiacchiaretta Piero, Gambi Francesco, Saggini Raoul, Perrucci Mauro Gianni & Antonio Ferretti "Osteopathy modulates brain–heart interaction in chronic pain patients: anASL study". www.nature.com/scientificreports (2021) 11:4556

Abstract. In this study we used a combination of measures including regional cerebral blood flow (rCBF) and heart rate variability (HRV) to investigate brain–heart correlates of longitudinal baseline changes of chronic low back pain (cLBP) after osteopathic manipulative treatment (OMT). Thirty-two righthanded patients were randomised and divided into 4 weekly sessions of OMT (N= 16) or Sham (N= 16).

Participants aged 42.3 ± 7.3 (M/F: 20/12) with cLBP (duration: 14.6 ± 8.0 m). At the end of the study, patients receiving OMT showed decreased baseline rCBF within several regions belonging to the pain matrix (left posterior insula, left anterior cingulate cortex, left thalamus), sensory regions (left superior parietal lobe), middle frontal lobe and left cuneus. Conversely, rCBF was increased in right anterior insula, bilateral striatum, left posterior cingulate cortex, right prefrontal cortex, left cerebellum and right ventroposterior lateral thalamus in the OMT group as compared with Sham.

OMT showed a statistically significant negative correlation between baseline High Frequency HRV changes and rCBF changes at T2 in the left posterior insula and bilateral lentiform nucleus. The same brain regions showed a positive correlation between rCBF changes and Low Frequency HRV baseline changes at T2. These findings suggest that OMT can play a significant role in regulating brain–heart interaction mechanisms.

| | Study group (OMT) | Control group (Sham) | p < t |
|-----------------------|-------------------|----------------------|--------|
| Age | 41.8 ± 6.6 | 42.7 ± 8.0 | 0.73 |
| Male | 9 (60) | 11 (73.3) | 0.70* |
| BMI | 24.1 ± 3.5 | 25.5 ± 2.4 | 0.19 |
| LBP duration (m) | 15.1 ± 9.2 | 14.4 ± 6.7 | 0.72 |
| General scores | | | |
| STAI-Y1 | 42.4 ± 3.4 | 42.7 ± 2.9 | 0.85 |
| STAI-Y2 | 41.3 ± 3.0 | 41.1 ± 3.7 | 0.87 |
| TEMPS-A | 8.8 ± 3.4 | 9.27 ± 4.1 | 0.48 |
| Pain scores | | | |
| VAS—T0 | 63.1 ± 21.4 | 57.5 ± 17.3 | 0.10 |
| VAS—T1 | 31.3 ± 21.7 | 47.5 ± 15.4 | <0.001 |
| VAS—T2 | 18.3 ± 20.5 | 53.7 ± 23.6 | <0.001 |
| Oswestry—T0 | 24.9 ± 3.3 | 26.0 ± 5.2 | 0.51 |
| Oswestry—T1 | 16.4 ± 2.6 | 25.2 ± 4.1 | <0.01 |
| Oswestry—T2 | 10.8 ± 2.1 | 24.5 ± 3.7 | <0.001 |
| Roland-Morris—T0 | 15.5 ± 4.0 | 15.3 ± 4.9 | 0.90 |
| Roland-Morris—T1 | 11.4 ± 3.4 | 15.0 ± 3.8 | <0.01 |
| Roland-Morris—T2 | 8.7 ± 2.6 | 14.9 ± 4.6 | <0.001 |

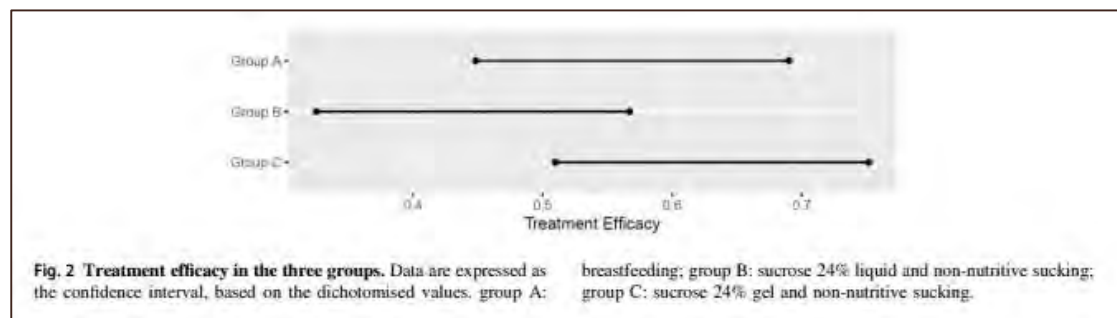
Table 1. Clinical characteristics of study population. Numbers in table are mean ± SD or *N(%). P values from Student *t* test and *Chi square. BMI body mass index, LBP low back pain, VAS visual analogue scale.

18. I. Bresesti, G. Vanzù, F. Redaelli, I. Daniele, GV. Zuccotti, F. Cerritelli, G. Lista, V. Fabiano “New perspective for pain control in neonates: a comparative effectiveness research”. Journal of Perinatology <https://doi.org/10.1038/s41372-021-01025-6>

Abstract. Objective: To compare sucrose 24% oral gel formulation to liquid formula and breastfeeding during a heel prick in neonates. Study design In this comparative effectiveness research 195 neonates >36 week s’ gestation were randomised to three groups, receiving during heel stick: (i) breastfeedi ng, (ii) sucros e 24% liquid with non-nutritive sucking and (iii) sucrose 24% gel with non-nutritive sucking. The pain was assessed through the Neonatal Infant Pain Scale.

Results: All the methods analysed has shown to be effective in reducing pain. There was an increase in odds of pain following liquid sucrose compared to breastfeeding (OR = 1.60; 95% CI: 0.82–3.3; p = 0.17). A reduction of odds of pain was showed comparing sucrose to breastfeeding (OR = 0.78; 0.38 –1.6; 0.48), and comparing sucrose gel to liquid formula (OR = 0.48; 0.23–0.96; p = 0.04).

Conclusion: Sucrose 24% gel with non-nutritive sucking seems to be a valid alternative when breastfeeding is not possible. Further research is needed.



19. Manzotti Andrea, Chiera Marco, Galli Matteo, Lombardi Erica, La Rocca Simona, Biasi Pamela, Jorge Esteves, Lista Gianluca and Cerritelli Francesco “The neonatal assessment manual score (NAME) for improving the clinical management of infants: a perspective validity study”. Italian Journal of Pediatrics. Manzotti et al. Italian Journal of Pediatrics (2021) 47:53 <https://doi.org/10.1186/s13052-021-01012-9>

Abstract. Background and objectives: The Neonatal Assessment Manual scoreE (NAME) was developed to assist in the clinical management of infants in the neonatal ward by assessing their body’s compliance and homogeneity. The present study begins its validation process.

Methods: An expert panel of neonatal intensive care unit (NICU) professionals investigated the NAME face and content validity. Content validity was assessed through the content validity index (CVI). Construct validity was assessed using data collected from 50 newborns hospitalized in the NICU of “Vittore Buzzi” Children Hospital of Milan, Italy. Kendall’s τ and ordinal logistic regressions were used to evaluate the correlation between the NAME scores and infants’ gestational age, birth weight, post-menstrual age, weight at the time of assessment, and a complexity index related to organic complications.

Results: The CVIs for compliance, homogeneity, and the whole scale were respectively 1, 0.9, and 0.95. Construct validity analysis showed significant positive correlations between the NAME and infants’ weight and age, and a negative correlation between the NAME and the complexity index ($\tau = -0.31$ [95% IC: $-0.47, -0.12$], $p = 0.016$ and OR = 0.56 [95% IC: 0.32, 0.94], $p = 0.034$ for categorical NAME; $\tau = -0.32$ [95% IC: $-0.48, -0.14$], $p = 0.005$ for numerical NAME).

Conclusions: The NAME was well accepted by NICU professionals in this study and it demonstrates good construct validity in discriminating the infant’s general condition. Future studies are needed to test the NAME reliability and predictive capacity.

Keywords: Neonatology, Manual assessment, Haptic perception, Body volume, Autonomic nervous system, Prematurity, Touch, NICU

| Table 2 Content validity index for the NAME items (I-CVI, k) and the whole scale (S-CVI/Ave) | | | | |
|---|--|--------------------|----------------|------|
| Item | Number of 3 or 4 ratings out of 10 judgments | I-CVI ^a | p _c | k |
| Compliance | 10 | 1.00 | 0.001 | 1 |
| Homogeneity | 9 | 0.9 | 0.010 | 0.90 |
| S-CVI/Ave ^a | | 0.95 | | |

I-CVI item content validity index; p_c: change agreement; S-CVI/Ave average scale content validity index.
^a Calculations done according to Polit et al. 2007 [39]

20. Nguyen C.; Boutron I.; Zegarra-Parodi R.; Baron G.; Alami S.; Sanchez K; Daste K.; Boisson M.; Fabre L.; Krief P.; Krief; Marie-Martine Lefèvre-Colau G.; Rannou F. "Effect of Osteopathic Manipulative Treatment Vs Sham Treatment on Activity Limitations in Patients With Nonspecific Subacute and Chronic Low Back Pain A Randomized Clinical Trial". JAMA Internal Medicine. Published online March 15, 2021. Downloaded From: <https://jamanetwork.com/> by a Assistance Publique – Hopitaux de Paris. User on 03/15/2021

Abstract.Importance. Osteopathic manipulative treatment (OMT) is frequently offered to people with nonspecific low back pain (LBP) but never compared with sham OMT for reducing LBP-specific activity limitations.

