NON PROFIT FOUNDATION COME COLLABORATION

Research Report 2019

INTRODUCTION

The present document reports the list of all publications referring to the 2019 in chronological order. All authors published their research papers, articles, studies, book chapters etc. in collaboration with the Non-Profit FOUNDATION COME COLLABORATION.
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 developed and delivery their research studies and papers.
For more information: info@comecollaboration.org and www.comecollaboration.org
Thank you for reading.

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3. Zegarra-Parodi, R., Draper-Rodi, J., Cerritelli, F. ***Refining the biopsychosocial model for musculoskeletal practice by introducing religion and spirituality dimensions into the clinical scenario.*** Int J Ost Med 2019;32:44-48.

4. Zegarra-Parodi, R., Draper-Rodi, J., Haxton, J., Cerritelli, F. ***The Native American heritage of the body-mind-spirit paradigm in osteopathic principles and practices.*** *Int J Ost Med* 2019;**33-34**:31-37.

5. Cerritelli F, van Dun PLS, Esteves JE, Consorti G, Sciomachen P, Lacorte E, et al. (2019) ***The Italian Osteopathic Practitioners Estimates and RAtes (OPERA) study: A cross sectional survey.*** PLoS ONE 14(1): e0211353.

6. Bresesti I, Ricci M, Cerritelli F, Veneziano A, Zuccotti G, Lista G***. Comparison between two ocular cleansing modalities in a population of newborns admitted to neonatal intensive care Unit with clinical signs of conjunctivitis: a randomized controlled trial.*** Journal: Minerva Pediatr. 2019 Dec;71(6):500-504

7. Manzotti A, Cerritelli F, Esteves JE, Lista G, Lombardi E, La Rocca S, Gallace A, McGlone FP, Walker SC. ***Dynamic touch reduces physiological arousal in preterm infants: A role for c-T tactile afferents?*** Journal: Dev Cogn Neurosci. 2019 Oct; 39:100703.

8. Vismara L., Manzotti A., Tarantino A.G., Bianchi G., Nonis A., La Rocca S., Lombardi E., Lista G., Agosti M***. Timing of oral feeding changes in premature infants underwent osteopathic manipulative treatment.*** Journal: Complement Ther Med. 2019 Apr; 43:49-52

9. *Matthew J. Leach,Tobias Sundberg, Gary Fryer,Philip Austin, Oliver P. Thomson, and Jon Adams.* ***An investigation of Australian osteopaths' attitudes, skills and utilisation of evidence-based practice: a national cross-sectional survey.*** Journal: BMC Health Service (2019) 19:498.

PUBLICATIONS ON PEER-REVIEWED NATIONAL JOURNALS

1. van Dun P. About Osteopathy, 2019; ***Holisme in de osteopathie: de kloof overbruggen tussen concept en praktijk***, 1: 28-33.

2. van Dun P, Verbeeck J, Esteves J, Cerritelli F.***Osteopathic Practitioners Estimates and RAtes (OPERA) study Belgium - Luxembourg: Part I***, [Dutch], About Osteopathy, 2019; 1: 20-26.

3. van Dun P. About Osteopathy, 2019 ***Het imago van de osteopathie in België 2019: "voor alle duidelijkheid.*** [Dutch]; 2: 19-22.

4. van Dun P, Verbeeck J, Esteves J, Cerritelli F. ***Osteopathic Practitioners Estimates and RAtes (OPERA) study Belgium - Luxembourg: Part II*** [Dutch], About Osteopathy, 2019; 2: 31-36.

5. Wagner C, van Dun P. About Osteopathy, 2019 ***Oraal squameus celcarcinoom (OSCC), een mogelijke rol voor osteopathie in het kader van een multidiciplinaire nazorg: een casusrapport,*** [Dutch], 3: 31-35.

