NON-PROFIT FOUNDATION

COME

CENTRE FOR OSTEOPATHIC MEDICINE COLLABORATION

Fondazione COME Collaboration ONLUS

REPORT RICERCA 2020

Introduzione.

Il presente documento riporta le pubblicazioni scientifiche realizzate nel corso del 2020 dai ricercatori osteopatici che collaborano con la Fondazione.

Nonostante la situazione internazionale dovuta al contesto pandemico del Covid-19, le attività di pubblicazione su importanti riviste sanitarie e scientifiche sono state piuttosto intense.

L'attività di ricerca degli autori rispecchia la missione e i valori principali della Fondazione, nel rispetto dei più elevati standard di qualità etici, professionali e scientifici.

Le parole chiave per collaborare sono: ***"multidisciplinarietà, collaborazione, ricerca, impatto sociale, progetto basato sui risultati".***

La missione della Fondazione è riportata come segue:

"Crediamo che la conoscenza condivisa attraverso esperienze e competenze aiuti ad avere un pensiero indipendente creando speranza e genuina solidarietà"

Tenendo presente queste parole, gli autori hanno sviluppato e consegnato i loro studi e articoli di ricerca.

Per maggiori informazioni: info@comecollaboration.org e www.comecollaboration.org

Si veda l'elenco delle pubblicazioni di seguito.

a. LISTA DELLE PUBBLICAZIONI IN PEER REVIEWED JOURNALS

1. Tramontano, M., Cerritelli, F., Piras, F., Spanò, B., Tamburella, F., Piras, F., Caltagirone, C., Gili, T. ***Brain connectivity changes after osteopathic manipulative treatment: A randomized manual placebo-controlled trial***. Brain Sci. 2020 Dec 11;10(12):969. DOI: 10.3390/brainsci10120969

2. Chiera, M., Cerritelli, F., Casini, A., Barsotti, N., Boschiero, D., Cavigioli, F., Corti, C.G., Manzotti, A. ***Heart Rate Variability in the Perinatal Period: A Critical and Conceptual Review.*** Front Neurosci. 2020 Sep 25;14:561186. DOI: 10.3389/fnins.2020.561186

3. Cerritelli, F., Cardone, D., Pirino, A., Merla, A., Scoppa, F. ***Does Osteopathic Manipulative Treatment Induce Autonomic Changes in Healthy Participants? A Thermal Imaging Study.*** Front Neurosci. 2020 Aug 18;14:887. DOI: 10.3389/fnins.2020.00887

4. Manzotti, A., Cerritelli, F., Chiera, M., Lombardi, E., La Rocca, S., Biasi, P., Galli, M., Esteves, J., Lista, G. ***Neonatal Assessment Manual Score: Is There a Role of a Novel, Structured Touch-Based Evaluation in Neonatal Intensive Care Unit?*** Front Pediatr. 2020 Aug 6;8:432. DOI: 10.3389/fped.2020.00432

5. Lunghi, C., Consorti, G., Tramontano, M., Esteves, J.E., Cerritelli, F**. *Perspectives on tissue adaptation related to allostatic load: Scoping review and integrative hypothesis with a focus on osteopathic palpation.*** J Bodyw Mov Ther. 2020 Jul;24(3):212-220. DOI: 10.1016/j.jbmt.2020.03.006

6. Cerritelli, F., Consorti, G., Van Dun, P.L.S., Esteves, J.E., Sciomachen, P., Valente, M., Lacorte, E., Vanacore, N. ***The Italian osteopathic practitioners estimates and RAtes (OPERA) study: How osteopaths work***. PLoS One. 2020 Jul 2;15(7): e0235539. DOI: 10.1371/journal.pone.0235539

7. Alvarez, G., Roura, S., Cerritelli, F., Esteves, J.E., Verbeeck, J., Dun, P.L.S.V. ***The Spanish Osteopathic Practitioners Estimates and RAtes (OPERA) study: A cross-sectional Survey.*** PLoS One. 2020 Jun 15;15(6):e0234713.DOI: 10.1371/journal.pone.0234713

8. Manzotti, A., Cerritelli, F., Lombardi, E., La Rocca, S., Chiera, M., Galli, M., Lista, G. ***Effects of osteopathic treatment versus static touch on heart rate and oxygen saturation in premature babies: A randomized controlled trial: OMT on physiological premature infants' arousal: A RCT.*** Complement Ther Clin Pract. 2020 May; 39 :101116. DOI: 10.1016/j.ctcp.2020.101116

9. Esteves, J.E., Zegarra-Parodi, R., van Dun, P., Cerritelli, F., Vaucher, P. ***Models and theoretical frameworks for osteopathic care – A critical view and call for updates and research (2020)*** Int J Osteopat Med. 2020; 35;1-4. DOI: 10.1016/j.ijosm.2020.01.003

10. Cerritelli, F., Chiacchiaretta, P., Gambi, F., Perrucci, M.G., Barassi, G., Visciano, C., Bellomo, R.G., Saggini, R., Ferretti, ***A. Effect of manual approaches with osteopathic modality on brain correlates of interoception: an fMRI study***. Sci Rep. 2020 Feb 21;10(1):3214 DOI: 10.1038/s41598-020-60253-6

11. van Dun P, Zegarra-Parodi R. ***"Osteopathic Manual Treatment" (OMT) ou "Orthopaedic Manual Therapy" (OMT): quelle est vraiment la différence?*** About Osteopathy, 2020; 1: 18-25.

12. van Dun P, Wagner C. ***Richtige Kommunikation in unserem Beruf : ein internationales Anliegen.*** DO – Deutsche Zeitschrift für Osteopathie 2020; 18: 40–43.

13. van Dun P. ***Kunnen osteopaten bijdragen aan de zorg van mensen met COVID-19?*** About Osteopathy, 2020; 2: 20-22.

14. A. Manzotti, F. Cerritelli, M. Chiera, E. Lombardi, S. La Rocca, P. Biasi, M. Galli, J. Esteves, G. Lista***. Il modello NAME per la valutazione dei bambini nella TIN***. pneireview 2020;1;66-75

15. R. Zegarra-Parodi, J. Draper-Rodi, F. Cerritelli. ***Erweiterung*** **des biopsychosozialen Modells für die muskuloskelettale Praxis**. ***Teil 1: Einführung religiöser und spiritueller Dimensionen in das biopsychosoziale Modell.*** Osteopathische Medizin 21. Jahrg., Heft 2/2020, S. 28–32

16. R. Zegarra-Parodi, J. Draper-Rodi, F. Cerritelli. ***Erweiterung des biopsychosozialen Modells für die muskuloskelettale Praxis. Teil 2: Klinische Bedeutung für die muskuloskelettale Behandlung***. Osteopathische Medizin 21. Jahrg., Heft 3/2020, S. 9–12

17. Consorti G. D.O., Marchetti A. PhD, De Marinis M.G., ***What makes an osteopathic treatment effective from a Patient's Perspective: a descriptive phenomenological study***. JMPT 2020, Vol.00, N.00

18. Lunghi C. ***Test der Faszienkompartimente***. Osteopathische Medizin 21. Jahrg., Heft 2/2020, S. 33-35

19. T.Van Biesen, G.Alvarez; ***Beliefs about chronic low back pain amongst osteopaths registered in Spain: A cross-sectional survey***. IJOM. 12 March 2020; 1746-0689/

20. M. Tramontano, DO; S. Pagnotta, DO; C. Lunghi, DO; C. Manzo, DO; F. Manzo, DO; S. Consolo, MSc; V. Manzo, MD, DO; ***Assessment and Management of Somatic Dysfunctions in Patients With Patellofemoral Pain Syndrome.*** J Am Osteopath Assoc. 2020;120(3):1-9 doi:10.7556/jaoa.2020.029

21. G. Alvarez, I. Solà, M. Sitjà-Rabert, , A. Fort-Vanmeerhaeghed, I. Gich, C. Fernàndez, X. Bonfilla, Gerard Urrútia. ***A methodological review revealed that reporting of trials in manual therapy has not improved over time.*** Journal of Clinical Epidemiology 121 (2020) 32e44

22. Lunghi C., Liem T.; ***Models and theoretical frameworks for osteopathic care – a critical view and call for updates and research.*** IJOSM 549; S1746-0689(20)30125-5 DOI: https://doi.org/10.1016/j.ijosm.2020.07.004

b. RELAZIONI TECNICHE

1. The Covid-19 Guide Consortium: Collomb R, Macdonald R, Schira F, van Dun P, Vaucher P. COVID-19 Guide – ***Adaptive hygiene guidance for osteopathic practices.*** Version 2.0. Foundation COME Collaboration, Pescara, Italy; 1 June 2020. https://drive.infomaniak.com/app/share/116280/7c3b09b1-3b20-49de-8385-doca59a23fcb

2. van Dun P, Dobbelaere E, Simons E**.** ***Een kwantitatief onderzoek naar de bekendheid en het imago van de osteopathie in België in opdracht van de Beroepsvereniging voor Belgische Osteopaten*** (osteopathie.be), 2020, Brussel. DOI: 452.394.538/iVOX.2020.

3. van Dun P, Dobbelaere E, Simons E. ***Une étude quantitative mesurant la connaissance et l'image de l'ostéopathie en Belgique pour le compte de l'Union Professionnelle des Ostéopathes de Belgique (UPOB-BVBO)***, 2020, Bruxelles. DOI : 452.394.538/iVOX.2020.

c. PRESENTAZIONI CONGRESSUALI

1. Francesco Cerritelli. Are you ready for the future? placebo is here- 6th Annual COME Quantum Global Conference, 02-03 October 2020, Paris (France, virtual).

2. van Dun P, Gatekeeping, referral, networking – the actual role and place of osteopathic care, 6th Annual COME Quantum Global Conference, 02-03 October 2020, Paris (France, virtual).

d. MEDIA

1. Engels T. Osteopaten maken komaf met hardnekkige mythes: 'Baby's worden nooit gekraakt', Knack, 2020, https://www.knack.be/nieuws/wetenschap/osteopaten-maken-komaf-met-hardnekkige-mythes-baby-s-worden-nooit-gekraakt/article-longread-1667109.html

2. Interview with P. van Dun concerning the myths in the Belgian press about osteopathy for unsettled infants (Dutch).

LISTA DELLE PUBBLICAZIONI IN PEER REVIEWED JOURNALS (con ABSTRACT).
Nota: la seguente lista riporta gli articoli ed i paper con I rispettivi abstract, così come pubblicati sulle rispettive riviste, in lingua originale.

1. Tramontano, M., Cerritelli, F., Piras, F., Spanò, B., Tamburella, F., Piras, F., Caltagirone, C., Gili, T. ***Brain connectivity changes after osteopathic manipulative treatment: A randomized manual placebo-controlled trial.*** Brain Sci. 2020 Dec 11;10(12):969. DOI: 10.3390/brainsci10120969

AFFILIATIONS: IRCCS Fondazione Santa Lucia, Rome, 00174, Italy;

Clinical-Based Human Research Department, Foundation COME Collaboration, Pescara, 65121, Italy;

Networks Unit, IMT School for Advanced Studies Lucca, Lucca, 55100, Italy

ABSTRACT

The effects of osteopathic manipulative treatment (OMT) on functional brain connectivity in healthy adults is missing in the literature. To make up for this lack, we applied advanced network analysis methods to analyze resting state functional magnetic resonance imaging (fMRI) data, after OMT and Placebo treatment (P) in 30 healthy asymptomatic young participants randomized into OMT and placebo groups (OMTg; Pg). fMRI brain activity measures, performed before (T0), immediately after (T1) and three days after (T2) OMT or P were used for inferring treatment effects on brain circuit functional organization. Figure 1 and 2 showed repeated measures ANOVA and post-hoc analysis demonstrating that Right Precentral Gyrus ($F(2, 32) = 5.995$, $p < 0.005$) was more influential over the information flow immediately after the OMT, while decreased betweenness centrality in Left Caudate ($F(2, 32) = 6.496$, $p < 0.005$) was observable three days after. Clustering coefficient showed a distinct time-point and group effect. At T1, reduced neighborhood connectivity was observed after OMT in the Left Amygdala (L-Amyg) ($F(2, 32) = 7.269$, $p < 0.005$) and Left Middle Temporal Gyrus ($F(2, 32) = 6.452$, $p < 0.005$), whereas at T2 the L-Amyg and Vermis-III ($F(2, 32) = 6.772$, $p < 0.005$) increased functional interactions. Data demonstrated functional connectivity re-arrangement after OMT.