Objective. To compare the efficacy of standard OMT vs sham OMT for reducing LBP-specific activity limitations at 3 months in persons with nonspecific subacute or chronic LBP.

Design, Setting, and Participants. This prospective, parallel-group, single-blind, single-center, sham-controlled randomized clinical trial recruited participants with nonspecific subacute or chronic LBP from a tertiary care center in France starting February 17, 2014, with follow-up completed on October 23, 2017. Participants were randomly allocated to interventions in a 1:1 ratio. Data were analyzed from March 22, 2018, to December 5, 2018.

Interventions. Six sessions (1 every 2 weeks) of standard OMT or sham OMT delivered by nonphysician, nonphysiotherapist osteopathic practitioners.

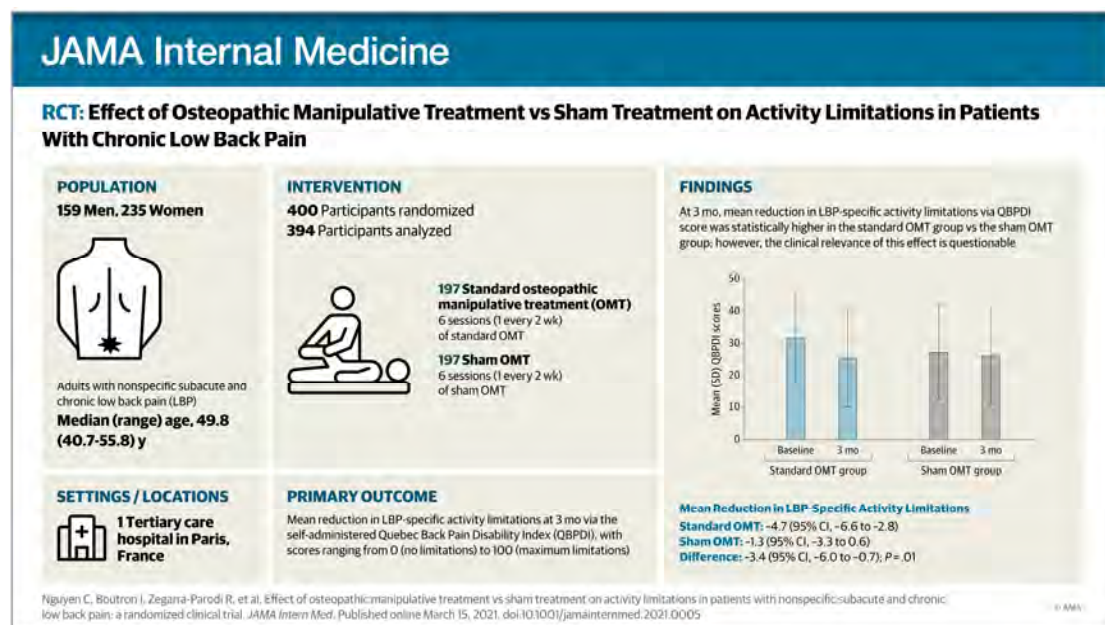
Main Outcomes and Measures. The primary end point was mean reduction in LBP-specific activity limitations at 3 months as measured by the self-administered Quebec Back Pain Disability Index (score range, 0-100). Secondary outcomes were mean reduction in LBP-specific activity limitations; mean changes in pain and health-related quality of life; number and duration of sick leaves, as well as number of LBP episodes at 12 months; and consumption of analgesics and nonsteroidal anti-inflammatory drugs at 3 and 12 months. Adverse events were self-reported at 3, 6, and 12 months.

Results. Overall, 200 participants were randomly allocated to standard OMT and 200 to sham OMT, with 197 analyzed in each group; the median (range) age at inclusion was 49.8 (40.7-55.8) years, 235 of 394 (59.6%) participants were women, and 359 of 393 (91.3%) were currently working. The mean (SD) duration of the current LBP episode was 7.5 (14.2) months. Overall, 164 (83.2%) patients in the standard OMT group and 159 (80.7%) patients in the sham OMT group had the primary outcome data available at 3 months. The mean (SD) Quebec Back Pain Disability Index scores for the standard OMT group were 31.5 (14.1) at baseline and 25.3 (15.3) at 3 months, and in the sham OMT group were 27.2 (14.8) at baseline and 26.1 (15.1) at 3 months. The mean reduction in LBP-specific activity limitations at 3 months was -4.7 (95% CI, -6.6 to -2.8) and -1.3 (95% CI, -3.3 to 0.6) for the standard OMT and sham OMT groups, respectively (mean difference, -3.4; 95% CI, -6.0 to -0.7; $P = .01$). At 12 months, the mean difference in mean reduction in LBP-specific activity limitations was -4.3 (95% CI, -7.6 to -1.0; $P = .01$), and at 3 and 12 months, the mean difference in mean reduction in pain was -1.0 (95% CI, -5.5 to 3.5; $P = .66$) and -2.0 (95% CI, -7.2 to 3.3; $P = .47$), respectively. There were no statistically

significant differences in other secondary outcomes. Four and 8 serious adverse events were self-reported in the standard OMT and sham OMT groups, respectively, though none was considered related to OMT.

Conclusions and Relevance. In this randomized clinical trial of patients with nonspecific subacute or chronic LBP, standard OMT had a small effect on LBP-specific activity limitations vs sham OMT. However, the clinical relevance of this effect is questionable.

Trial Registration. ClinicalTrials.gov Identifier: NCT0203486



21. Poiraudau Serge “Comparison of the effectiveness of 2 manual therapies on functional outcomes in sub-acute and chronic low back pain less than 1-year duration: a randomised controlled trial”. Method Supplement 1. English translation of the study’s original protocol. LC OSTEO -- Ref.: P 110142 - IDRCB 2012-A00167-36

Abstract. Chronic common lower back pain represents a public health problem, particularly at the socio-professional and economic level. Beyond the human suffering, they lead to functional disorders which disrupt professional activity. They account for a heavy financial burden on society as they lead to significant employee absenteeism and therefore a loss in efficiency for the company^{3,4}. Numerous treatments have been proposed for this condition, but they have not been effective enough to reduce its incidence. Osteopathy, one example of manual therapy, belongs to the category of emerging alternative medicines which patients may resort to, although few scientific studies have been implemented to demonstrate their effectiveness^{1,19,26,28}. We aim to assess the effectiveness of two manual therapies administered by osteopaths in patients who have had sub-acute or chronic common lower back pain for less than a year; this is particularly relevant as the assessment of alternative medicines is part of the AP-HP’s 2010-2014 Strategic Plan.

| Treatment | Endpoint | Level of evidence | Therapeutic effectiveness |
|------------------------------|--------------------------------|-------------------|--|
| Physical therapy | Pain, function | 1 | Slightly effective in terms of pain Slightly effective in terms of function |
| Multidisciplinary programmes | Pain, function, return to work | 1 | Effective in terms of function and return to work Not proven to be effective in terms of pain |
| Acupuncture | Pain, function | 1 | Slightly effective in terms of pain and function |
| Spinal manipulation | Pain, function | 1 | Slightly effective in terms of pain Not proven to be effective in terms of function |
| Corticosteroid injection | Pain | 2 | Effective in the short-term |
| Antidepressant | Pain | 2 | Slightly effective |
| NSAID | Pain | 2 | Effective in the short-term |
| Analgesic | Pain | 2 | Moderately effective |
| Paracetamol | Pain | 2 | Slightly effective |
| Muscle relaxant | Pain | 2 | Not proven to be effective |
| TENS | Pain | 2 | Not proven to be effective |
| Spinal traction | Pain | 2 | Not proven to be effective |

Table 1: Summary table of the treatments and their effectiveness in chronic lower back pain.

22. Nguyen C, Boutron I, Zegarra-Parodi R, et al. "Effect of osteopathic manipulative treatment vs sham treatment on activity limitations in patients with nonspecific subacute and chronic low back pain: a randomized clinical trial". JAMA Intern Med. Published online March 15, 2021. doi: 10.1001/jamainternmed.2021.0005. Supplemental Online Content.