BOOKS AND BOOK CHAPTERS

1. Lunghi C, Baroni F. - In: Ciranna Raab C, Manzotti A, (2019). ***"Modelli osteopatici struttura/funzione in ambito pediatrico [Italian]".*** Medicina osteopatica in pediatria. Edra edizioni. Milano

MEDIA

1. van Dun P. Opinie: ***Belgische osteopaten hebben al lang geleden resoluut de keuze gemaakt voor Evidence Based Medicine***, [Dutch]. Knack, 2019, https://www.knack.be/nieuws/belgie/belgische-osteopaten-hebben-al-lang-geleden-resoluut-de-keuze-gemaakt-voor-evidence-based-medicine/article-opinion-1453789.html
2. van Dun P, Dobbelaere E. Interview: ***Osteopathie is een natte droom voor een minister van Volksgezondheid,*** [Dutch]. Knack, 2019, https://www.knack.be/nieuws/belgie/osteopathie-is-een-natte-droom-voor-een-minister-van-volksgezondheid/article-normal-1453271.html
3. van Dun P. ***Interview: USA, Italien, Niederlande und Deutschland führend in Faszienforschung***, [Dutch]. Osteopathie: Das Praxismagazin, Verband der Osteopathen Deutschland e.V., Ausgabe 1/2019, S. 16-17.
4. Press release summary related to the article ***Dynamic touch reduces physiological arousal in preterm infants: A role for c-T tactile afferents?*** [Italian] https://drive.google.com/file/d/1r_bUNp_oQqkt_icEiPs0j69DZF3IMqWj/view?usp=sharing

CONGRESS PRESENTATIONS

1. van Dun P, Evidenz Informierte Osteopathie (EIO): die schwierige Beziehung zur Praxis, 30 J. Jubiläum College Sutherland, 11.05.2019, Schlangenbad (Germany)
2. van Dun P, Workshop session: the OPERA Project, COME to Quantum Global Conference, 19-19 October 2019, Catania (Italy)
3. Alvarez G, Roura S, Cerritelli F, Esteves JE, Verbeeck J, van Dun P. The Spanish Osteopathic Practitioners Estimates and RAtes (OPERA): A cross sectional survey, COME to Quantum Global Conference, 19-19 October 2019, Catania (Italy) (Poster)
4. Cerritelli F. Interoception as a meaningful element for allostasis. COME to Quantum Global Conference, 19-19 October 2019, Catania (Italy)
5. Zegarra Parodi R. New Approach for Touch Interpretation Valuing and Emphasizing on INteroception for OSTeopathic diagnosis after MEDitative states (Native in Ost Med). Workshop - COME to Quantum Global Conference, 19-19 October 2019, Catania (Italy)
6. Aubin A, Bouchard A, Morin C. Teaching palpation Going Further and meet allostasis? Workshop - COME to Quantum Global Conference, 19-19 October 2019, Catania (Italy)

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8. Paul Vaucher, Francesco Cerritelli. Exploring non-specific effects of osteopathic care. Workshop - COME to Quantum Global Conference, 19-19 October 2019, Catania (Italy)
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11. Jorge Esteves. Allostatic regulation and symptom management within a biopsychosocial framework. COME to Quantum Global Conference, 19-19 October 2019, Catania (Italy)
12. Francesco Cerritelli. Integrated allostatic approach: the new vision of patient-centred health care. COME to Quantum Global Conference, 19-19 October 2019, Catania (Italy)
13. Christian Lunghi. Touching allostatic load? A world cafe for osteopathic community conversation. Workshop - COME to Quantum Global Conference, 19-19 October 2019, Catania (Italy)
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15. Zegarra-Parodi, R., Draper-Rodi, J., Cerritelli, F. Updating the biopsychosocial model for musculoskeletal practice by introducing religion and spirituality dimensions into the clinical scenario. Society for the Scientific Study of Religion (SSSR) Annual Meeting 2019. St. Louis, MO (USA), October 2019.

LIST OF FULL PUBLICATIONS IN PEER REVIEWED JOURNALS (ABSTRACTS).

Lunghi C, Baroni F. - In: Ciranna Raab C, Manzotti A, (2019**). "Cynefin Framework for Evidence-Informed Clinical Reasoning and Decision-Making".** J Am Osteopath Assoc. 119:312-21.

Abstract

Osteopathy (manipulative care provided by foreign-trained osteopaths) emphasizes manual techniques as the cornerstone of patient care. Although osteopathic medicine has been well integrated into traditional health care systems in the United States, little is known about the role of osteopathy in traditional health care systems outside the United States. Therefore, it is incumbent on the osteopathy community to gather evidence in order to practice scientifically informed effective methods. This narrative review outlines the Cynefin framework (Table 1) for clinical reasoning and decision-making (Table 2) and encourages a broadening of the evidence base among osteopaths to promote health in an interdisciplinary care setting. This review also presents the concept of an osteopath's mindline, in which the osteopath combines information from a range of sources into internalized and collectively reinforced tacit guidelines.