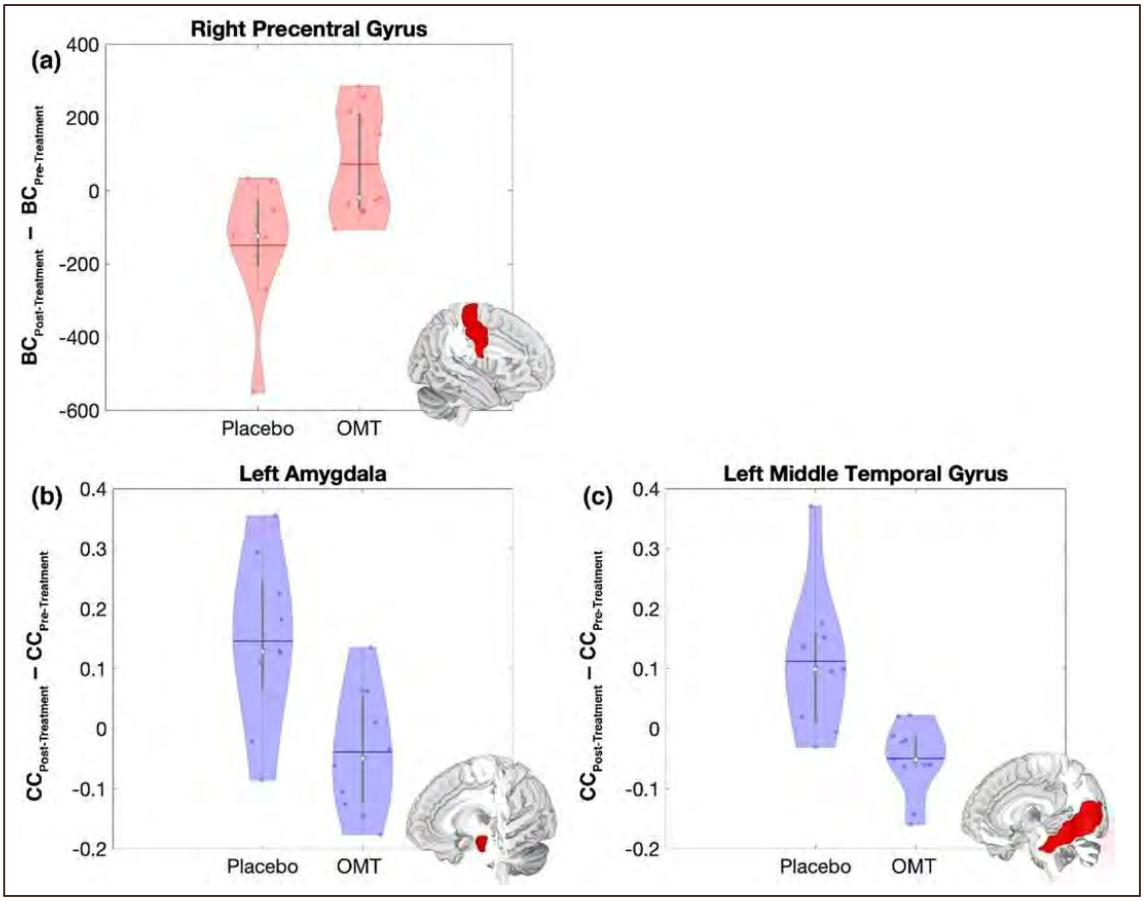


Figure 1: Pre to Post-treatment changes of brain functional topological measures in the Right Precentral Gyrus (**a**), Left Amygdala (**b**) and in the Left Middle Temporal Gyrus (**c**). Violin plots of the statistically significant difference between the post-treatment and pre-treatment values of Betweenness Centrality (BC, red) and Clustering Coefficient (CC, blue) for the Osteopathic Manipulative Treatment (OMT) and Placebo (P). The solid horizontal lines represent the mean of the distribution, while the white dots represent the median. For each plot the structural representation of the associated region is reported as the red portion of the whole brain (right Precentral Gyrus, left Amygdala and left Middle Temporal Gyrus respectively).

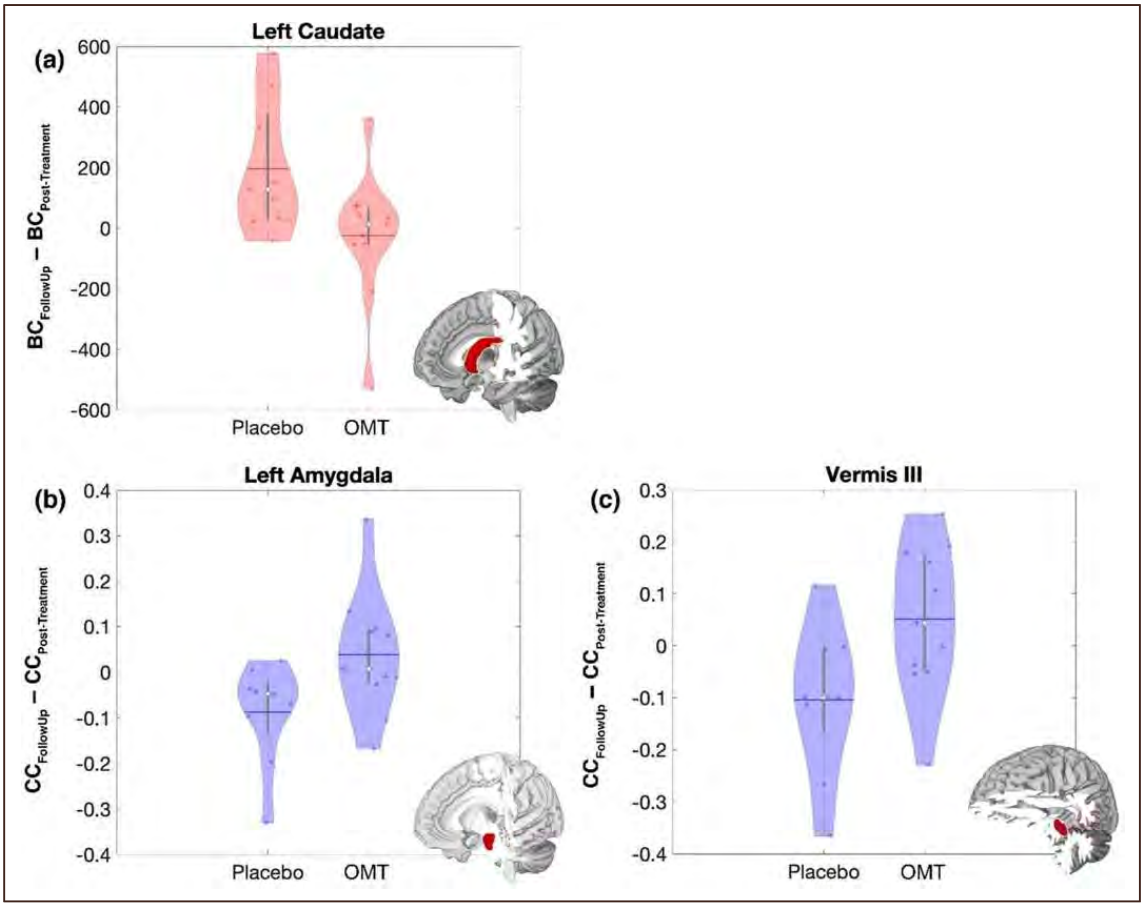


Figure 2: Post-treatment to Follow-Up changes of brain functional topological measures in the Left Caudate (**a**), Left Amygdala (**b**) and in the Vermis III (**c**). Violin plots of the statistically significant difference between the follow-up and post-treatment values of Betweenness Centrality (BC, red) and Clustering Coefficient (CC, blue) for the Osteopathic Manipulative Treatment (OMT) and Placebo (P). The solid horizontal lines represent the mean of the distribution, while the white dots represent the median. For each plot the structural representation of the associated region is reported as the red portion of the whole brain (left Caudate, Left Amygdala and Vermis III respectively).

2. Chiera, M., Cerritelli, F., Casini, A., Barsotti, N., Boschiero, D., Cavigioli, F., Corti, C.G., Manzotti, A. ***Heart Rate Variability in the Perinatal Period: A Critical and Conceptual Review.*** Front Neurosci. 2020 Sep 25;14:561186. DOI: 10.3389/fnins.2020.561186

AFFILIATIONS: Research and Assistance for Infants to Support Experience Lab, Foundation Center for Osteopathic Medicine Collaboration, Pescara, Italy;

Research Commission on Manual Therapies and Mind-Body Disciplines, Societ Italiana di Psico Neuro Endocrino Immunologia, Rome, Italy;

BioTekna – Biomedical Technologies, Venice, Italy;

Neonatal Intensive Care Unit, "V. Buzzi" Children's Hospital, Azienda Socio Sanitaria Territoriale Fatebenefratelli-Sacco, Milan, Italy;

Pediatric Cardiology Unit-Pediatric Department, Azienda Socio Sanitaria Territoriale Fatebenefratelli-Sacco, Milan, Italy;

Research Department, SOMA, Istituto Osteopatia Milano, Milan, Italy

ABSTRACT

Neonatal intensive care units (NICUs) greatly expand the use of technology. There is a need to accurately diagnose discomfort, pain, and complications, such as sepsis, mainly before they occur. While specific treatments are possible, they are often time-consuming, invasive, or painful, with detrimental effects for the development of the infant. In the last 40 years, heart rate variability (HRV) has emerged as a non-invasive measurement to monitor newborns and infants, but it still is underused. Hence, the present paper aims to review the utility of HRV in neonatology and the instruments available to assess it, showing how HRV could be an innovative tool in the years to come. When continuously monitored, HRV could help assess the baby's overall wellbeing and neurological development to detect stress-/pain-related behaviors or pathological conditions, such as respiratory distress syndrome and hyperbilirubinemia, to address when to perform procedures to reduce the baby's stress/pain and interventions, such as therapeutic hypothermia, and to avoid severe complications, such as sepsis and necrotizing enterocolitis, thus reducing mortality. Based on literature and previous experiences, the first step to efficiently introduce HRV in the NICUs could consist in a monitoring system that uses photoplethysmography, which is low-cost and non-invasive, and displays one or a few metrics with good clinical utility. However, to fully harness HRV clinical potential and to greatly improve neonatal care, the monitoring systems will have to rely on modern bioinformatics (machine learning and artificial intelligence algorithms), which could easily integrate infant's HRV metrics, vital signs, and especially past history, thus elaborating models capable to efficiently monitor and predict the infant's clinical conditions. For this reason, hospitals and institutions will have to establish tight collaborations between the obstetric, neonatal, and pediatric departments: this way, healthcare would truly improve in every stage of the perinatal period (from conception to the first years of life), since information about patients' health would flow freely among different professionals, and high-quality research could be

performed integrating the data recorded in those departments.