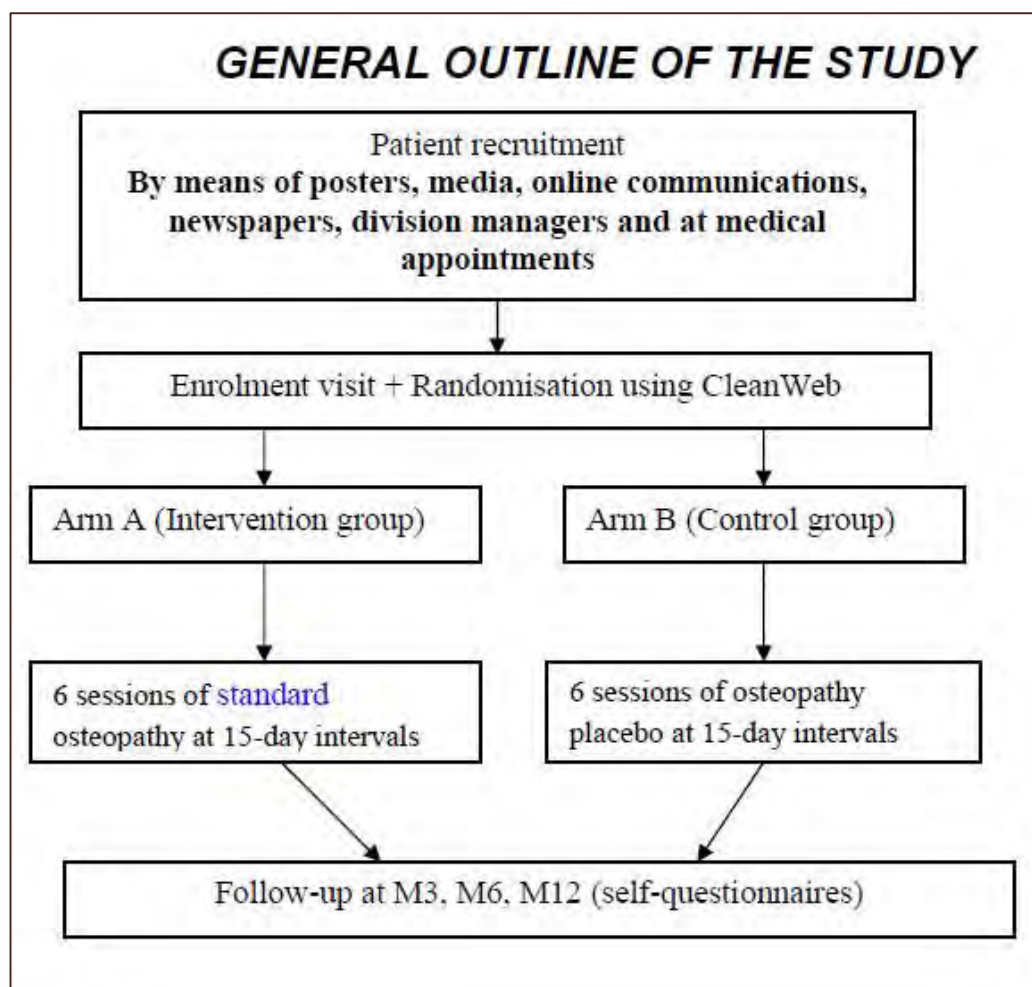
Abstract. This supplemental material has been provided by the authors to give readers additional information about their work.

23. Rannou François: “Statistical analysis plan. EVALUATION OF TWO MANUAL THERAPIES ON THE FUNCTIONAL CAPACITIES OF PATIENTS WITH SUB-ACUTE OR CHRONIC LOW BACK PAIN. A RANDOMISED CONTROLLED TRIAL”. Short title: LC OSTEO -- Ref.: P 110142 - IDRCB 2012-A00167-36 - Ct.gov registration number: NCT02034864. Method Supplement 3. English translation of the study’s original statistical analysis plan.

Abstract. Research objectives. Primary objective: to evaluate the effectiveness of two manual therapies on improving functional capacity at 3 months in patients with sub-acute or chronic common low back pain.

Secondary objectives: to evaluate the effectiveness of standard osteopathic treatment on:

- pain (at 3 and 12 months);
- number and duration of sick-leave periods (at 12 months);
- number of recurrences (at 12 months);
- quality of life (at 3 and 12 months);
- consumption of painkillers and NSAIDs (at 3 and 12 months).



24. Cayrol Timothée, Draper-Rodi Jerry, Fabre Laurent, Pitance Laurent, van den Broeke Emanuel N. “Stuck in the middle with you: why a broad-brush approach to defining central sensitisation does not help clinicians and patients”.

Abstract. Central sensitisation is (i) increasingly interpreted as central nervous system hyper excitability accounting for a general increase in sensitivity, and (ii) used to explain a variety of pain and non-pain symptoms. In this commentary, we argue that such a broad interpretation might not be clinically useful because it fails to distinguish one patient from another based on pathophysiological mechanisms and does not facilitate tailored treatment. We recommend that clinicians use a person-centred approach when assessing and managing patients, considering the different interacting processes/mechanisms that can contribute to a patient’s clinical presentation. Keywords: central nervous system sensitization; central sensitivity; pain hypersensitivity; widespread pain; chronic pain; medically unexplained symptoms.

25. Nunes Alexandre, Petersen Kristian, Espanha Margarida and Arendt-Nielsen Lars “Sensitization in office workers with chronic neck pain in different pain conditions and intensities”. <https://doi.org/10.1515/sjpain-2020-0107> Received June 28, 2020; accepted December 12, 2020; published online February 23, 2021

Abstract. Objectives: Office workers with chronic neck pain demonstrates signs of widespread hyperalgesia, less efficient descending pain modulation, which could indicate sensitization of central pain pathways. No studies have assessed a wide variety of office workers with different chronic neck pain disorders and assessed the impact of pain intensity on assessments of central pain pathways. This study aimed to assessed pressure pain thresholds (PPTs), temporal summation of pain (TSP) and conditioned pain modulation (CPM) and to associate these with pain intensity and disability in subgroups of office workers.

Methods: One hundred-and-seventy-one office workers were distributed into groups of asymptomatic and chronic neck pain subjects. Chronic neck pain was categorized as chronic trapezius myalgia and chronic non-specific neck pain and as ‘mild-pain’ (Visual Analog Scale [VAS]≤3) and ‘moderate-pain’ (VAS>3) groups. PPTs, TSP, CPM, and Copenhagen Psychosocial Questionnaire II were assessed in all subjects. Neck Disability Index and Pain Catastrophizing Scale were assessed in all the symptomatic office workers.

Results: PPTs were lower in moderate pain (n=49) and chronic trapezius myalgia (n=56) compared with asymptomatic subjects (n=62, $p<0.05$). TSP was facilitated in moderate pain group compared with mild pain (n=60, $p<0.0001$) group and asymptomatic subjects ($p<0.0001$). No differences were found in CPM comparing the different groups ($p<0.05$). Multiple regression analysis identified Neck Disability Index and TSP as independent factors for prediction of pain intensity in chronic trapezius myalgia ($R^2 = 0.319$) and chronic non-specific neck pain ($R^2 = 0.208$). Somatic stress, stress and sleep as independent factors in chronic non-specific neck pain ($R^2 = 0.525$), and stress in moderate pain group ($R^2 = 0.494$) for the prediction of disability.

Conclusions: Office workers with chronic trapezius myalgia and moderate pain intensity showed significant signs of widespread pressure hyperalgesia. Moreover, the moderate pain group demonstrated facilitated TSP indicating sensitization of central pain pathways. Neck Disability Index and TSP were independent predictors for pain intensity in pain groups. Sleep and stress were independent predictors for disability.

Keywords: chronic neck pain; conditioned pain modulation; office workers; pressure pain thresholds; sensitization; temporal summation of pain.

Table 2: Descriptive characteristics of office workers in pain intensity groups.

| Variable | Mild pain (n=60) | Moderate pain (n=49) | Controls (n=62) | p-Value |
|---------------------------------|----------------------|-----------------------|-----------------------|-------------------------------|
| Age, years | 44.21 ± 7.7 | 43.93 ± 7.7 | 43.0 ± 8.3 | 0.719 |
| Sex, n (%) female/male | 52 (86.7%)/8 (13.3%) | 45 (91.8%)/4 (8.2%) | 38 (61.3%)/24 (38.7%) | <0.0001^a |
| BMI, kg/m ² | 23.97 ± 3.63 | 24.47 ± 3.29 | 24.88 ± 3.80 | 0.347 |
| Working time, h/wk | 37.93 ± 5.9 | 35.79 ± 6.3 | 38.22 ± 6.0 | 0.122 |
| Computer work, h/day | 6.37 ± 1.0 | 6.34 ± 1.4 | 6.48 ± 1.3 | 0.882 |
| Computer work, years | 17.31 ± 8.0 | 16.46 ± 8.5 | 18.11 ± 7.6 | 0.863 |
| VAS (0–10 cm) (present day) | 1.18 ± 1.02 | 2.76 ± 2.04 | NA | <0.0001^b |
| VAS (0–10 cm) (last seven days) | 1.60 ± 0.86 | 4.62 ± 0.94 | NA | <0.0001^b |
| Pain duration, months | 86.83 ± 71.36 | 81.60 ± 58.02 | NA | 0.088 |
| Analgesic + 24 h, n (%) yes/no | 8 (13.3%)/52 (86.7%) | 12 (24.5%)/37 (75.5%) | NA | 0.146 |
| Treatment, n (%) yes/no | 10 (16.7%)/50 (83.3) | 2 (4.1%)/47 (95.9%) | NA | 0.062 |

Data are expressed as mean ± SD of the mean, or in percentage frequencies (%). Bold indicates significant ($p < 0.05$). ^aBetween controls group with mild pain and moderate pain groups, χ^2 test. ^bBetween moderate pain group with mild pain group, unpaired t-test. NA, not available; VAS, Visual Analog Scale.