Table 1.

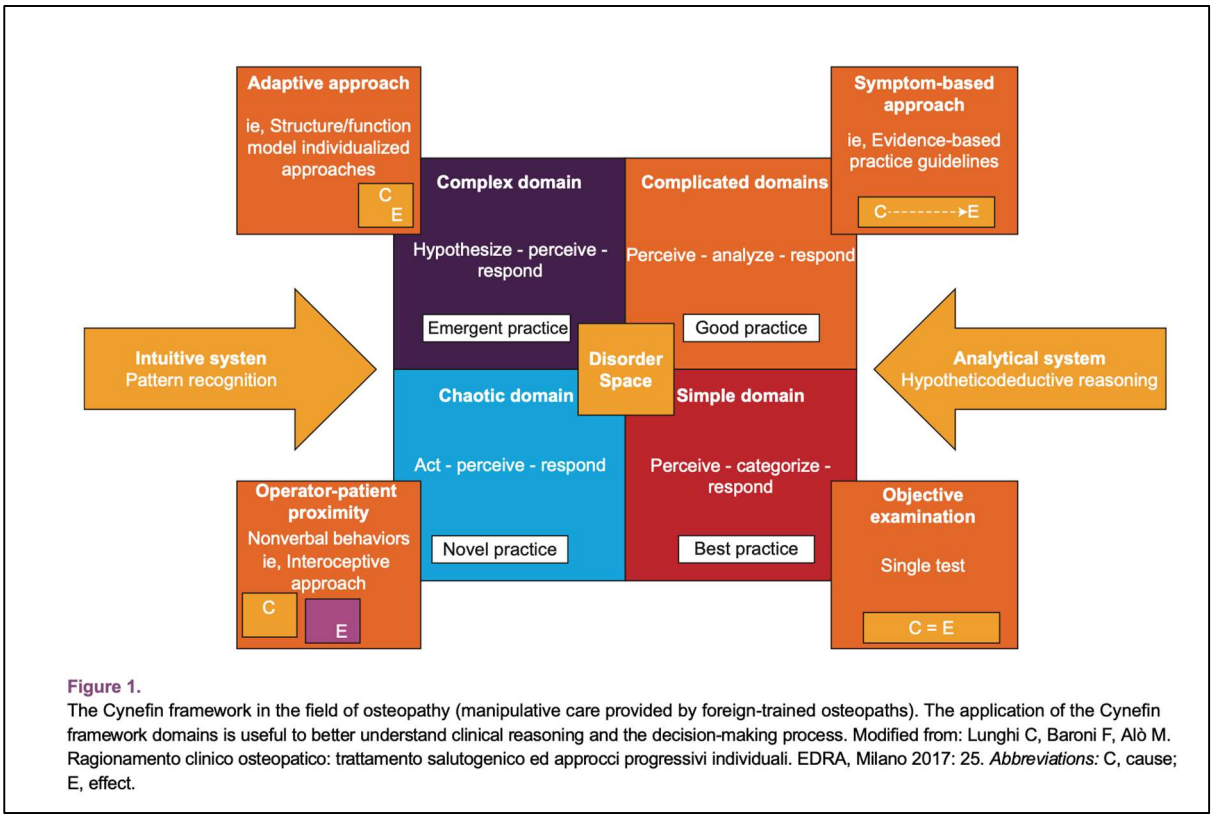


Figure 1.
The Cynefin framework in the field of osteopathy (manipulative care provided by foreign-trained osteopaths). The application of the Cynefin framework domains is useful to better understand clinical reasoning and the decision-making process. Modified from: Lunghi C, Baroni F, Alò M. Ragionamento clinico osteopatico: trattamento salutogenico ed approcci progressivi individuali. EDRA, Milano 2017: 25. *Abbreviations:* C, cause; E, effect.

Table 2.