3. Cerritelli, F., Cardone, D., Pirino, A., Merla, A., Scoppa, F. Does Osteopathic Manipulative Treatment Induce Autonomic Changes in Healthy Participants? A Thermal Imaging Study. Front Neurosci. 2020 Aug 18;14:887. DOI: 10.3389/fnins.2020.00887

AFFILIATIONS: Clinical-based Human Research Department, Foundation COME Collaboration, Pescara, Italy;

Department of Neuroscience and Imaging, Institute for Advanced Biomedical Technologies, University G. D'Annunzio of Chieti-Pescara, Chieti, Italy;

Department of Biomedical Sciences, University of Sassari, Sassari, Italy;

Faculty of Medicine and Dental Surgery, Sapienza University of Rome, Rome, Italy;

Chinesis I.F.O.P. Osteopathy School, Rome, Italy

ABSTRACT

Osteopathic manipulative treatment (OMT) has been demonstrated to be an effective therapy in several clinical conditions and age groups. Despite the clinical effectiveness, lack of robust data in terms of neurobiological, specifically autonomic, mechanisms of action is observed. Preliminary studies showed a parasympathetic effect leading to a trophotropic effect of OMT. However, these data are limited to heart rate variability (HRV) analysis. In order to study further the role of OMT on the autonomic nervous system, a cross-over randomized controlled trial RCT has been designed to test the effect of osteopathic treatment compared to sham therapy on a range of autonomic parameters. Thermal images, HRV and skin conductance data were collected on a sample of healthy adults. The study design consisted of two sessions (OMT and SHAM), 1 treatment per week, lasting 35 min each, composed of 5 min of baseline, 25 min of treatment, and 5 min of post-touch. During the baseline and the post-treatment, participants received no touch. Thirty-seven participants (aged 27 ± 5 years old, male ratio 40%) completed the study. Multivariate analysis showed a significant parasympathetic effect of group as well as of epoch on thermographic data (Figure 1) of the nose (estimate 0.38; 95% CI 0.12–0.63; $p < 0.01$), left (0.17; 0.06–0.27; <0.001) and right (0.16; 0.07–0.24; <0.001) perioral as well as on the forehead (0.07; 0.01–0.12; <0.01) regions but not for the chin (0.08; –0.02 to 0.18; 0.13). Consistent with a parasympathetic effect, analyses demonstrated a difference between OMT and sham groups on the nuHF ($p < 0.001$) and DFA-a1 ($p < 0.01$) as well as on skin conductance (<0.01). The present research supports the hypothesis that a single session of OMT as compared to sham induces autonomic consequences in healthy non-symptomatic adults. Clinicaltrial.gov identifier: NCT03888456

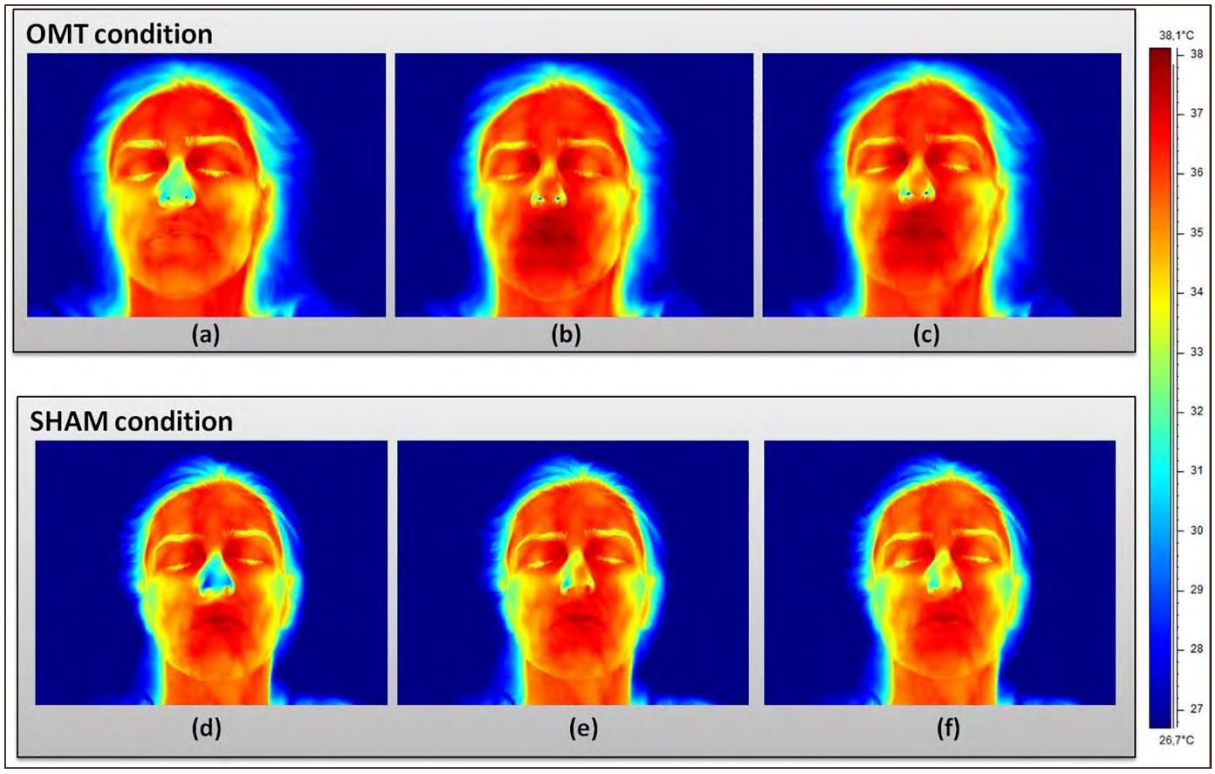


Figure 1: Facial thermal changes in a representative participant receiving either osteopathic manipulative treatment or sham. Panels **(a,d)** represents baseline period before the touch stimulation. Panels **(b,e)** show touch period. Panels **(c,f)** demonstrate post-touch period. A general temperature increase can be observed over the whole face in the osteopathic group as compared to the sham. In particular, while the chin slightly changes their average temperature values, nose tip, perioral, maxillary, and forehead regions clearly present a temperature increase where red areas can be easily spotted. OMT, osteopathic manipulative treatment.

4. Manzotti, A., Cerritelli, F., Chiera, M., Lombardi, E., La Rocca, S., Biasi, P., Galli, M., Esteves, J., Lista, G. Neonatal Assessment Manual Score: Is There a Role of a Novel, Structured Touch-Based Evaluation in Neonatal Intensive Care Unit? Front Pediatr. 2020 Aug 6;8:432. DOI: 10.3389/fped.2020.00432

AFFILIATIONS: RAISE Laboratory, Foundation COME Collaboration, Pescara, Italy;

Division of Neonatology, V. Buzzi" Children's Hospital, ASST-FBF-SaccoMilan, Italy;

Research Department, Istituto Osteopatia Milano, Milan, Italy;

Gulf National Centre, Foundation COME Collaboration, Riyadh, Saudi Arabia;

Research Department, University College of Osteopathy, London, United Kingdom

ABSTRACT

Despite the technological improvements in monitoring preterm infants in the neonatal intensive care unit, routine care in the neonatal ward is primarily based on manual procedures. Although manual clinical procedures play a critical role in neonatology, little attention has been paid to palpation as a clinical assessment tool. Palpation is a clinical evaluation tool that relies mostly on the senses of touch and proprioception. Based on recent studies investigating the role and clinical effectiveness of touch in full-term and preterm babies, this paper proposes an evaluative touch-based procedure—the Neonatal Assessment Manual Score (NAME) model—that could be useful in the neonatal ward and describes its rationale. The operator applies gentle light pressures to the infant's body (Figure 1). In essence, the touch stimulates low-threshold afferent fibers that could influence the interoceptive cerebral network and the autonomic nervous system, thus altering the blood flow and breathing rhythm. These events could change how bodily fluids distribute among body segments and hence the body volume. The volume modification could be felt manually through haptic perception owing to the high sensitivity of the fingers. On the basis of their clinical conditions and stage of development, infants will respond differently to the applied pressures. Evaluating the infant's response, the operator produces a score of "bad," "marginal," or "good" for communicating quickly and clearly the infant's conditions to other professionals. Because the NAME model is intended for every professional who is used to touch-based procedures, if future studies confirmed its validity and reliability in clinical practice, the NAME model could become a part of the neonatal ward routine care for better assessing and managing the infant's conditions, even during emergencies.

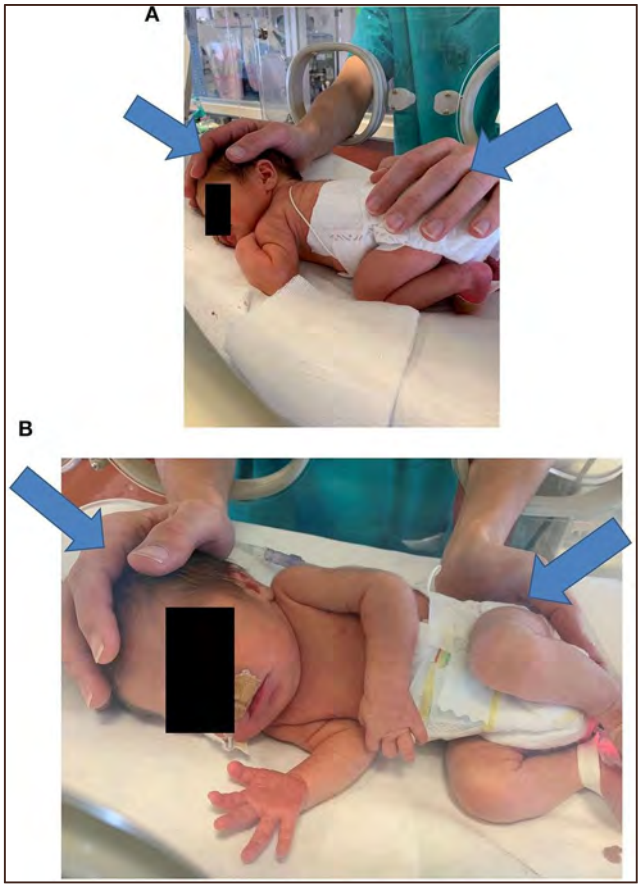


Figure 1: Typical hand positioning for a NAME procedure **(A,B)**. In **(A,B)** the arrows indicate the direction of the manual stimuli. NAME, Neonatal Assessment Manual Score.

5. Lunghi, C., Consorti, G., Tramontano, M., Esteves, J.E., Cerritelli, F. Perspectives on tissue adaptation related to allostatic load: Scoping review and integrative hypothesis with a focus on osteopathic palpation J Bodyw Mov Ther. 2020 Jul;24(3):212-220. DOI: 10.1016/j.jbmt.2020.03.006

AFFILIATIONS: Clinical-based Human Research Department, Research Division, Foundation COME Collaboration, Pescara, Italy;

Malta I.C.O.M. Educational, Malta;

Research Department of the Centre pour l'Etude, la Recherche et la Diffusion Osteopathiques (C.E.R.D.O.), Rome, Italy;

Fondazione Santa Lucia IRCCS, Rome, Italy;

University College of Osteopathy, London, United Kingdom;

Gulf National Centre, Foundation COME Collaboration, Riyadh, Saudi Arabia;

MYO Osteopathy, Riyadh, Saudi Arabia.

ABSTRACT

Introduction: Osteopathic care may support an individual's adaptive capacity, including allostatic regulation and tissue changes in both health and disease. The palpatory findings which osteopaths claim are related to tissue changes may be linked to allostatic load. However, this putative link has not been formally investigated. Methods: We conducted a scoping review to critically appraise the relevant literature on the relationship between allostatic processes and tissue alterations. This review evaluates the use and relevance of palpatory findings in osteopathic care. We searched on PubMed, EMBASE, Cochrane library for research exploring the links between tissue adaptation, allostasis and osteopathic palpatory findings (OPF). Results: Recent studies provide insights into the role of allostatic regulation on body systems' responses related to tissue alterations. These results provide new insights into the relevance of OPF to clinical practice. Discussion: We build upon the findings of our review to propose a putative model for OPF in clinical practice. Conclusion: Although the clinical phenomena associated with OPF may be biologically plausible, it lacks the necessary underpinning research evidence. Arguably, the classical focus on the diagnosis of palpable tissue changes fails to integrate biological, social and neuropsychological aspects such as stress responses. Tissue alterations related to stress and allostatic load markers have been less studied. Tissue changes involved in the adaptive process may be useful to practitioners in the field of manual therapy, particularly in osteopathy. We propose that OPF are one of the multidimensional aspects that may inform osteopathic decision-making. However, they should be considered within a biopsychosocial perspective and taking into account concepts of allostatic load and regulation.