26. F. Cerritelli, C. Lunghi, J.E. Esteves, P. Vaucher, P.L.S. van Dun, G. Alvarez, M. Biberschick, A. Wagner, O. Merdy, M. Menard, Tavernier, Clouzeau, A. Risch, Nuria Ruffini, A. Nunes, R. Santiago, P. Marett, O.P. Thomson. "Osteopathy: Italian professional profile. A professional commentary by a group of experts of the European community of practice". International Journal of medicine. Received 5 October 2020; Received in revised form 16 February 2021; Accepted 20 March 2021. journal homepage: www.elsevier.com/locate/ijosm

Abstract. Osteopathy became recently regulated as a healthcare profession in Italy. The Italian legislation classifies osteopathy as a healthcare profession, which focuses on health prevention and maintenance with a role in rehabilitation and functional psychosocial recovery. The legislative framework also lays down the osteopathic professional profile. Osteopaths are described as healthcare practitioners who deliver osteopathic person-centre care focused on the musculoskeletal system and the concept of somatic dysfunction. Despite these positive developments in the legislation for osteopathy, the Italian law raises critical points regarding the validity of osteopathic care models, namely the concept of somatic dysfunction and the role of osteopaths in health promotion and prevention. The legislative developments currently occurring worldwide must be informed by a critical appraisal of osteopathic conceptual models and grounded on robust research. In the article, a panel of European osteopaths involved in clinical and academic practice, research and regulation, present this professional commentary to facilitate a critical discussion on the role, competencies and scope of practice of osteopaths in the light of the recently published Italian osteopathic professional profile.

27. Nunes Alexandre Mauricio Passos, Azinheira Martins Moita Joao Paulo, Marques Rebelo Espanha Maria Margared, Petersen Kristian Kjær, Arendt-Nielsen Lars “Pressure pain thresholds in office workers with chronic neck pain: A systematic review and meta-analysis”. 2021 World Institute of Pain, 1530-7085/20/\$15.00 Pain Practice, Volume, Issue, 2021

Abstract. Objectives: The purpose of this study was to (a) compare pressure pain threshold (PPT) values between office workers with chronic neck pain and asymptomatic controls; (b) establish reference PPT values in chronic neck pain; and (c) evaluate associations between PPTs and pain intensity, and disability.

Methods: Seven English/Portuguese databases were searched for relevant literature. Studies investigating adult office workers (age > 18 years) with chronic neck pain were included if PPTs were an outcome. The risk of bias was assessed using the Downs and Black checklist. Meta-analysis was conducted if a cluster contained at least two studies reporting the same PPTs.

Results: Ten high quality, two low qualities, and one poor quality studies were included. The meta-analysis revealed decreased PPT values in the upper trapezius, extensor carpi ulnaris, and tibialis anterior in office workers with chronic neck pain when compared with healthy workers, without a statistical difference ($p > 0.05$). The PPT reference value in the upper trapezius was 263 kPa (95% confidence interval [CI] = 236.35 to 289.70), and 365 kPa (95% CI = 316.66 to 415.12) for the tibialis anterior in office workers with chronic neck pain. No correlations were found between the upper trapezius PPT and pain intensity and disability.

Conclusion: This meta-analysis found that all the PPT measurements were not significantly reduced in office workers with chronic neck pain compared with healthy workers. These assumptions were based on a small sample of existing studies, and therefore further studies are necessary to quantify the differences in PPTs. Hypersensitivity PPT reference values are proposed for localized and extra segmental sites in office workers with chronic neck pain.

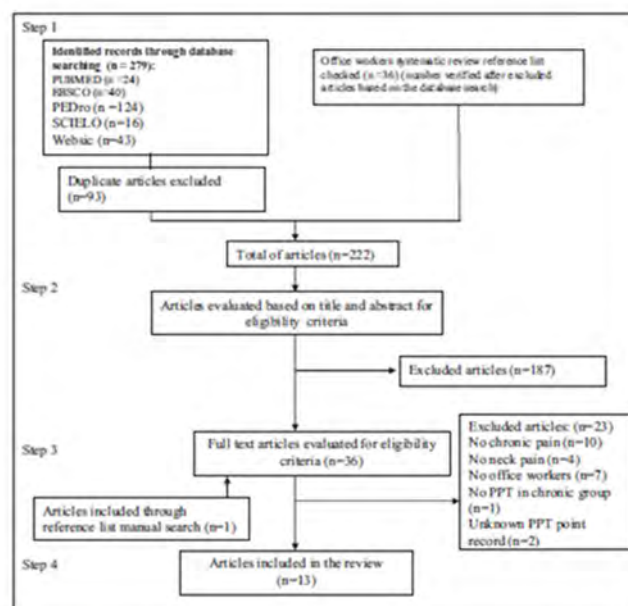


FIGURE 1. Flow diagram for selection articles included in the review. PPT, pressure pain threshold

28. Cerritelli Francesco, Galli Matteo, Consorti Giacomo, D'Alessandro Giandomenico, Kolacz Jacek, Porges Stephen G. "Cross-cultural adaptation and psychometric properties of the Italian version of the Body Perception Questionnaire" PLOS ONE. <https://doi.org/10.1371/journal.pone.0251838> May 27, 2021

Abstract. Background/Objective The purpose of this study was to cross-culturally adapt the Body Perception Questionnaire Short Form (BPQ-SF) into Italian and to assess its psychometric properties in a sample of Italian subjects.

Methods. A forward-backward method was used for translation. 493 adults were recruited for psychometric analysis. Structural validity was assessed with confirmatory factor analysis and a hypothesis testing approach. Internal consistency was assessed by Cronbach's alpha and McDonald's omega. Measurement invariance analysis was applied with an age-matched American sample.

Results. The single-factor structure fit the awareness subscale (RMSEA = .036, CFI = .983, TLI = .982). Autonomic reactivity (ANSR) was well-described by supra- and sub-diaphragmatic subscales (RMSEA = .041, CFI = .984, TLI = .982). All subscales were positively correlated (r range: .50-.56) and had good internal consistency (McDonald's Omega range: .86-.92, Cronbach's alpha range: .88-.91). Measurement invariance analysis for the Awareness model showed significant results (p

Conclusions. Our results support the Italian version of the BPQ as having consistent psychometric properties in comparison with other languages.

| Cross-cultural adaptation and psychometric properties of the Italian version of the BPQ | |
|---|--------------|
| Table 1. Sample characteristics. | |
| Characteristics | Values |
| Gender (%) | |
| F: | 292 (59.23) |
| M: | 201 (40.77) |
| Age (SD) | 34.71 (14) |
| BMI (SD) | 23.46 (3.86) |
| Education level (%) | |
| High school diploma: | 247 (50.10) |
| University degree: | 200 (40.57) |
| Other: | 46 (9.33) |
| Smoker (%) | |
| yes: | 126 (25.56) |
| no: | 367 (74.44) |
| Medications usage (%) | |
| yes: | 119 (24.14) |
| no: | 374 (75.86) |
| Psychiatric disorder (%) | |
| yes: | 4 (0.81) |
| no: | 489 (99.19) |
| Physical activity ≥ 2 /week (%) | |
| yes: | 289 (58.62) |
| no: | 204 (41.38) |
| Other Diseases (%) | |
| yes: | 146 (29.61) |
| no: | 347 (70.39) |

<https://doi.org/10.1371/journal.pone.0251838.t001>

30. Alvarez Gerard, Zegarra-Parodi Rafael and Esteves Jorge E. "Person-centered versus body-centered approaches in osteopathic care for chronic pain conditions" *Therapeutic Advances in Musculoskeletal Disease*. Letter to the Editor 2021, Vol. 13: 1-3 First Published July 8, 2021 <https://doi.org/10.1177/1759720X211029417>

Abstract. Keywords: osteopathy, fibromyalgia, chronic pain, patient-centered care.

Below is reported the first part of the letter.

"We read with great interest the recently published study by Coste et al. The authors reported no benefit of osteopathic treatment in a sample of patients with fibromyalgia (FM) and, therefore, concluded that its use was not recommended. We argue that their findings were expected given their lack of rationale for evaluating the benefits of a single therapeutic approach in the care of individuals with this chronic pain syndrome.

In this multicentre randomized controlled trial, the osteopathic ('real') intervention consisted of a strict protocol of manual techniques routinely applied for each patient. No justification was provided regarding their choice of the specific techniques used in the study. In addition to this concern about the selected techniques, the actual study protocol raises other concerns about the lack of rationale for applying this kind of manual approach for a chronic pain condition like FM and about the authors' reductionist and biomechanical-based understanding of what constitutes osteopathy and osteopathic treatment."

31. Nguyen Christelle, Zegarra-Parodi Rafael, Boutron Isabell. Letters. LC-OSTEO_JAMA Internal Medicine_Comment & Reply. Published Online: June 28, 2021. doi:10.1001/jamainternmed.2021.3186

Abstract. Below is report the first part of the letter.