Table 2.
Allostatic Overload Index Involved in the Decision-Making Process in the Practice of Osteopathy[a]

Identifiers	Examples
Markers	
Biomarkers	Neuroendocrine, metabolic, immunologic markers[42,43]
Psychomarkers	Body perception questionnaire-short form[44]; depression, anxiety and stress scales[45]; salutogenesis index (sense of coherence questionnaires)[39]
Life markers	Social Readjustment Rating Scale[46]
Self-Regulation Systems Functional Tests	
Biomechanical	Postural control test[47]
Neurologic	Manual assessments of central sensitization[48] and autonomic nervous system tone[49]
Respiratory-circulatory	Manual assessment of respiratory motion[50] and examination of the amplitude of the peripheral pulses, considering its relationship with arterial stiffness[49]
Metabolic	Gastrointestinal distress signs[49]
Psychosocial	Waddell signs[51]

[a] Manipulative care provided by foreign-trained osteopaths.

Mancini D, Cesari M, Lunghi C, Benigni AM, Incalzi RA and Scarlata S, (2019). ***"Ultrasound evaluation of diaphragmatic mobility and contractility after osteopathic manipulative techniques in healthy volunteers: a prospective, randomized, double-blinded clinical trial".*** Journal of manipulative and physiological therapeutics, 42(1):47-54.

Abstract

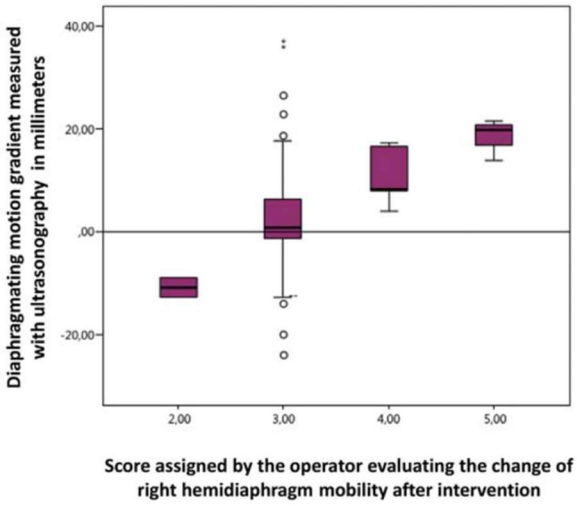
Objective: The purpose of this study was to investigate the effect of a session of osteopathic manipulative techniques on diaphragmatic motion and thickness in healthy participants.

Methods: This was a prospective, randomized, double-blinded, case vs sham vs control clinical trial performed in an outpatient osteopathic clinic in Rome, Italy. Sixty-seven healthy participants, mean age 40.4 ± 14.5 years, received an ultrasound evaluation of diaphragmatic motion and thickness, followed by a systematic osteopathic evaluation. After randomization, the experimental group (n = 22) received osteopathic manipulation, whereas the sham (n = 22) and the control (n = 22) groups had a light touch approach and simple observation, respectively. After a 1-session intervention, new osteopathic and ultrasound assessments were repeated in all participants.

Results: A statistically significant increase in diaphragmatic mobility was observed in the experimental group after the osteopathic manipulation (Δ = 14.5 mm, P b .001; analysis of variance P b .001 vs both sham: Δ = -0.22 mm, and control: Δ = -2.09 mm groups) (Table 1). A strong linear relationship was observed between the diaphragmatic motion gradient, measured with ultrasonography, and the score assigned by the operator evaluating the change of diaphragm mobility after intervention (Figure 1).

Conclusion: Osteopathic techniques used in this study improved the diaphragmatic motion (but not the muscle thickness) in healthy participants. Further studies are needed to confirm our findings and eventually identify the clinical conditions that may benefit from osteopathic manipulative treatment of the diaphragm

Figure 1. Box plot showing the diaphragmatic motion and the operator scores



SCORE LEGEND:
1= severely worsened somatic dysfunction; **2=** mildly worsened somatic dysfunction;
3= unchanged somatic dysfunction; **4=** slightly improved somatic dysfunction;
5= dramatically improved dysfunction; **6=** complete normalization of somatic dysfunction.