6. Cerritelli, F., Consorti, G., Van Dun, P.L.S., Esteves, J.E., Sciomachen, P., Valente, M., Lacorte, E., Vanacore, N. The Italian osteopathic practitioners estimates and RAtes (OPERA) study: How osteopaths work. PLoS One. 2020 Jul 2;15(7): e0235539. DOI: 10.1371/journal.pone.0235539

AFFILIATIONS: Clinical-based Human Research Department, Foundation COME Collaboration, Pescara, Italy;

Research Department, Centre pour l'Etude, la Recherche et la Diffusion Osteopathiques (C.E.R.D.O.), Rome, Italy;

Registro degli Osteopati d'Italia, Milan, Italy;

Belgium National Centre, Foundation COME Collaboration, Mechelen, Belgium;

Gulf National Centre, Foundation COME Collaboration, Riyadh, Saudi Arabia;

University College of Osteopathy, London, United Kingdom;

National Institute of Health, Rome, Italy

ABSTRACT

The scope of practice of the osteopathic profession in Italy is underreported. The first part of the present study investigated the Italian osteopaths' profile, focusing on the socio-demographic information and geographical distribution together with the main characteristics of their education. The OPERA-IT study highlighted that the majority of respondents declared to work as sole practitioners (58.4%), while the remaining declared to work as part of a team. Since teamwork and networking are recognized as fundamental aspects of healthcare, the present study aims to compare the osteopathic practice, diagnostic and treatment modalities of osteopaths who work as a sole practitioner and osteopaths who work as part of a team to highlight possible differences. Moreover, patients' characteristics will be presented. The OPERA-IT study population was chosen to provide a representative sample. A web campaign was set up to inform the Italian osteopaths before the beginning of the study. The OPERA IT study used a previously tested questionnaire. The questionnaire was translated into Italian following the World Health Organization recommendation. The questionnaire was composed of 57 items grouped in five sections, namely: socio-demographics, osteopathic education and training, working profile, organization, and management of the clinical practice and patient profile. The survey was delivered online through a dedicated platform. The survey was completed by 4,816 individuals. Osteopaths who work as sole practitioners represented the majority of the sample (n = 2814; 58.4%). Osteopaths who work as part of a team declared to collaborate mostly with physiotherapists (n = 1121; 23.3%), physicians with speciality (n = 1040; 21.6%), and other osteopaths (n = 943; 19.6%). The two groups showed heterogeneous characteristics. Significative differences were observed in all the factors, namely: geographical distribution, age, gender, training, working contract and working place, daily consultations and time for each consultation, fees, and the average waiting period to book an appointment. The principal component analysis supported a ten-

component model and explained 80.5% of the total variance. The analysis showed that osteopaths working as sole practitioners have an increased probability (OR = 0.91; CI 95%: 0.88-0.94; p<0.01) of using systemic diagnostic and treatment techniques and have distinct clinical features with higher probability (OR = 0.92; 0.88-0.96; p<0.01) of spending less time with patients, being paid less but treating a higher number of patients per week. The most represented patients' age groups were 41-64 years old (n = 4452; 92.4%) and 21-40 years old (n = 4291; 89.1%). Similarly, the most reported new patients' age groups were 41-64 years old (n = 4221; 87.7%) and 21-40 years old (n = 3364; 69.9%). The most common presenting complaints were back pain, neck pain, cervical radiculopathy, sciatica, shoulder pain, and headaches. Osteopathic practice in Italy seems to be characterised by inter-professional collaboration, mostly with physiotherapists. Our results highlighted two different profiles in terms of sociodemographic characteristics and work modalities between osteopaths who work as sole practitioners and those who work as part of a team. Although according to the respondents, people of all ages consult Italian osteopaths, the majority of patients are adults. Most of them have been referred to osteopathy by other patients or acquaintances. Patients seek osteopathic care mostly for musculoskeletal related complaints.

7. Alvarez, G., Roura, S., Cerritelli, F., Esteves, J.E., Verbeeck, J., Dun, P.L.S.V. The Spanish Osteopathic Practitioners Estimates and RAtes (OPERA) study: A crosssectional Survey. PLoS One. 2020 Jun 15;15(6):e0234713.DOI: 10.1371/journal.pone.0234713

AFFILIATIONS: Spain National Centre, Foundation Come Collaboration, Barcelona, Spain;

Iberoamerican Cochrane Centre, Biomedical Research Institute Sant Pau, Iib Sant Pau, Barcelona, Spain;

Clinical Human-based Research Department, Foundation Come Collaboration, Pescara, Italy;

Gulf National Centre, Foundation Come Collaboration, Ksa, Riyadh, Saudi Arabia;

Independent Statistical Consultant, Blaasveld, Belgium;

Belgium National Centre, Foundation Come Collaboration, Mechelen, Belgium.

ABSTRACT

Background Despite the growth of the osteopathic profession in Spain in the last few years, reliable information regarding professional profile and prevalence is still lacking. The Osteopathic Practitioners Estimates and RAtes (OPERA) project was developed as a European-based survey dedicated to profiling the osteopathic profession across Europe. The present study aims to describe the characteristics of osteopathic practitioners, their professional profile and the features of their clinical practice. Methods A voluntary, validated online-based survey was distributed across Spain between January and May 2018. The survey, composed of 54 questions and 5 sections, was formally translated from English to Spanish and adapted from the original version. Because there is not a unique representative osteopathic professional body in Spain, a dedicated website was created for this study, and participation was encouraged through both specific agreements with national registers/associations and an e-based campaign. Results A total of 517 osteopaths participated in the study, of which 310 were male (60%). The majority of respondents were aged between 30-39 years (53%) and 98% had an academic degree, mainly in physiotherapy. Eighty-five per cent of the respondents completed a minimum of four-year part-time course in osteopathy. Eighty-nine per cent of the participants were self-employed. Fifty-eight per cent of them own their clinic, and 40% declared to work as sole practitioner. Thirty-one per cent see an average of 21 to 30 patients per week for 46-60 minutes each. The most commonly used diagnostic techniques are movement assessment, palpation of structures/position and assessment of tenderness and trigger points. Regarding treatment modalities, articulatory/mobilisation techniques followed by visceral techniques and progressive inhibition of neuromuscular structures is often to always used. The majority of patients estimated by the respondents sought osteopathic treatment for musculoskeletal problems mainly localised on the lumbar and cervical region. The majority of respondents manifest a robust professional identity and a collective desire to be regulated as a healthcare profession. Conclusions This study represents the first published document to determine the characteristics of the osteopathic practitioners in Spain using large, national data. To date, it represents the most informative document related to the osteopathic community in Spain. It brings new information on where, how, and by whom osteopathy is practised

in the country. The information provided could potentially influence the development of the profession in Spain.

8. Manzotti, A., Cerritelli, F., Lombardi, E., La Rocca, S., Chiera, M., Galli, M., Lista, G. Effects of osteopathic treatment versus static touch on heart rate and oxygen saturation in premature babies: A randomized controlled trial: OMT on physiological premature infants' arousal: A RCT. Complement Ther Clin Pract. 2020 May; 39 :101116. DOI: 10.1016/j.ctcp.2020.101116

AFFILIATIONS: RAISE Lab, Foundation COME Collaboration, Pescara, Italy;

Division of Neonatology, "V. Buzzi" Children's Hospital, ASST-FBF-Sacco, Milan, Italy;

Research Department, SOMA, Istituto Osteopatia Milano, Milan, Italy

ABSTRACT

Background: Osteopathic manipulative treatment (OMT) has been successfully tested in the context of preterm infants. No studies, however, have been conducted to investigate the OMT immediate effects on physiological measurements, such as partial oxygen saturation (SpO_2) and heart rate (HR). The purpose of the present study was to assess the effect of osteopathic treatment on SpO_2 and HR values and to compare it with 10 min of static touch. Materials and methods: Ninety-six preterm infants (41 male), aged 33.5 weeks (±4.3) with mean weight at birth of 2067gr (±929) were recruited from the neonatal intensive care unit (NICU) of the Buzzi Hospital in Milan, and randomly allocated to two groups: OMT and Static Touch. Each protocol session consisted of: a) 5-min Pre-touch baseline recording, b) 10-min touch procedure, c) 5-min post-touch recording. Primary and secondary outcomes were, respectively, the baseline changes of HR and SpO_2. Results: The 2 × 2 repeated measure ANOVA for HR showed a statistically significant effect ($F(1,94) = 5.34$; $p < 0.02$) (Figure 1), revealing that the OMT group decreases the HR value at T2 ($p = 0.006$). In contrast, SpO_2 analysis showed an increase of SpO_2 value where the OMT group demonstrated higher values at T2 ($p = 0.04$) (Figure 2). Conclusion: Results from the present study suggest that a single osteopathic intervention may induce beneficial effects on preterm physiological parameters. Trial registration: ClinicalTrials.gov identifier: NCT03833635 – Date: February 7, 2019.

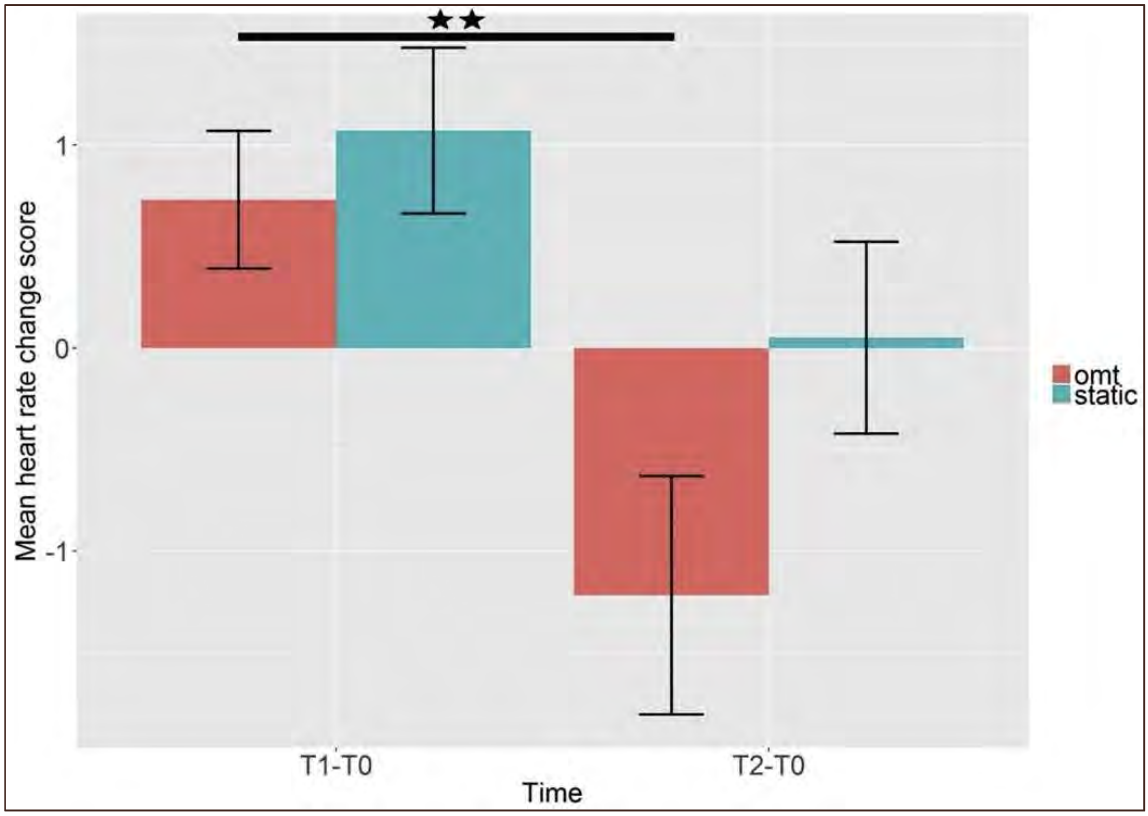


Figure 1. **Mean heart rate change score during the touch (T1-T0) and post-touch (T2-T0) periods**. Data are presented as change in heart rate from baseline. OMT: osteopathic manipulative treatment. Error bars show ± Standard Error. The black line indicates the significant effect of Time for the OMT group as detected via 2 × 2 repeated measures ANOVA and Bonferroni corrected pairwise t-tests. $^{**}p < 0.01$.