“In Reply. As correctly pointed out by Licciardone, our study¹ involved non-physician osteopathic practitioners and represented practice settings in France. According to French usage, osteopathic manipulative treatment (OMT) can be delivered by health and non-health professionals. In 2021, this latter category represented 21 000 (60%) of 35 000 osteopathic practitioners in France, and this proportion likely differs from international contexts. Licciardone suggested that these differences may have influenced our outcomes. However, despite design and contextual differences, data from the OSTEOPATHIC Trial, conducted by Licciardone and colleagues² in the Dallas–Fort Worth area of Texas, were consistent with ours regarding activity limitations, and that trial showed no clinically relevant differences between OMT (N = 230) and sham OMT (N = 225) at 3months in patients with chronic lower back pain (LBP). Licciardone suggested we could have used another set of outcomes instead of our activity limitations, pain intensity, and health-related quality of life outcomes, but these domains are consistent with the core outcome set for clinical trials of nonspecific LBP.”

32. Cerritelli Francesco, Zegarra-Parodi Rafael, Esteves Jorge E., Lunghi Christian, Baroni Francesca, Jerry Draper-Rodi Jerry “The legacy and implications of the body-mind-spirit osteopathic tenet: A discussion paper evaluating its clinical relevance in contemporary osteopathic care”. International Journal of Osteopathic Medicine. Published: June 02, 2021DOI:<https://doi.org/10.1016/j.ijosm.2021.05.003>

Abstract. A current osteopathic tenet inherited from Native American principles involves viewing each person as a dynamic interaction of body-mind-spirit (BMS). Because of its traditional medicine heritage and current evidence-based approach, the osteopathic profession is, arguably, uniquely positioned to promote evidence-informed person-centered approaches that transcend improvements in pain and musculoskeletal function. It may be particularly relevant in the context of integrating the BMS tenet into osteopathic care according to the diversity of patients’ values and sociocultural assumptions towards health, symptoms, and subsequent care, which range from the typical Western to complementary and alternative medicine perspectives. There is currently a lack of robust clinical practice frameworks in this area, confusing patients and practitioners and blurring professional identities. The current commentary provides an opportunity to initiate discussions in the profession with a rationale for creating a roadmap to develop an evidence-informed framework for osteopathic care that integrates the BMS tenet.

Table 1 (continued)

| Steps | Possible Areas of Exploration | Research Topics | Suggested Methods |
|--|--|-----------------|--|
| Describing the clinical value of using the BMS tenet within osteopathic scopes of practice | Patient characteristics likely to benefit from the BMS tenet in osteopathic care | Evaluation | <ul style="list-style-type: none"> • Pretrial economic evaluation • Experimental studies • Feasibility studies • Pilot studies • Pretrial economic evaluation |

Abbreviations: BMS, body-mind-spirit; MSK, musculoskeletal.

33. Consorti Fabrizio, Consorti Giacomo “The lived experience of distance learning of medical students during the CoViD-19 pandemic in Italy: a descriptive phenomenological research”. Tutor. VOL. 21, N. 1, 2021: 142-159 DOI: 10.13135/1971-8551/5670

Abstract. Introduction. The pandemic forced the quick adoption of distance education in Italian schools of Medicine. Qualitative research about the sudden adoption of distance education is missing. This study explores from a phenomenological perspective the lived experience of medical students of distance education during the CoViD-19 pandemic.

Methods. A descriptive phenomenological research of written narrative essays about one distance lesson was conducted. Texts were collected through the e-learning platform and analyzed according to Giorgi’s method

Results. Eighteen narratives were analyzed. Three themes emerged, which described the lived experience of the participants: distance learning was not an educational choice but a mandatory answer to the pandemic that disrupted the usual course of our lives; distance learning can make the classroom cozy; distance learning puts you in a “bubble”.

Discussion. These findings confirm what is already known in general about distance learning and add a new insight on the importance of the social processes and physical presence of students in the development of their identity as a student. Our findings underline the importance of faculty development on the issues of distance learning.

34. Cerritelli Francesco, Frasci Martin G., Antonelli Marta C., Viglione Chiara, Vecchi Stefano, Chiera Marco and Manzotti Andrea “A Review on the Vagus Nerve and Autonomic Nervous System During Fetal Development: Searching for Critical Windows”. *Front. Neurosci.*, 20 September 2021 | <https://doi.org/10.3389/fnins.2021.721605>

Abstract. The autonomic nervous system (ANS) is one of the main biological systems that regulates the body's physiology. Autonomic nervous system regulatory capacity begins before birth as the sympathetic and parasympathetic activity contributes significantly to the fetus' development. In particular, several studies have shown how vagus nerve is involved in many vital processes during fetal, perinatal, and postnatal life: from the regulation of inflammation through the anti-inflammatory cholinergic pathway, which may affect the functioning of each organ, to the production of hormones involved in bioenergetic metabolism. In addition, the vagus nerve has been recognized as the primary afferent pathway capable of transmitting information to the brain from every organ of the body. Therefore, this hypothesis paper aims to review the development of ANS during fetal and perinatal life, focusing particularly on the vagus nerve, to identify possible “critical windows” that could impact its maturation. These “critical windows” could help clinicians know when to monitor fetuses to effectively assess the developmental status of both ANS and specifically the vagus nerve. In addition, this paper will focus on which factors—i.e., fetal characteristics and behaviors, maternal lifestyle and pathologies, placental health and dysfunction, labor, incubator conditions, and drug exposure—may have an impact on the development of the vagus during the above-mentioned “critical window” and how. This analysis could help clinicians and stakeholders define precise guidelines for improving the management of fetuses and newborns, particularly to reduce the potential adverse environmental impacts on ANS development that may lead to persistent long-term consequences. Since the development of ANS and the vagus influence have been shown to be reflected in cardiac variability, this paper will rely in particular on studies using fetal heart rate variability (fHRV) to monitor the continued growth and health of both animal and human fetuses. In fact, fHRV is a non-invasive marker whose changes have been associated with ANS development, vagal modulation, systemic and neurological inflammatory reactions, and even fetal distress during labor.

35. Manzotti Andrea, Cerritelli Francesco, Lombardi Erica, La Rocca Simona, Biasi Pamela, Chiera Marco, Galli Matteo and Lista Gianluca “The Neonatal Assessment Manual score: A Reliability Study on Hospitalized Neonates”. *Front. Pediatr.*, 22 September 2021 | <https://doi.org/10.3389/fped.2021.715091>

Abstract. Despite clinical improvements in neonatal intensive care units (NICUs), prematurity keeps causing several comorbidities. To enhance the management of such conditions, in previous studies we devised the Neonatal Assessment Manual score (NAME) model, a structured touch-based assessment that aims to evaluate how newborns respond to gentle touch-based stimuli. The present study aimed to begin assessing the NAME interrater reliability and specific agreements. At the “Vittore Buzzi” Pediatric Hospital NICU ward in Milan, Italy, we enrolled 144 newborns, 85 male and 59 female, with a mean age of 35.9 weeks (± 4.1) and a weight of 2,055.3 g (± 750.6). Two experienced manual professionals performed the NAME procedure on all the infants. Regarding the total sample and the analysis by sex, we found moderate and statistically significant results for the interrater reliability ($p < 0.001$) and the specific agreements ($p < 0.05$), in particular for the “Marginal” score. Furthermore, interrater reliability significantly ($p < 0.05$) increased as age and weight increased, whereas there was an almost constant moderate and significant ($p < 0.05$) agreement especially for the “Marginal” score. Therefore, we found preliminary results showing that the NAME could be a reliable diagnostic tool for assessing the newborns' general condition.

36. Cerritelli Francesco, Iacopini Alessio, Galli Matteo, Thomson Oliver. P., Sundberg Tobias, Leach Matthew J. and Adams Jon “Evidence-based practice among Italian osteopaths: a national cross-sectional survey”. BMC Complementary Medicine and Therapies. (2021) 21:252 <https://doi.org/10.1186/s12906-021-03430-y> (Open Access).

Abstract. Background. While evidence-based practice (EBP) is widely accepted across healthcare professions, research investigating its implementation in manual therapy professions such as osteopathy is limited. The primary aim of this study was to investigate Italian osteopaths’ attitudes, skills, and use of EBP. A secondary purpose was to understand the obstacles and enablers to EBP adoption in the Italian osteopathic context.

Methods. A cross-sectional national survey was conducted (April to June 2020) among a sample of Italian osteopaths. Eligible participants were invited to complete the Italian-translated Evidence-Based practice Attitude and Utilization Survey (EBASE) anonymously online using various recruitment strategies, including email and social media campaigns. In addition to the three EBASE sub-scores (attitudes, skills and use), the demographic characteristics of the sample were considered.

Results. A total of 473 osteopaths responded to the survey. The sample appeared to represent the Italian osteopathic profession. The majority of participants had a favourable attitude toward EBP. Eighty-eight percent of respondents agreed that EBP was necessary for osteopathy practice and that scientific literature and research findings were beneficial to their clinical scenario (95%). Perceived skill levels in EBP were rated as moderate, with the lowest scores for items relating to clinical research and systematic review conduct. Apart from reading/reviewing scientific literature and using online search engines to locate relevant research papers, participant engagement in all other EBP-related activities were generally low. Clinical practice was perceived to be based on a very small proportion of clinical research evidence. The primary obstacles to EBP implementation were a dearth of clinical evidence in osteopathy, and poor skills in applying research findings. The primary enablers of EBP adoption were access to full-text articles, internet connectivity at work, and access to online databases.