Table 1. Modifications of diaphragmatic mobility in the experimental group

	n	Mean at T_0 (SD)	Mean at T_1 (SD)	Δ (mm)	*P* Value
Age < median value [a]	11	71.6 (17.7)	84.3 (17.3)	12.7	.02
Age > median value	11	64.4 (18.2)	80.8 (14.7)	16.3	.01
BMI < median value [b]	11	64.5 (19.1)	75.7 (13.8)	11.1	.03
BMI > median value	11	71.5 (16.9)	89.4 (15.2)	17.9	.03
Male	10	72.9 (15.7)	89.2 (12.8)	16.3	.02
Female	12	62.1 (19.4)	74.5 (15.8)	12.4	.03
Current smokers	4	71.1 (16.9)	78.0 (8.2)	6.9	.36
Nonsmokers	18	67.3 (18.5)	83.5 (17.0)	16.2	.04
Sedentary work	13	63.6 (19.3)	78.1 (17.5)	14.5	.08
Nonsedentary work	9	74.4 (14.3)	89.0 (10.6)	14.6	.04
Physically active	11	66.8 (16.6)	79.9 (13.0)	13.1	.03
Not physically active	11	69.2 (19.9)	85.2 (18.4)	16.0	.01

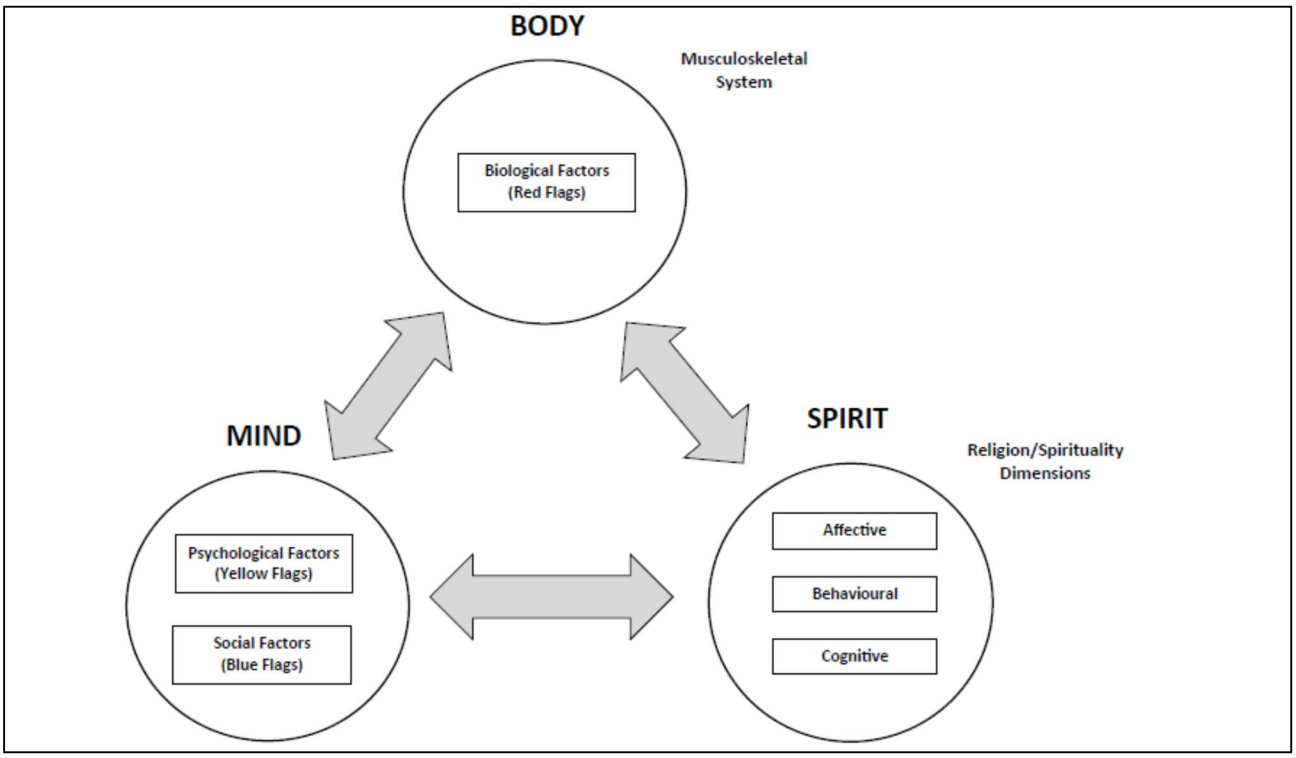
BMI, body mass index; *SD*, standard deviation.
[a] Median age value = 45.5 y.
[b] Median BMI value = 24.0 kg/m^2.