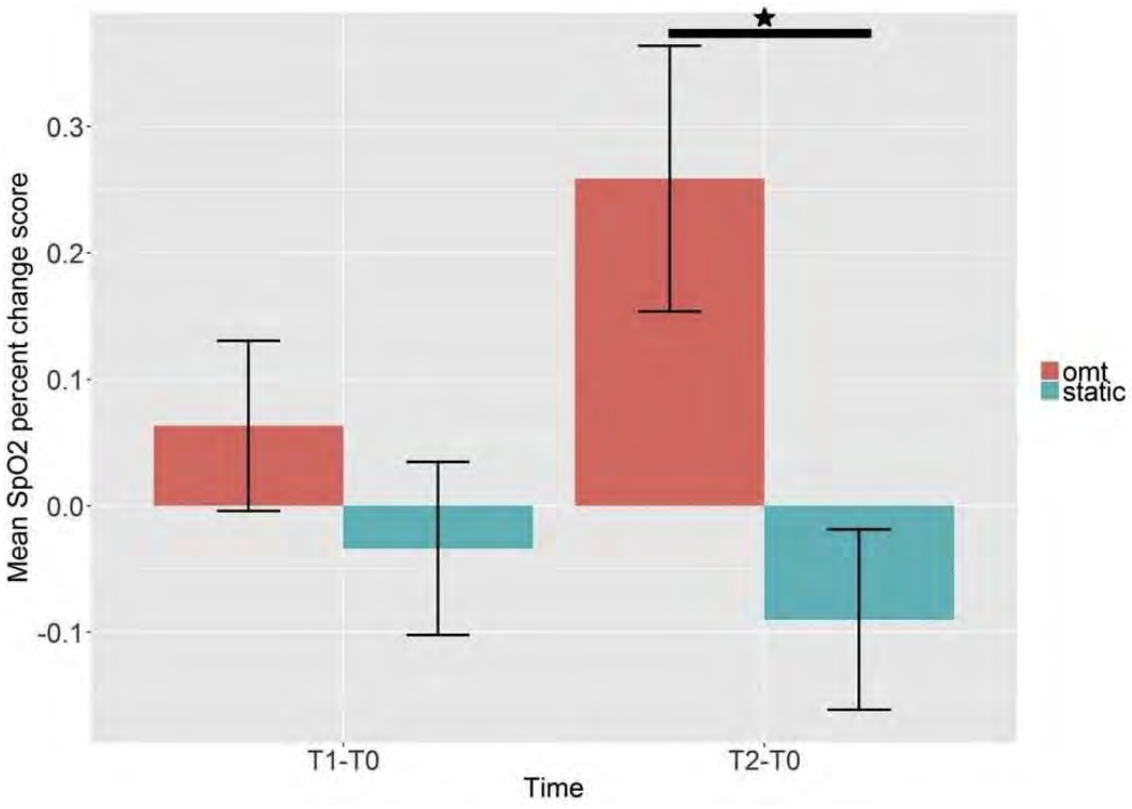


Figure 2: **Mean SpO2 change score during the touch (T1-T0) and post-touch (T2-T0) periods.** Data are presented as a change in oxygen saturation from baseline. SpO2 1/4 partial oxygen saturation. OMT 1/4 osteopathic manipulative treatments. Error bars show Standard Error. The black line indicates a significant difference between groups in the post-touch period as detected via Bonferroni corrected pairwise t-tests. *$p < 0.05$.

9. Esteves, J.E., Zegarra-Parodi, R., van Dun, P., Cerritelli, F., Vaucher, P. Models and theoretical frameworks for osteopathic care – A critical view and call for updates and research (2020) Int J Osteopat Med. 2020; 35;1-4. DOI: 10.1016/j.ijosm.2020.01.003

AFFILIATIONS: Foundation COME Collaboration, Italy;

Gulf National Centre, Foundation COME Collaboration, Riyadh, Saudi Arabia;

MYO Osteopathy, Riyadh, Saudi Arabia;

University College of Osteopathy, London, United Kingdom;

A.T. Still Research Institute, A.T. Still University, Kirksville, MO, United States;

University of Applied Sciences and Arts Western Switzerland (HES-SO), School of Health Sciences Fribourg, Fribourg, Switzerland.

ABSTRACT

Rather than locking the profession within a set framework, the profession could benefit from valuing innovation and originality in new emerging models and theoretical frameworks of care as long as the underlying methodology for their development is appropriate. There is a need for extensive exposure to critical judgment and identifications of strengths and limitations of each model. We argue that the recent developments in the fields of pain science and musculoskeletal care, which endorse “osteopathic” concepts of person-centred care, provide a unique window of opportunity for the development and dissemination of evidence-based models of osteopathic care, to foster a stronger professional identity and to the recognition of osteopathy as a mainstream healthcare discipline.

10. Cerritelli, F., Chiacchiaretta, P., Gambi, F., Perrucci, M.G., Barassi, G., Visciano, C., Bellomo, R.G., Saggini, R., Ferretti, A. Effect of manual approaches with osteopathic modality on brain correlates of interoception: an fMRI study. Sci Rep. 2020 Feb 21;10(1):3214 DOI: 10.1038/s41598-020-60253-6

AFFILIATIONS: Department of Neuroscience, Imaging and Clinical Sciences, "G. D'Annunzio" University of Chieti-Pescara, Chieti, Italy;

ITAB-Institute for Advanced Biomedical Technologies, "G. D'Annunzio" University of Chieti-Pescara, Chieti, Italy;

Clinical-Based Human Research Department-C.O.M.E. Collaboration ONLUS, Pescara, Italy;

Department of Medical Oral and Biotechnological Science, "Gabriele d'Annunzio" University, Chieti-Pescara, Italy;

Department of Biomolecular Sciences, 'Carlo Bo' University, Urbino, Italy.

ABSTRACT

The present randomised placebo controlled trial explored the extent to which osteopathic manipulative treatment (OMT) affects brain activity, particularly the insula, during both an "interoceptive awareness" and "exteroceptive awareness" task in a sample of 32 right-handed adults with chronic Low Back Pain (CLBP) randomly assigned to either the OMT or sham group. Patients received 4 weekly sessions and fMRI was performed at enrolment (T0), immediately after the first session (T1) and at 1 month (T2). The results revealed that the OMT produced a distinct and specific reduction in BOLD response in specific brain areas related to interoception, i.e., bilateral insula, ACC, left striatum and rMFG (Figure 1). The observed trend across the three time points appears uncharacteristic. At T1, a marginal increase of the BOLD response was observed in all the above-mentioned areas except the rMFG, which showed a decrease in BOLD response. At T2, the response was the opposite: areas related to interoception (bilateral insula and ACC) as well as the rMFG and left striatum demonstrated significant decreased in BOLD response. The findings of this study provide an insight into the effects of manual therapies on brain activity and have implications for future research in the field.

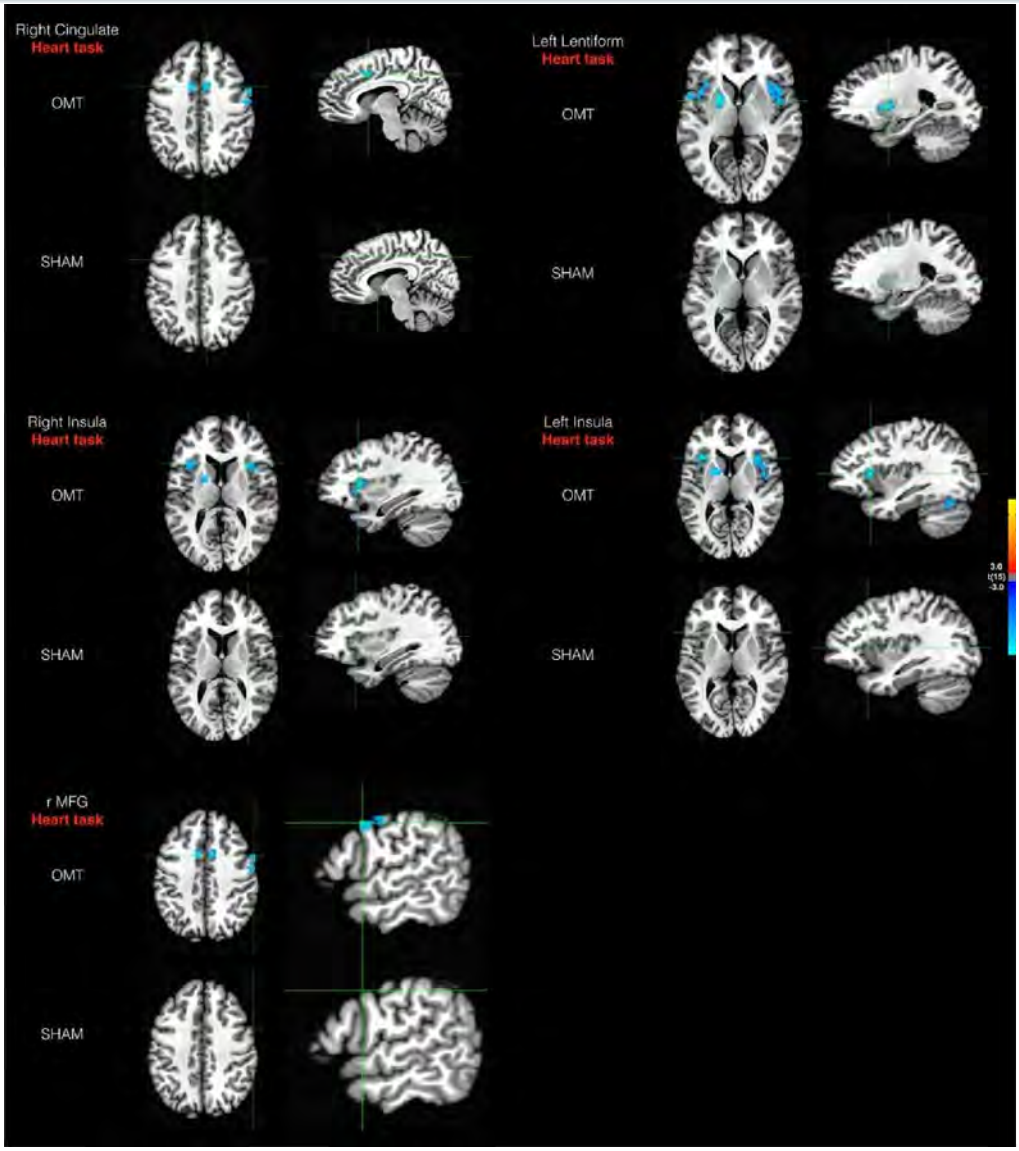


Figure 1: Results of the group analysis revealing areas for OMT and Sham group by the contrast T2-T1-T0 in the heart task (interoceptive awareness task) and sound task (exteroceptive awareness task). The group statistical maps were thresholded at $p < 0.05$, corrected for multiple comparisons using FDR, and superimposed on the Talairach transformed structural scan of one of the subjects. Activation was observed in Right Cingulate Cortex, Right and Left Insula, Left Lentiform and right Middle Frontal Gyrus (rMFG).

11. van Dun P, Zegarra-Parodi R. "Osteopathic Manual Treatment" (OMT) ou "Orthopaedic Manual Therapy" (OMT): quelle est vraiment la différence? About Osteopathy, 2020; 1: 18-25.