Conclusions. Italian osteopaths were largely supportive of evidence-based practice but lacked basic skills in EBP and rarely engaged in EBP activities. The updating of osteopathic training curriculum and professional formal regulation in Italy could provide a suitable framework to improve EBP skills and use.

Keywords. Evidence-based practice, Osteopathy, Attitude, Skill, Use, Cross-sectional studies

37. Bohlen Lucas, Shaw Robert, Cerritelli Francesco and Esteves Jorge E. "Osteopathy and Mental Health: An Embodied, Predictive, and Interoceptive Framework". HYPOTHESIS AND THEORY article. Front. Psychol., 27 October 2021 | <https://doi.org/10.3389/fpsyg.2021.767005>

Abstract. Globally, mental and musculoskeletal disorders present with high prevalence, disease burden, and comorbidity. In order to improve the quality of care for patients with persistent physical and comorbid mental health conditions, person-centered care approaches addressing psychosocial factors are currently advocated. Central to successful person-centered care is a multidisciplinary collaboration between mental health and musculoskeletal specialists underpinned by a robust therapeutic alliance. Such a collaborative approach might be found in osteopathy, which is typically utilized to treat patients with musculoskeletal disorders but may arguably also benefit mental health outcomes. However, research and practice exploring the reputed effect of osteopathy on patients with mental health problems lack a robust framework. In this hypothesis and theory article, we build upon research from embodied cognition, predictive coding, interoception, and osteopathy to propose an embodied, predictive and interoceptive framework that underpins osteopathic person-centered care for individuals with persistent physical and comorbid mental health problems. Based on the premise that, for example, chronic pain and comorbid depression are underlined by overly precise predictions or imprecise sensory information, we hypothesize that osteopathic treatment may generate strong interoceptive prediction errors that update the generative model underpinning the experience of pain and depression. Thus, physical and mental symptoms may be reduced through active and perceptual inference. We discuss how these theoretical perspectives can inform future research into osteopathy and mental health to reduce the burden of comorbid psychological factors in patients with persistent physical symptoms and support person-centered multidisciplinary care in mental health.

38. D'Alessandro Giandomenico, Ruffini Nuria, Iacopini Alessio; Annoni Marco, Kossowsky Joe, Cerritelli Francesco "Overcoming placebo-related challenges in manual therapy trials: The 'whats and hows' and the 'touch equality assumption' proposals". International Journal of Osteopathic Medicine. IJOM VOLUME 42, P5-10, DECEMBER 01, 2021

Abstract. Due to the significant increase in interest in placebos, biomedical scientists have incorporated placebo innovations into a modern methodological research scenario in order to increase the quality of clinical studies. Indeed, the randomised-controlled trial design has changed dramatically, and these changes have had an impact on manual therapy research as well. The present paper outlines the main difficulties that placebo-controlled trials pose for research in manual therapy, for example, designing ineffective sham protocols, the role of touch in triggering neurobiological responses, or the unique specificity of manual therapies. The paper then offers suggestions on how to overcome such challenges, for example by providing a definition of 'specificity' in the context of manual therapies, and specifically osteopathy, suggesting how to design adequate sham procedures, and by introducing the so-called 'touch equality assumption'.

Keywords: Manual therapy trials, Trial methodology, Placebo, Manual medicine, Osteopathy

39. Santiago Rui José, Esteves Jorge Eduardo, Baptista Joao Santos, Magalhaes André, Torres Costa José “Results of a feasibility randomised controlled trial of osteopathy on neck-shoulder pain in computer users”. *Complementary Therapies in Clinical Practice* Volume 46, February 2022, 101507. <https://doi.org/10.1016/j.ctcp.2021.101507>

Abstract. Background. Computer use is a well-known source of chronic pain, leading to absenteeism and reduced productivity and well-being. This study evaluated the feasibility of conducting a full-scale randomised controlled trial. Several methodological variables defined trial feasibility.

Materials and methods. Thirty adults, daily computer users reporting pain, were recruited. Data collection took place at LABIOME. Participants were randomised into 1 of 3 parallel groups and received either osteopathic, sham or no treatment. Only the volunteers were blind to group assignments. The primary objective was to study the feasibility and acceptability of the protocol.

Results. Of 77 participants interested, 30 were included and randomised into three groups of ten. All participants concluded the study, and all the data was analysed. The feasibility outcomes were deemed appropriate. No adverse events or severe side effects were reported or identified.

Conclusion. Studying the efficacy of osteopathic consultation on computer users by conducting an RCT is feasible and safe. With adjustments, a full-scale study can be designed.

Trial registration. ClinicalTrials.gov with the identifier: NCT04501575. Date registered August 06, 2020.

41. Roura Sonia, Alvarez Gerard, Solà Ivan, Cerritelli Francesco “Do manual therapies have a specific autonomic effect? An overview of systematic reviews”. PLOS ONE | <https://doi.org/10.1371/journal.pone.0260642> December 2, 2021

Abstract. Background. The impact of manual therapy interventions on the autonomic nervous system have been largely assessed, but with heterogeneous findings regarding the direction of these effects. We conducted an overview of systematic reviews to describe if there is a specific autonomic effect elicited by manual therapy interventions, its relation with the type of technique used and the body region where the intervention was applied.

Methods. We conducted an overview according to a publicly registered protocol. We searched the Cochrane Database of Systematic Reviews, MEDLINE, EPISTEMONIKOS and SCOPUS, from their inception to march 2021. We included systematic reviews for which the primary aim of the intervention was to assess the autonomic effect elicited by a manual therapy intervention in either healthy or symptomatic individuals. Two authors independently applied the selection criteria, assessed risk of bias from the included reviews and extracted data. An established model of generalisation guided the data analysis and interpretation.

Results. We included 12 reviews (5 rated as low risk of bias according the ROBIS tool). The findings showed that manual therapies may have an effect on both sympathetic and parasympathetic systems. However, the results from included reviews were inconsistent due to differences in their methodological rigour and how the effects were measured. The reviews with a lower risk of bias could not discriminate the effects depending on the body region to which the technique was applied.

Conclusion. The magnitude of the specific autonomic effect elicited by manual therapies and its clinical relevance is uncertain. We point out some specific recommendations in order to improve the quality and relevance of future research in this field.

PLOS ONE

Autonomic effects of manual therapy interventions

Table 4. Risk of bias of included reviews (ROBIS assessments).

| REVIEW | 1. Concerns regarding specification of STUDY ELIGIBILITY CRITERIA | 2. Concerns regarding methods used for the IDENTIFICATION AND SELECTION OF STUDIES | 3. Concerns regarding methods used in DATA COLLECTION AND STUDY APPRAISAL | 4. Concerns regarding methods used in SYNTHESIS AND FINDINGS | RISK OF BIAS IN THE REVIEW |
|----------------------|---|--|---|--|----------------------------|
| Wirth 2019 | low | low | low | low | LOW |
| Picchiotino 2019 | low | low | low | low | LOW |
| Araujo 2018 | low | low | low | low | LOW |
| Chu 2014 | low | low | low | low | LOW |
| Navarro-Santana 2019 | unclear | low | low | unclear | UNCLEAR |
| Hegedus 2011 | unclear | low | low | unclear | UNCLEAR |
| Rechberger 2019 | low | unclear | unclear | unclear | UNCLEAR |
| Galindez 2017 | low | unclear | unclear | unclear | UNCLEAR |
| Kingsdon 2014 | low | unclear | low | high | UNCLEAR |
| Amoroso Borges 2018 | low | unclear | unclear | high | UNCLEAR |
| Schimid 2008 | low | low | low | high | UNCLEAR |
| Lascrain 2016 | unclear | unclear | low | high | HIGH |

<https://doi.org/10.1371/journal.pone.0260642.t004>

<https://doi.org/10.1371/journal.pone.0260642.t004>

42. Castagna Carmine, Consorti Giacomo, Turinetti Matteo and Lunghi Christian “Osteopathic Models Integration Radar Plot: A Proposed Framework for Osteopathic Diagnostic Clinical Reasoning”. *Journal of Chiropractic Humanities*. Volume 28, Number C - December 2021.

Abstract. Objective. The purpose of this article is to propose a tool to assist with clinical reasoning to select and integrate different osteopathic models and evidence-based actions into clinical practice.

Discussion. The authors adopted the guidelines for writing a commentary as a reporting framework for the present article. The proposed Osteopathic Models Integration Radar Plot has potential for integration into clinical practice and the educational environment. This framework may enable clinicians to manage complex clinical phenomena, such as musculoskeletal disorders related to allostatic load.

Conclusion. This proposed framework may be helpful to communicate the outcome of osteopathic evaluations to other healthcare professionals. This proposed model will need to be tested to determine feasibility. (*J Chiropr Humanit* 2021;28;49-59)

Key Indexing Terms. Osteopathic Medicine; Manipulation, Osteopathic; Models, Educational; Models, Theoretical; Clinical Decision-Making; Decision Making, Shared

| Table 1. Osteopathic Structure/Function Models | |
|---|--|
| Model | Osteopathic Focus |
| Biomechanical | To enhance the movement function of the myofascial and skeletal system ¹¹⁻¹⁵ and confront pain. ^{1,2} |
| Respiratory-circulatory | To improve ventilatory function, ¹²⁻¹⁵ enhance circulation in the entire body, ¹⁶ including cerebral perfusion, ¹⁹ and the stiffening or hardening of the vessel. ²⁰ |
| Metabolic | To enhance immunity, ²¹⁻²⁹ endocrine, ³⁰ and visceral activities, also including gastrointestinal function. ^{27,31} |
| Neurologic | To balance central and peripheral autonomic nervous activities, ^{32,33} including exteroceptive, proprioceptive, and interoceptive processes, ^{34,35} and pain. ^{27,36,38} |
| Biopsychosocial model | The Biopsychosocial model, first proposed by Engel in 1977, ³⁶ can be considered both a clinical care philosophy and a practical guide to individual patient management. In recent years, the osteopathic biopsychosocial model was updated ^{37,38} and discussed in light of the body-mind-spirit and environment unity ³⁹ principle, the enactive model, ³⁻¹⁹ as well as psychoneuroimmunology ²⁰ to enhance patients' sense of agency and responsiveness to allostatic load. ⁴⁰ |

43. Mhadhbi Hakim, Thierry-Hildenbrand Benoit, Draper-Rodi Jerry, Esteves Jorge E., Menard Mathieu "Pain knowledge and fear-avoidance beliefs of French osteopathy students and educators towards chronic low back pain: An osteopathic educational institution-based cross-sectional survey". International Journal of Osteopathic Medicine – IJOM. Published: December 22, 2021 DOI: <https://doi.org/10.1016/j.ijosm.2021.12.002>

Abstract. Background. Practitioners' fear-avoidance beliefs can influence positively or negatively therapeutic outcomes in their patients. This study reports pain knowledge and fear-avoidance beliefs of French osteopathy students and educators towards the management of chronic low back pain (cLBP).

Methods. An online cross-sectional survey was proposed to educators and students. It included sociodemographic characteristics and two questionnaires: the FABQ-HC to assess beliefs on the effects of physical and work activities for people with cLBP, and the NPQ to assess participants' knowledge of pain.

Results. Participants (N = 172) had mean FABQ-HC subscale scores of 11.02 ± 4.44 (Physical activity) and 24.37 ± 11.78 (Work). The mean NPQ total score was 11.90 ± 2.05 . There were no significant score differences between students and educators ($p > 0.05$). Results showed that Year 4 students (N = 65) had a significantly better score ($p < 0.05$) at the FABQ-HC Physical Activity than Year 5 students (N = 71). Educators (N = 36) having less than 10 years of practice in osteopathy had better scores than other educators ($p < 0.01$) at the FABQ-HC Work. Educators and students in the study show similar scores to other French HCPs and international osteopaths on the FABQ-HC Physical activity. In contrast, they scored lower on the FABQ-HC Work.

Conclusions. The main finding was that educators and students belonging to the same OEI have no significantly different beliefs about cLBP and no significantly differing knowledge of pain. There is potential to improve pain education especially concerning the beliefs around cLBP concerning work activity.

Table 1
Sociodemographic characteristics of the population evaluated.

| | Year 4 students | Year 5 students | Educators |
|---|--------------------|--------------------|------------|
| Number | 71 | 65 | 36 |
| Age - mean in years (SD) | 22.4 (1.4) | 23.5 (1.5) | 35.9 (8.5) |
| Gender women N (%) | 48 (68) | 45 (69) | 9 (25) |
| Education's grade equal or higher than a bachelor's degree for students N (%) | 12 (17) | 8 (12) | / |
| Years of experience as an osteopath mean (SD) | / | / | 10.1 (6.4) |
| Years of experience as an educator mean (SD) | / | / | 6.8 (5.0) |
| Previous pain CPD N (%) | 2 | 4 | 10 (27.8) |

44. Esteves Jorge E. "Osteopathic care of patients with persistent physical symptoms: an enactive-ecological framework". Nordic Osteopathic Journal. MEDLEMSBLAD NORSK OSTEOPATFORBUND • NR. 4 • 2021 • 3. ÅRGANG

Abstract.

(Here below it is reported the introduction of the paper).

Osteopathy recognises that each patient's clinical signs and symptoms are the consequences of the interaction of multiple physical and non-physical factors. Osteopathy emphasises the importance of the patient-practitioner relationship in the therapeutic process and can therefore be regarded as a person-centred approach to healthcare. Person-centred care requires a solid therapeutic alliance, which is influenced by biopsychosocial factors (Miciak et al., 2018; Søndenå, Dalusio-King and Hebron, 2020). An effective therapeutic alliance enables osteopaths to assist patients in making sense of their illness experiences by developing new body narratives about their altered or changing physical capacities (Gale, 2011). Despite the claimed person-centeredness of osteopathic care, clinicians have traditionally focused on cause-effect body-centred care models (Esteves et al., 2020).

b. LIST OF FULL PUBLICATIONS IN NON-PEER REVIEWED JOURNALS

1. Van Ballart C, van Dun P. Impact of the COVID-19 crisis on the osteopathic practice: results of a Swiss survey and comparison with the Belgian situation, *About Osteopathy*, 2021; 3: 33-35.

Abstract. The COVID-19 crisis has had a marked effect on the entire health care system, including osteopathic practitioners. Especially at the beginning of the pandemic, the number of consultations dropped significantly, both due to government restrictions and patients' fear of leaving their homes. Like everyone else, osteopaths had to follow specific hygiene measures: wear masks, provide (hand) disinfectant and establish an extensive cleaning routine. It required constant adjustment of care according to need. All this so that we, as health professionals, could contribute to the health of the general population. This article compares the results of a Swiss survey of the members of the SOSF (Swiss Osteopathy Science Foundation) with those of a Belgian survey of the members of Osteopathie.be, in order to gain a better understanding of how to plan and anticipate the future needs of professional osteopathic practitioners during such a crisis.

2. van Dun P. Gebrek aan evidence - stel u tevreden met een imperfecte medische zorg: het geval van de orthopedische chirurgie, *About Osteopathy*, 2021; 3: 28-30. (Dutch)

Abstract. This article is a summary of an umbrella review of level 1 evidence of common elective orthopaedic procedures and their clinical effectiveness of Blom et al. of 2021. It focuses on the importance this study may have in the management of a large proportion patients in an osteopathic practice. It argues about the relativity of scientific evidence of and consideration of certain clinical interventions such as surgery, pharmacology, and osteopathic care for musculoskeletal disorders.

3. van Dun P, Roncada G, Simons E. Le Règlement Formation Continue des Ostéopathes : pour permettre des soins de qualité et répondre aux besoins de la profession, *About Osteopathy*, 2021; 3: 20-22. (French Version).

4. van Dun P, Roncada G, Simons E. Het Reglement Bijscholing voor Osteopaten: kwaliteitszorg mogelijk maken en voldoen aan de behoeften van de beroepsgroep, *About Osteopathy*, 2021; 3: 16-18. (Dutch version).

Abstract. The aim of this article was a critical analysis of the accreditation process of continued professional development (CPD) of osteopathy in Belgium and to propose adjustments in order to meet the requirements in terms of CPD of a primary care profession in all its facets. To achieve this, a comparative analysis was made of how CPD is organized for colleagues in neighboring countries, and for other medical professions in Belgium.

| | Ostéopathes | Kinésithérapeutes | Médecins | Dentistes |
|---------------------|---|---|--|---|
| Unités* | 48 | 60** | 60 | 75*** |
| Période | 3 ans | 3 ans | 3 ans | 5 ans |
| Unités/an | 16 | 20 | 20 | 15 |
| Obligatoire | Sujets liés à l'ostéopathie (min. 36) Autres activités (max. 12) 12 peer review (pas encore d'application?) | Critères annuels 1 procédure d'amélioration 1 peer review au choix 1 E-learning ou peer review avec thème établi 1 évaluation de la procédure d'amélioration 40 unités (= 20 heures) Critères de Période Remplir une Checklist sur la pratique Sondage des patients | Critères annuels 3 CP éthique et économie 2 participations à un Glem (peer review) Seuil d'activités de min 1.250 prestations/an | 5-Critères annuels 7 CP éthique et économie 3 CP radiologie Au moins 1 formation dans chaque catégorie 2 peer reviews Seuil d'activités de 300 prestations/an |
| Contrôle | Système PE-online Contrôle/période | Système PE-online contrôle/an | Application Online par l'INAMI | Application Online par l'INAMI |
| Unités de transfert | Aucun | Les unités supplémentaires sont automatiquement reportées à l'année suivante, dans la même période, avec un maximum de 8/an | Aucun | Les unités d'années précédentes peuvent être reportées d'une année à l'autre au cours d'un même cycle (jusqu'à 9 unités/an ; pour chaque année du cycle, un maximum de 24 unités sont prises en compte) |
| Incentive | Mention "en ordre de formation continue" sur le site de l'union professionnelle | Inscription au registre de qualité et obtention d'une prime qualité annuelle de l'INAMI | Frais d'accréditation forfaitaires annuels (€ 622) | Frais d'accréditation après 5 ans (€ 3.011,29) |