ABSTRACT

(French) L'objectif de cet article est de commenter l'article de Hidalgo et Demoulin, lequel se proposait de comparer la thérapie manuelle orthopédique avec l'ostéopathie. Après une analyse attentive de la littérature scientifique pourtant disponible, il semble que les caractéristiques proposées par les auteurs aux fins de cette comparaison, telle l'intégration de la pratique fondée sur les preuves, les compétences techniques et l'accès aux soins, ne permettent pas de dessiner le caractère distinctif des deux professions. De plus, l'absence d'importantes données descriptives limite la portée des conclusions des auteurs. Enfin, nous suggérons qu'une analyse des concepts cliniques et des valeurs professionnelles, considérés comme les principes directeurs pour une prise de décision et une pratique clinique rationnelles, aurait probablement mieux caractérisé les deux professions et permis de les distinguer l'une de l'autre.

(English) The purpose of this commentary is to discuss Hidalgo and Demoulins' paper where they intended to compare orthopaedic manual therapy with osteopathy. After careful analysis of the available literature, it appears that the proposed characteristics for comparison such as the integration of evidence-based practice, technical skills and access to care, fail to characterize the distinctiveness of both professions. Further, important descriptive data are missing thus limiting the conclusions of the authors. Finally, we think an analysis of clinical concepts and professional values, considered as guiding principles for rational decision making and clinical practice, would probably better have characterized the two professions and help distinguish them from each other.

12 van Dun P, Wagner C. Richtige Kommunikation in unserem Beruf : ein internationales Anliegen. DO – Deutsche Zeitschrift für Osteopathie 2020; 18: 40–43.

ABSTRACT

Seit mehr als 10 Jahren setzen sich die belgischen Berufsverbände für Osteopathie aktiv gegen den unangemessenen Gebrauch bestimmter Begriffe in unserem Beruf ein. Am weitesten verbreitet und am hartnäckigsten hält sich die künstliche Aufteilung unseres Berufes in einen parietalen, viszeralen und kranialen Teil. Die Verwendung von Terminologie wie "kraniale Osteopathie", "viszerale Osteopathie" und andere, wie zum Beispiel "Kinder- und Sportosteopathie", wird in jeglicher offiziellen Kommunikation mit der Außenwelt bewusst vermieden. Kurse mit diesen Namen werden nicht mehr akkreditiert und wir versuchen, den einzelnen Osteopathen davon zu überzeugen, das Bild von verschiedenen Arten der Osteopathie hinter sich zu lassen.

13. van Dun P. Kunnen osteopaten bijdragen aan de zorg van mensen met COVID-19? About Osteopathy, 2020; 2: 20-22.

ABSTRACT

(Dutch) Ieder osteopaat heeft gedurende vele weken reeds ondervonden dat patiënten hun behandeling bij de osteopaat uitstellen. In een aantal Europese landen kregen osteopaten zelfs een verbod tot praktijkuitoefening opgelegd. Osteopaten onder elkaar stelden zich vragen rond de al dan niet opportuniteit van het aanbieden van osteopathische zorg in deze coronatijden. Hierbij maakte men niet enkel een afweging rond de mogelijke voor- en nadelen van elke interventie die aan patiënten wordt gegeven, maar kwam ook de meer fundamentele vraag aan bod van wat de functie is van osteopathische zorg bij infectieziekten.
Dit artikel geeft een kort overzicht van de grenzen en mogelijkheden van osteopathische zorg voor mensen met COVID-19.

(French) Au cours des dernières semaines, tous les ostéopathes ont constaté que les patients reportaient leurs traitements chez l'ostéopathe. Dans certains pays européens, les ostéopathes ont même eu l'interdiction d'exercer leur profession. Entre eux, les ostéopathes s'interrogeaient sur la pertinence d'orir des soins ostéopathiques en ces temps de corona. S'il nous fallait considérer les avantages et les inconvénients de chaque intervention auprès des patients, se posait aussi la question plus fondamentale de la fonction des soins ostéopathiques dans les maladies infectieuses. Cet article donne un bref aperçu des limites et des possibilités des soins ostéopathiques pour les personnes atteintes de COVID-19.

14. A. Manzotti, F. Cerritelli, M. Chiera, E. Lombardi, S. La Rocca, P. Biasi, M. Galli, J. Esteves, G. Lista. Il modello NAME per la valutazione dei bambini nella TIN. pneireview 2020;1;66-75

ASTRACT

Le cure di routine nelle terapie intensive neonatali (TIN) si basano soprattutto su procedure manuali. Negli ultimi anni, diversi studi hanno mostrato come il - no studi sulla palpazione come strumento di valutazione clinica. Pertanto, gli autori propongono il modello Neonatal Assessment Manual scorE (NAME), una procedura di valutazione basata sul tocco che potrebbe aiutare l'equipe delle TIN. Il NAME mira a valutare come il corpo del bambino si adatta a pressioni manuali gentili. Stimolando meccanorecettori a bassa soglia, queste pressioni possono indurre una complessa risposta neurologica che può altera- re l'emodinamica e il ritmo respiratorio del bambino, così come il suo volume corporeo. L'operatore può avvertire questi cambiamenti tramite la percezione aptica e ottenere informazioni riguardanti lo sviluppo e le condizioni cliniche del bambino, in quanto la risposta corporea dipende da essi. Se futuri studi do- potrebbe diventare parte delle cure di routine neonatali.

15. R. Zegarra-Parodi, J. Draper-Rodi, F. Cerritelli. Erweiterung des biopsychosozialen Modells für die muskuloskelettale Praxis. Teil 1: Einführung religiöser und spiritueller Dimensionen in das biopsychosoziale Modell Osteopathische Medizin 21. Jahrg., Heft 2/2020, S. 28–32

ABSTRACT

(German) Religiöse und spirituelle (R/S) Dimensionen anzusprechen, mag für Patienten und Therapeuten unangenehm sein, da es sich um sehr persönliche Überzeugungen in Bezug auf die eigene Existenz handelt. Sie unterscheiden sich je nach Region und Kultur und werden normalerweise in der therapeutischen Situation nicht mitgeteilt. Religion und Spiritualität stehen in Zusammenhang mit Überzeugungen und Verhaltensweisen, die unmittelbar die Lebensqualität und die Gesundheit beeinflussen. Dennoch werden R/S-Dimensionen bei der muskuloskelettalen (MSK) Arbeit nicht beachtet. Grundlegende R/S-Dimensionen in die therapeutische Beziehung zu integrieren, könnte die Behandlung jedoch optimieren. Religion und Spiritualität könnten als Faktoren im biopsychosozialen Modell etabliert werden. Ziel der vorliegenden Arbeit ist es, Definitionen von R/S zu liefern, die bei der Behandlung von MSK-Patienten hilfreich sind. Es wird beschrieben, wie religiöse und spirituelle Einstellungen mit dem Gesundheitsstatus verbunden sein können. Schlüsselwörter: biopsychosozial, Manual Therapie, muskuloskelettale Therapie, Religion, Spiritualität.

(English) Addressing religion and spirituality (R/S) dimensions may be uncomfortable for patients and practitioners because they refer to intimate beliefs about existence, vary across the globe and cultures, and are not routinely shared in the modern therapeutic scenario. Often, R/S dimensions are overlooked in musculoskeletal (MSK) practice despite associations with attitudes and behavior that directly affect quality of life and health outcomes. Inclusion of basic R/S dimensions in the therapeutic alliance may optimise care and establish these dimensions as interactors within the biopsychosocial model. The purpose of this commentary was to provide practitioners with definitions of R/S that are useful for managing care of MSK patients, describe how attitudes towards R/S may be linked to health status. Keywords. Biopsychosocial, manual therapy, musculoskeletal care, religion, spirituality.

16. Erweiterung des biopsychosozialen Modells für die muskuloskelettale Praxis. Teil 2: Klinische Bedeutung für die muskuloskelettale Behandlung. Rafael Zegarra-Parodi, Jerry Draper-Rodi, Francesco Cerritelli. Osteopathische Medizin 21. Jahrg., Heft 3/2020, S. 9–12

ABSTRACT

Zusammenfassung

Religion und Spiritualität stehen in Zusammenhang mit Überzeugungen und Verhaltensweisen, die unmittelbar die Lebensqualität und die Gesundheit beeinflussen. Dennoch werden R/S-Dimensionen bei der muskuloskelettalen (MSK) Arbeit nicht beachtet. Grundlegende R/S-Dimensionen in die therapeutische Beziehung zu integrieren, könnte die Behandlung jedoch optimieren. Religion und Spiritualität könnten als Faktoren im biopsychosozialen Modell etabliert werden.

Ziel der vorliegenden Arbeit ist es Hinweise zu geben, wie R/S-Dimensionen auf einfache Weise in der therapeutischen Situation diskutiert werden können. Darüber hinaus werden Vorschläge unterbreitet, wie MSK-Therapeuten und Forscher R/S-Dimensionen in der westlichen evidenzbasierten Medizin ansprechen können.

Schlüsselwörter

Biopsychosozial, Manualtherapie, muskuloskelettale Therapie, Religion, Spiritualität

Abstract

Inclusion of basic religion and spirituality (R/S) dimensions in the therapeutic alliance may optimise care and establish these dimensions as interactors within the biopsychosocial model. The purpose of this commentary was to provide practitioners with definitions of R/S that are useful for managing care of musculoskeletal (MSK) patients, describe how attitudes towards R/S may be linked to health status, and indicate how R/S dimensions could be discussed in simple ways in a modern therapeutic scenario. Finally, suggestions are provided for MSK practitioners and researchers to address R/S dimensions in Western evidence-oriented healthcare.

Keywords

Biopsychosocial, manual therapy, musculoskeletal care, religion, spirituality

17. Consorti G. D.O., Marchetti A. PhD, De Marinis M.G., What makes an osteopathic treatment effective from a Patient's Perspective: a descriptive phenomenological study. JMPT 2020, Vol.00, N.00

ABSTRACT

Objectives: This study aimed to describe patients' perspectives on their experience in osteopathic treatment, to contribute toward developing interpretative models on effectiveness.

Methods: A descriptive phenomenological approach was used. The data were collected through a semi structured interview. To capture the variability of the phenomenon, a purposive sample of 12 participants with previous experience of osteopathic care was selected. The data analysis was carried out in an inductive way, and it was parallel to the recruitment to continuously monitor the data saturation.

Results: Data saturation was reached with 12 participants (female = 9; male = 3). Participants' age ranged from 27 to 82 years old (mean: 55.25 § 17.15; median: 59; kurtosis: -0.82). Participants had different reasons for consultation.
The analysis showed 1 overarching theme, "Osteopathy is a path of awareness," 3 themes, and 12 categories. Themes were: (1) "The experience of pain produces awareness of the need for care," (2) "Osteopathy is a journey to be shared over time," and (3) "The effectiveness of the osteopathic treatment is the discovery of the person's unity by experience."

Conclusion: Participants affirm that osteopathy is a path of awareness that starts from an experience of pain; leads them to contact an osteopath; and ends with their experience of the unity of body, mind, and spirit. (J Manipulative Physiol Ther 2020;00;1-9).

Key Indexing Terms: Manipulation, Osteopathic; Qualitative Research; Patient Outcome Assessment; Treatment Outcome

18. Lunghi C. ***Test der Faszienkompartimente***. Osteopathische Medizin 21. Jahrg., Heft 2/2020, S. 33-35

ABSTRACT

(German) Der Artikel beschreibt die röhrenförmigen Faszienkompartimente der pannikulären, axialen, meningealen und viszeralen Faszien. Zusätzlich wird dargestellt, wie sie einzeln getestet werden können.
Schlüsselwörter: Diagnostik, Faszienröhre, osteopathische Untersuchung, Geweberesilienz.