Tableau 2
Caractéristiques de la formation continue des différentes professions médicales en Belgique

Légende: *en heures; **120 unités avec 2 unités par heure et un maximum de 24 unités par activité; ***300 unités: 10 unités attribuées par module de 90 minutes.

| | Belgique | Pays-Bas | Royaume-Uni | Allemagne | France |
|---------------------|---|---|---|---|--|
| Unités* | 48 | 160 | 90 | 100 | 250 |
| Période | 3 ans | 5 ans | 3 ans | 3 ans | 5 ans |
| Unités/an | 16 | 32 | 30 | 33,33 | 50 |
| Obligatoire | Sujets liés à l'ostéopathie (min. 36) Autres activités (max. 12) 12 peer review (pas encore d'application?) | Minimum 35 en "activités de base" | 45 learning with others Examen/discussion avec les pairs 1 activity from quality of care 1 activity of communication and consent annual CPD portfolio | 60% ostéopathique 40% médical | 100 FCO présentielle. 150 FCO personnelle |
| Contrôle | Système PE-online | Système PE-online | Déclaration annuelle de la formation continue suivie Sélection aléatoire (10% par an en 10% après 3 ans) | Le secrétariat VOD via une connexion personnelle sur le site | NI |
| Unités de transfert | NI | NI | NI | Jusqu'à 40 unités peuvent être transférées dans la période suivante | NI |
| Incentive | Mention "en ordre de formation continue" sur le site de l'union professionnelle | Exclusion du registre (l'inscription est une condition de la WKKGZ (loi sur la qualité des soins, plaintes et litiges), une loi qui régit les conditions pour être autorisé à travailler pour les professions qui ne relèvent pas de la loi BIG | Exclusion du registre GOSC | Suppression de la « liste des thérapeutes » du site du VOD | NI |

Tableau 1
Caractéristiques de la formation continue en ostéopathie en Belgique et dans les pays voisins

Légende: *en heures; NI: No Information; **Activities across the four themes of the Osteopathic Practice Standards (DPS): 1. Communication and patient partnership, 2. Knowledge, skills and performance, 3. Safety and quality, 4. Professionalism; an objective activity (quality of care), an activity focused on communication and consent and a Peer Discussion Review

5. van Dun P. Hoe schrijft men een casusverslag in de osteopathische praktijk? Comment rédiger une étude de cas dans la pratique ostéopathique? About Osteopathy, 2021; 2: 34-39.

Abstract. A case report can be a first step for clinicians towards a more scientific and especially a more critical approach of their everyday clinical practice. On top of that, it fits like a glove for osteopathy as a complex intervention, where the individuality of the patient and the totality of the complaint is at the forefront. Exactly for these reasons and in the hope that in this way some more practice-oriented exchange between colleagues could arise, this article explains in a practical way what a case report should contain and how one gets started.

| | Een overzicht van de items die in een casusverslag dienen opgenomen te worden voor publicatie in de About | Un aperçu des éléments qui devraient être inclus dans une étude de cas pour une publication dans le About |
|---|---|--|
| INTRODUCTIE INTRODUCTION | een samenvatting van de huidige literatuur en biedt context voor de casus | un résumé de la littérature actuelle qui fournit un contexte pour le cas |
| CASUS | <ul style="list-style-type: none"> » ziektegeschiedenis » klinisch onderzoek » onderzoeksbevindingen » bijkomende onderzoeken » resultaten van deze bijkomende onderzoeken » behandeling » resultaat van de behandeling | <ul style="list-style-type: none"> » antécédents médicaux » examen clinique » résultats de l'examen » examens complémentaires » résultats de ces examens complémentaires » traitement » résultat du traitement |
| DISCUSSIE DISCUSSION | <ul style="list-style-type: none"> » waarom heb je deze patiënt uitgekozen voor je casusverslag? » wat rapporteert de literatuur over gelijkaardige gevallen? » hoe zeldzaam is deze aandoening? » wat is de wetenschappelijke verklaring voor deze aandoening? » wat is de oorzaak van deze aandoening? » waarom heeft u precies voor deze behandelingsstrategie gekozen? » hoe heeft uw behandelingsstrategie het resultaat voor de patiënt beïnvloed? » wat is de standaardbehandeling voor deze aandoening? » wat zijn uw aanbevelingen voor de toekomstige behandeling van deze aandoening? » welke lessen kunnen uit deze casus worden getrokken? | <ul style="list-style-type: none"> » pourquoi avez-vous choisi ce patient pour votre étude de cas ? » que rapporte la littérature sur des cas similaires ? » à quel point cette condition est-elle rare ? » quelle est l'explication scientifique de cette condition ? » quelle est la cause de cette condition ? » pourquoi exactement avez-vous choisi cette stratégie de traitement ? » comment votre stratégie de traitement a-t-elle influencé les résultats pour le patient » quel est le traitement standard pour cette condition ? » quelles sont vos recommandations pour le traitement futur de cette condition ? » quelles leçons peut-on tirer de ce cas ? |
| CONCLUSIE CONCLUSION | een samenvatting in één tot twee zinnen (niet noodzakelijk) | un résumé en une à deux phrases (pas nécessaire) |
| REFERENTIES RÉFÉRENCES | afhankelijk van het vakblad maar voor de About graag in APA stijl: apastyle.apa.org/style-grammar-guidelines/references/examples | d'après la revue spécialisée, mais pour le About de préférence dans le style APA : apastyle.apa.org/style-grammar-guidelines/references/examples |
| ERKENLIJKHEDEN REMERCIEMENTS | personen die je wil danken bij het uitwerken/schrijven van dit casusverslag (niet noodzakelijk) | les personnes que vous voudriez remercier pour l'élaboration/la rédaction de cette étude de cas (pas nécessaire) |
| PATIËNTENTOESTEMMING CONSENTEMENT DU PATIENT | een schriftelijke toestemming van de patiënt(en) is steeds vereist | le consentement écrit du ou des patients est toujours requis |
| BIJKOMENDE INFO INFORMATION SUPPLÉMENTAIRE | informatie die van bijkomend belang kan zijn bij de beoordeling van dit casusverslag (niet noodzakelijk) | informations qui peuvent être d'une importance supplémentaire dans l'évaluation de cette étude de cas (pas nécessaire) |

Tabel / Tableau 1
Een overzicht van de items die in een casusverslag dienen opgenomen te worden voor publicatie in de About.
Un aperçu des éléments qui devraient être inclus dans une étude de cas pour publication dans le About.

6. van Dun P, Dobbelaere E. Verbreding van de scope of practice betekent niet meteen verdieping van onze osteopathische praktijk About Osteopathy, 2021; 1: 21-23.

7. van Dun P, Dobbelaere E. Etendre le champ d'application (scope of practice) de notre profession ne signifie pas immédiatement approfondir notre pratique professionnelle, About Osteopathy, 2021; 1: 25-27.

Abstract. This commentary addresses the trend toward expanding the scope of practice of osteopathic care. It offers an overview of additional diagnostic and therapeutic approaches such as applied kinesiology, dry needling, homeopathy etc., in osteopathic care in Belgium and in the surrounding countries. It points out the inconsistencies with a well-defined professional competence profile of osteopathy in Belgium and the influence this has on the image of osteopathy by other health professions and the policymakers who still have to decide on a regulation of the profession.

Press.

1. van Dun P, Osteopathie bij huilbaby's: de wetenschappelijke onderbouw ontbreekt: Brief aan de redactie, 2021; vol.3, DOI: 10.47671/TVG.77.21.006.

Abstract. This press article published in the Tijdschrift voor Geneeskunde en Gezondheidszorg in Belgium is a response to the press article by Finoulst et al, 2021 regarding the lack of scientific basis for osteopathic care in crying babies to even the warning of severe complications. The response posits that this article is misleading and erroneous in many ways. In describing osteopathy, a lot of things are mixed up, causing the article to miss its purpose of correctly informing regarding the osteopathic profession.

Conference participation.

1. Esteves JE (2021). Adaptation, the person and their environment: from AT Still to an ecological-enactive approach to osteopathic care. Keynote presentation. OSD Online Congress Osteopathy meets Psychology. 19-20 November 2021.
2. Esteves JE (2021). Osteopathic care of patients with persistent physical symptoms: an enactive-ecological framework. Keynote presentation. Norwegian Osteopathic Association 13 November 2021, Oslo, Norway.
3. Esteves JE (2021). Effectiveness and mechanisms of action of osteopathic treatment and affective touch in pre-term infants. Presentation at International Congress Osteopathy Open 2021 “Modern tendencies in health restoration and maintenance. Evidence-based osteopathy: an objective assessment of the subjective approach”, 11-13 June 2021, St Petersburg, Russia.



“we believe that the knowledge shared through experiences and skills helps to have an independent thought creating hope and genuine solidarity”

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