(English)
The article describes the tubular fascia compartments of the pannicular, axial, meningeal and visceral fascia. It also shows how they can be tested individually.
Keywords
diagnostics, fascia tube, osteopathic examination, tissue resilience

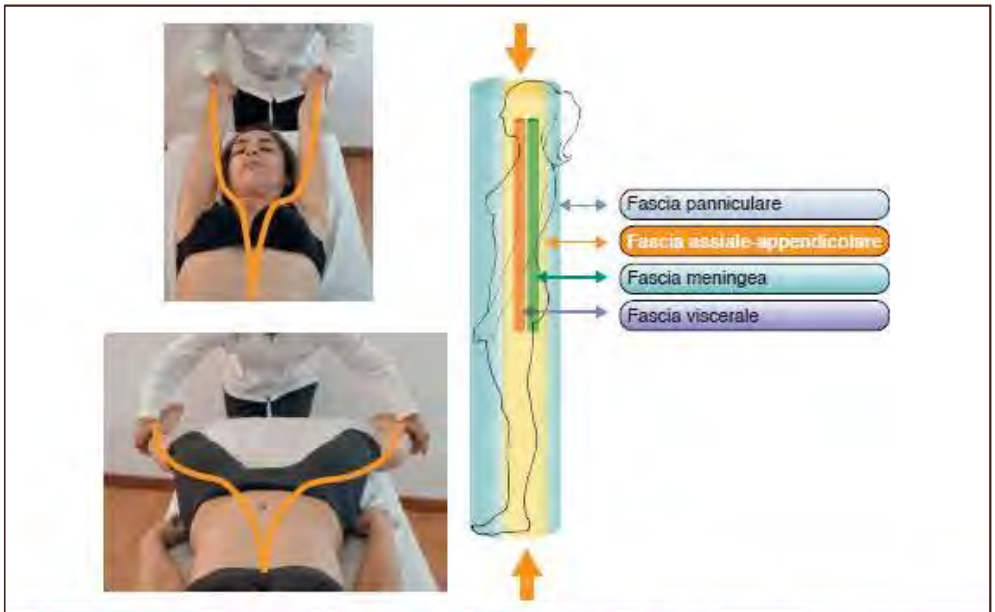


Abb. 2: Test der axialen-appendikulären Faszie (Exoskelett). Der Osteopath beginnt zuerst in Rücken- und dann in Bauchlage des Patienten, durch eine passive Mobilisierung mit Innen-/Außenrotation, Flexion, Extension, Kompression und Dehnung (Traktion) die thorakolumbal-femoralen (a) und zervikothorakal-brachialen (b) kinetischen Ketten zu testen und dabei die Flüssigkeit der Bewegungen zu beurteilen. Daran schließt sich eine Palpation an, um Bereiche mit Bewegungsrestriktion genauer abzuklären. In dieser Phase wird federnder Druck ausgeübt, um eine lokale Verhärtung mit angrenzenden Bereichen zu vergleichen. Es geht darum, die Elastizität des gesamten Kompartiments zu prüfen, d. h. die Verformbarkeit bei Druckanwendung und Rückkehr zur Normalform beim Lösen des Drucks. In der Elastizität kommt die statische (lineare) und dynamische (viskoelastische) Beziehung zwischen Druck und Gewebespannung zum Ausdruck. Die Zeichnung orientiert sich an der Klassifikation von Willard, Fossum u. Stanley (2010).

19. T.Van Biesen, G.Alvarez; Beliefs about chronic low back pain amongst osteopaths registered in Spain: A cross-sectional survey. IJOM. 12 March 2020; 1746-0689/

AFFILIATIONS:

FHG - University of Applied Sciences Tyrol, Innsbruck, Australia

Iberoamerican Cochrane Centre – Biomedical Research Institute Sant Pau, IIB Sant Pau, Barcelona, Spain

Spain National Centre, Foundation COME Collaboration, Barcelona, Spain

ABSTRACT

ARTICLE INFO

Keywords:
Beliefs
Chronic pain
Complementary therapy
Low back pain
Osteopathic manipulative treatment
Psychosocial factors

ABSTRACT

Background: Healthcare providers' (HCPs) attitudes and beliefs might influence patients' attitudes and beliefs as well as their management approach. It was hypothesised that osteopaths have a more biopsychosocial mindset towards chronic low back pain (CLBP) because of their holistic reasoning.
Objective: The primary aim of the study was to assess the beliefs of osteopaths registered in Spain about CLBP and the presence of kinesiophobic and fear-avoidance beliefs. The secondary aim was to compare these results with previous research and cut-off values.
Method: Members of the Spanish Federation of Osteopaths (FOE) were invited to participate in an online cross-sectional survey based on three questionnaires: the Health Care providers Pain and Impairment Relationship Scale (HC-PAIRS), the Tampa Scale of Kinesiophobia 11-item version for healthcare providers (TSK(11)-HC) and the Fear Avoidance Beliefs Questionnaire for healthcare providers (FABQ-HC). The mean scores were calculated for each questionnaire and correlations were established to assess the strength of the associations between the different instruments. The results were compared to previous research with other HCPs and to cut-off scores where available.
Results: The response rate was 14.58% (n = 70). The mean score on the HC-PAIRS was 59.44 ± 12.19 [CI 95% 56.54–62.35] and there was a large variation in scores. On the TSK(11)-HC and FABQ-HC 28.6% and 25.7% of the sample respectively reached the cut-off scores.
Conclusion: The study suggests that the Spanish osteopaths do not have a more biopsychosocial orientation towards the management of CLBP than other HCPs. Approximately a quarter of them hold kinesiophobic and fear-avoidance beliefs that might negatively influence their treatment approach.

20. M. Tramontano, DO; S. Pagnotta, DO; C. Lunghi, DO; C. Manzo, DO; F. Manzo, DO; S. Consolo, MSc; V. Manzo, MD, DO; Assessment and Management of Somatic Dysfunctions in Patients With Patellofemoral Pain Syndrome. J Am Osteopath Assoc. 2020;120(3):1-9 doi:10.7556/jaoa.2020.029

ABSTRACT

Context: Patellofemoral pain syndrome (PFPS) is one of the most common determinants of knee pain. The causes of PFPS are multifactorial, and most treatment approaches are conservative. There are many kinds of therapy for this syndrome, which are based on building strength, flexibility, proprioception, and endurance. Training is functional and progression is gradual. Our hypothesis is that total-body osteopathic manipulative therapy (OMTh; manipulative care provided by foreigntrained osteopaths) focused on the management of somatic dysfunctions could be useful for managing the pain of patients with PFPS.

Objective: To investigate the effect of OMTh on pain reduction in patients with PFPS.

Methods: This pilot study was randomized, controlled, and single-blinded with 2 months of follow-up. Qualified participants were randomly assigned to 1 of 2 groups: OMTh group or placebo group. Each participant received either 4 sessions of OMTh or 4 sessions of manual placebo intervention that consisted of passive touching without joint mobilization in a protocolled order. A visual analogue scale (VAS) was used to assess general knee pain, peripatellar pain, pain after prolonged sitting, pain during the patellar compression test, and pain during stair ascent and descent. Pain assessment was performed before the baseline (T0), second (T1), third (T2), and fourth (T3) session, and follow up (T4) was performed 8 weeks after T3. Results: Thirty-five participants were enrolled the study. The VAS score was significantly reduced and clinically relevant in the OMTh group after each treatment and after 2 months of follow-up. The change in the VAS score before each treatment indicates that the most improved areas at T1 compared with T0 were lumbar and sacral with improvements in 83% and 40% of patients, respectively. At T2 compared with T1, the most improved areas were cervical and sacral with improvements found in 58% and 36% of patients, respectively. The number of dysfunctions that were diagnosed decreased during the baseline to T3 period (40% change). The correlation analysis showed significant results for the dysfunction and the compression test at T2 ($P=.010$, $\rho=0.543$).

Conclusion: Significant differences in VAS scores were found between the OMTh and placebo groups. These findings underline how OMTh can lead to reduced pain in patients with PFPS.

Keywords: chronic pain, osteopathic care, osteopathic manipulative therapy, patellofemoral pain syndrome,
somatic dysfunction

21. G. Alvarez, I. Solà, M. Sitjà-Rabert, , A. Fort-Vanmeerhaeghed, I. Gich, C. Fernàndez, X. Bonfilla, Gerard Urrútia. A methodological review revealed that reporting of trials in manual therapy has not improved over time. Journal of Clinical Epidemiology 121 (2020) 32e44

ABSTRACT

Objective: The aim of this review was to evaluate a selection of major reporting aspects in manual therapy (MT) trials, before and after the publication of the CONSORT extension for no pharmacological trials (CONSORTnpt)

Study Design and Setting: We randomly selected 100 MT trials published between 2000 and 2015 and divided them into a pre-
CONSORTnpt (n 5 50) and a post-CONSORTnpt (n 5 50) group. We extracted data on relevant issues of internal validity, reliability, and description of interventions. Two authors extracted data independently. Percentages were used for descriptive analyses, and Fisher's exact test and the chi-square test were used for group comparisons.

Results: Six different types of MT interventions with up to 20 controls were analysed. The most common populations/conditions studied were healthy subjects and subjects with lower back or neck pain. Over 70% of studies included multi-session interventions, and 42% of studies reported long-term follow-up. The only significant differences between groups were the inclusion of a flowchart diagram, the estimated effect size, precision descriptions, and the description of intervention procedures.

Conclusion: Our findings suggest that trials in MT show poor reporting even after the availability of standardized guidelines

22. A. M. P. Nunes; J. P. Azinheira Martins Moita; M. M. Marques Rebelo Espanha, K. Kjær Petersen; L. Arendt-Nielsen. 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

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: SevenEnglish/Portuguese data bases 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.

Key Words: algometry, neck pain, office workers, pressure pain threshold (PPT), upper trapezius.

TABLE 2. Included studies quality assessment scores (from modified Downs and Black checklist)

	Items																											%
	Reporting										External validity			Internal validity (Bias)							Internal validity (Confounding)						Pwr		
Study	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	Score	
Observational studies $n = 8$; max. achievable score 16																													
Bragatto et al.[43]	1	1	1	[a]	1	1	1	[a]	[a]	1	1	0	[a]	[a]	[a]	0	[a]	1	[a]	1	0	1	[a]	[a]	0	[a]	[a]	11	68.7
Ge et al.[21]	1	1	1	[a]	1	1	0	[a]	[a]	1	0	0	[a]	[a]	[a]	0	[a]	1	[a]	1	1	0	[a]	[a]	0	[a]	[a]	9	56.2
Heredia-Rizo et al.[45]	1	1	1	[a]	1	1	1	[a]	[a]	1	0	0	[a]	[a]	[a]	0	[a]	1	[a]	1	1	0	[a]	[a]	0	[a]	[a]	10	62.5
Johnston et al.[20]	1	1	1	[a]	1	1	1	[a]	[a]	1	0	0	[a]	[a]	[a]	0	[a]	1	[a]	1	0	0	[a]	[a]	1	[a]	[a]	10	62.5
Johnston et al.[46]	1	1	1	[a]	1	1	1	[a]	[a]	1	0	0	[a]	[a]	[a]	0	[a]	1	[a]	1	0	0	[a]	[a]	1	[a]	[a]	10	62.5
Nielsen et al.[48]	1	1	1	[a]	0	1	0	[a]	[a]	0	0	0	[a]	[a]	[a]	0	[a]	1	[a]	1	0	1	[a]	[a]	0	[a]	[a]	7	43.7
Shahidi et al.[49]	1	1	1	[a]	1	1	1	[a]	[a]	1	0	0	[a]	[a]	[a]	0	[a]	1	[a]	1	0	0	[a]	[a]	1	[a]	[a]	10	62.5
Shahidi & Maluf[50]	1	1	1	[a]	0	1	0	[a]	[a]	1	0	0	[a]	[a]	[a]	0	[a]	1	[a]	1	1	1	[a]	[a]	0	[a]	[a]	9	56.2
Experimental studies with no independent control group $n = 1$; max. achievable score 28																													
Kimura et al.[47]	1	1	0	1	[a]	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	[a]	[a]	0	0	0	0	0	4	14.2
Experimental studies $n = 4$; max. achievable score 32																													
Andersen et al.[41]	1	1	1	1	1	1	1	0	0	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	0	1	2	22	68.7
Andersen et al.[42]	1	1	1	1	0	1	1	1	1	0	1	1	1	0	0	0	1	1	1	1	1	1	1	0	0	1	1	20	62.5
He et al.[44]	1	1	1	1	1	1	1	0	1	1	0	0	1	1	0	0	1	0	0	1	0	0	1	1	0	1	0	16	50.0
Valera-Calero et al.[51]	1	1	0	1	0	1	1	0	0	1	0	0	0	0	1	0	0	1	0	1	0	0	1	1	0	0	4	15	46.8
Mean % score																													55.1

Notes: All questions were scored on the following scale: yes = 1, no = 0, unable to determine = 0; Question 5 is an exception, with scores allocated: yes = 2, partially = 1; no = 0; Question 27 is also an exception with scores ranging from 0 to 5.
Abbreviation: Pwr, power.
[a]Not applicable.

22. Lunghi C., Liem T.; Models and theoretical frameworks for osteopathic care – a critical view and call for updates and research. IJOSM 549; S1746-0689(20)30125-5 DOI: https://doi.org/10.1016/j.ijosm.2020.07.004

ABSTRACT

Admirable work was done by Esteves and co-authors in their recent editorial: "Models and theoretical frameworks for osteopathic care – a critical view and call for updates and research"1. On the one hand, the authors highlighted the importance of having a robust conceptual framework for complex health interventions such as osteopathic care, on the other hand, they offered to the community of practice pragmatic methodological steps for the development of theoretically and evidentially informed osteopathic care models. The authors performed an in-depth critical analysis, that seems to have also been inviting further discussion by the community of practice. As an example of theoretical frameworks that require a robust assessment, revision, and consensus, the authors mentioned the Five osteopathic models, defining them as elaborated by policymakers when the World Health Organization collected the Benchmark for training in Osteopathy2. A few concepts should be examined in depth by the community of practice worldwide. The present letter is written to contribute to the discussion.

TECHNICAL REPORTS

1. 1. The Covid-19 Guide Consortium: Collomb R, Macdonald R, Schira F, van Dun P, Vaucher P. COVID-19 Guide – Adaptive hygiene guidance for osteopathic practices. Version 2.0. Foundation COME Collaboration, Pescara, Italy; 1 June 2020. https://drive.infomaniak.com/app/share/116280/7c3b09b1-3b20-49de-8385-d0ca59a23fcb

ABSTRACT

Following confinement measures due to COVID-19, in many parts of the world, social distancing measures have been reduced to physical distancing and "Normal » clinical activity can be resumed for most health professions. Nevertheless, the risk of propagation of COVID-19 remains a threat. To prevent a "second epidemiological wave" for covid-19, hygienic standards in practices are set at a higher standard than usual.

This document aims to provide guidance and assistance in setting up adapted secure hygienic conditions at your practice. It provides lists of suggestions, reflections, and possible hygienic measures to pick from. This document therefore serves as a complement to official local and international guidelines and standards. By no way should this guide substitute these documents. It is up to you to verify local regulations and make sure measures taken are in line with the legal framework.

For an optimal use of this guide, it is important to first observe and analyse the usual situation at your practice. You can then evaluate risks, target priorities and use the guide to find adapted resolutions. Relevance and feasibility are key in successfully implementing solutions. Measures can be specific to working conditions, epidemic situation and patient profile. Our professionalism and professional ethical standards should help guide our decisions to priorities patient, personnel, and population safety.

2. van Dun P, Dobbelaere E, Simons E. Een kwantitatief onderzoek naar de bekendheid en het imago van de osteopathie in België in opdracht van de Beroepsvereniging voor Belgische Osteopaten (osteopathie.be), 2020, Brussel. DOI: 452.394.538/iVOX.2020.

ABSTRACT

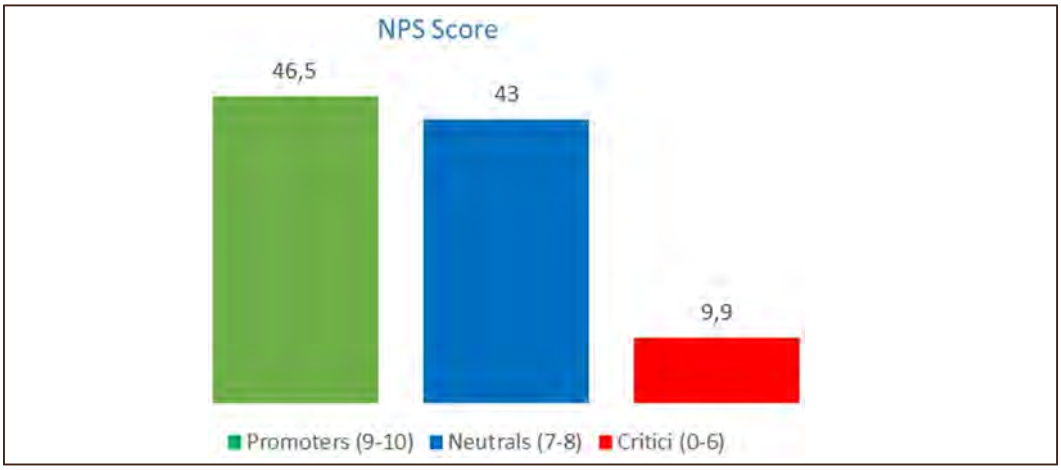
Het doel van het onderzoek is zicht te krijgen op de bekendheid en het imago van de osteopathie in België, zodat de Beroepsvereniging voor Belgische Osteopaten (BVBO) doelgericht haar communicatiestrategie kan bijsturen.

Kennis osteopathie: de Franstalige bevolking van België kent osteopathie significant beter, zowel van naam als van inhoud. Wanneer dieper nagevraagd wordt naar de inhoud van het beroep blijkt dit verschil niet helemaal bevestigd te worden. Er lijkt vooral een groter vertrouwen van de Franstaligen voor osteopathie voor wat haar 'bewezen werking' betreft.

Overweging/aanbeveling: de Belgen zijn zeer tevreden over de zorg die ze van hun osteopaat ontvangen en dit vertaald zich in de relatief hoge cijfers van het bezoek aan de osteopaat. De mond-tot-mondreclame door familie, vrienden of kennissen staat stevig op de eerste plaats voor wat de aanbeveling voor osteopathie betreft. Ruim een derde van diegenen die de weg naar een osteopaat vindt, doen dit op aanbeveling van een andere gezondheidszorger.

Wetgeving/erkenning: de Belg is duidelijk voorstander van een wettelijke regeling voor het beroep van osteopaat. Deze dient namelijk om de patiënt te beschermen en de zorgverlener te kaderen.

Financieel: de Belg is vrij goed op de hoogte van de kosten van osteopathische zorgverlening maar is slechts beperkt bereid om hiervoor een aanvullende verzekering te nemen. Een terugbetaling door het R.I.Z.I.V. (sociale zekerheid) is wel overduidelijk gewenst.



Net Promoter Score 0 = zeker niet aanbevelen, score 10 = zeker wel aanbevelen. Formule: NPS = promoters % – critici %

3. van Dun P, Dobbelaere E, Simons E. Une étude quantitative mesurant la connaissance et l'image de l'ostéopathie en Belgique pour le compte de l'Union Professionnelle des Ostéopathes de Belgique (UPOB-BVBO), 2020, Bruxelles. DOI : 452.394.538/iVOX.2020.

ABSTRACT

L'objectif de la recherche est de mieux comprendre la connaissance qu'ont les Belges de l'ostéopathie ainsi que d'évaluer l'image de l'ostéopathie en Belgique.
Connaissance de l'ostéopathie: la population francophone de Belgique a significativement une meilleure connaissance de l'ostéopathie, tant du nom que de son contenu. Des questions plus approfondies sur le contenu de la profession ne semblent cependant pas confirmer totalement cette différence. Il semble surtout que les francophones ont une plus grande confiance en l'ostéopathie et son « efficacité prouvée».

Considération/recommandation : les Belges sont très satisfaits des soins prodigués par leur ostéopathe et ceci se traduit par des chiffres relativement élevés de consultation chez un ostéopathe. En ce qui concerne la recommandation de l'ostéopathie, le bouche-à-oreille par la famille, les amis ou les connaissances occupe la première place, tandis que près d'un tiers des patients qui consultent un ostéopathe le font sur recommandation d'un autre professionnel de la santé.

Législation/reconnaissance : le Belge est clairement en faveur d'un cadre légal pour la profession. En effet, cette législation servirait à protéger le patient et à encadrer le professionnel. La majorité pense qu'on doit pouvoir consulter un ostéopathe sans ordonnance du médecin.

Financièrement: le Belge connaît assez bien le coût des soins en ostéopathie mais beaucoup de belges ne savent pas qu'un remboursement est possible. Un remboursement de l'INAMI (sécurité sociale) est en revanche clairement souhaité.

4. Dornieden R, van Dun P, Brownhill K, Pappas Y, Vogel S (2020). Exploration of the characteristics of German osteopaths and osteopathic physicians: Survey development and implementation. Report. University College of Osteopathy, London.

ABSTRACT

Background: Osteopathy and its practice in Germany are unregulated without nationally agreed competencies, frameworks or practice standards. The heterogeneity of practice makes it likely that there is a variety in the nature and scope of practice. Educational programs vary greatly in length and content, and no nationally agreed curriculum exist. The high number of osteopathic associations with varying political goals and perspectives suggests a fragmentation of the osteopathic community. Little formal research has been reported on standards and practice of osteopathic care in Germany. The lack of data contributes to uncertainty and makes it difficult to build a case for a more united regulated profession.

Purpose: A series of connected studies aimed to develop an instrument to survey the osteopathic profession in Germany. The purpose was to obtain data about the characteristics of the osteopaths and osteopathic physicians and their practice in order to provide a coherent picture of the profession in Germany.

Methods: A scoping review and appraisal of cross-sectional studies was conducted to create an overview of the literature from cross-sectional studies in the field, and to identify possible survey tools usable in the German context. This phase led to the decision to develop a survey instrument specifically for the German environment which was informed by the results of the scoping review. Previous questionnaires informed the first draft of the questionnaire. A mixed methods approach was used to enhance the design of the questionnaire, with consensus groups, cognitive interviews with stakeholders, expert rating and feedback from participants nominated by national associations. After online pilot testing, the survey was implemented on a national level with the participants recruited from eight national associations. Invitations were disseminated by the associations with 2 follow-up reminders. Data were collected using the SmartSurvey® online questionnaire system.

Results: The validated questionnaire used in the national survey consisted of 55 items subdivided into 8 sections. A sample of 8,331 osteopaths and osteopathic physicians were recruited from November 2017 to February 2018. The response rate was 18.9% (n=1,578), from which 1,175 active practicing respondents had complete data set. Osteopaths and osteopathic physicians in Germany provide osteopathic care for a wide range of patient groups, presenting with various complaints and conditions, using a variety of methods and techniques. Some differences between subgroups of German practitioners is seen and between German practice and elsewhere.

Conclusions: There is some variability in practice between and within stakeholder osteopathic groups in Germany. There is a need for unification of the osteopathic groups and regulation to improve professional identity and to support the implementation of nationally agreed standards of practice, education and safety.

Relazioni congressuali

1. Francesco Cerritelli. Are you ready for the future? placebo is here- 6th Annual COME Quantum Global Conference, 02-03 October 2020, Paris (France, virtual).

2. van Dun P, Gatekeeping, referral, networking – the actual role and place of osteopathic care, 6th Annual COME Quantum Global Conference, 02-03 October 2020, Paris (France, virtual).

Media

1. Engels T. Osteopaten maken komaf met hardnekkige mythes: 'Baby's worden nooit gekraakt', Knack, 2020, https://www.knack.be/nieuws/wetenschap/osteopaten-maken-komaf-met-hardnekkige-mythes-baby-s-worden-nooit-gekraakt/article-longread-1667109.html

2. Interview with P. van Dun concerning the myths in the Belgian press about osteopathy for unsettled infants (Dutch).

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