Zegarra-Parodi, R., Draper-Rodi, J., Cerritelli, ***F. "Refining the biopsychosocial model for musculoskeletal practice by introducing religion and spirituality dimensions into the clinical scenario"***. Int J Ost Med 2019;32:44-48.

Abstract

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 behaviour 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, and indicate how R/S dimensions could be discussed in simple ways in a modern therapeutic scenario (Figure 1). Finally, suggestions are provided for MSK practitioners and researchers to address R/S dimensions in Western evidence-oriented healthcare.

Figure 1. Biopsychosocial prognostic factors and potential interactors from religion/spirituality dimensions within the holistic body/mind/spirit approach of musculoskeletal care



Zegarra-Parodi, R., Draper-Rodi, J., Haxton, J., Cerritelli, F. **"The Native American heritage of the body-mind-spirit paradigm in osteopathic principles and practices".** *Int J Ost Med* 2019;**33-34**:31-37.

Abstract

The purpose of the current commentary was to document how Native American healing traditions may have influenced A.T. Still in the development of osteopathic principles and how current neuroscience models de- scribing shamanic healing practices of Native American healers may have applicability for osteopathic manipulative practices (Table 1). Recent materials from the Museum of Osteopathic Medicine document when Still was living among the Shawnee and suggest he was familiar with their healing traditions. Although he introduced the body- mind-spirit paradigm, derived from a key Native American healing concept, into Western medicine, this paradigm still lacks scientific grounding. Neuroscience models may offer a theoretical framework for the 'spiritual' component of the body-mind-spirit paradigm with brain predictive processing models that describe spiritual experiences of patients in altered states of consciousness. With its traditional medicine heritage and current evidence-based approach, the osteopathic profession is in a unique position to promote the scientific model of holistic care.

Table 1. Comparison of traditional Native American and shamanic healing practices, osteopathy and osteopathic medicine, and modern Western allopathic medicine principles

Traditional Native American and Shamanic Healing Practices	Osteopathy and Osteopathic Medicine	Modern Western Allopathic Medicine
Sacred medicine	Secular medicine	Secular medicine
Spiritual framework	Systemic framework	Analytic framework
Dynamic interaction between body, mind, spirit, and emotions; holistic approach	Dynamic interaction between body, mind, and spirit; holistic approach	Reductionist approach
Emphasis on health and harmony	Emphasis on health with a focus on proper musculoskeletal system function to resist disease processes	Emphasis on disease and curing
Oral transmission from a traditional healer to another	Oral transmission from an osteopathic practitioner to another for manual skills Osteopathic practitioner applying evidence-based practice	Physician applying evidence-based practice
Traditional healer teaches patients to heal themselves	Osteopathic practitioner teaches patients to have the primary responsibility for their health	Physician teaches patients how to be disease-free and symptom-free
Patient's tribal beliefs of health and illness used along with physical, social, and spiritual data to make diagnosis	Reductionist data (biochemical, physiologic, anatomic, laboratory data) and manual assessment of the musculoskeletal system used to make diagnosis within a biopsychosocial framework	Reductionist data (biochemical, physiologic, anatomic, laboratory data) used to make diagnosis within a biomedical framework
History, physical examination, and family assessment used along with treatment plan	History, physical examination with a focus on the musculoskeletal system, and laboratory data used along with treatment plan	History, physical examination, and laboratory data used along with treatment plan
Honors the patient for the maintenance of health and recovery from disease	Honors the patient for the maintenance of health and recovery from disease	Honors the physician for curing
Preventive medicine taught to patient and family within a community and environmental framework	Preventive medicine taught to patient and family within a biopsychosocial framework	Preventive medicine taught to patient and family within a biomedical framework
Herbal medicine from nature may be used	Manual treatments are used and pharmaceuticals may be used (only for US osteopathic physicians)	Pharmaceuticals may be used
Use of manual techniques within a body-mind-spirit-emotions framework * to improve overall well-being * patients treated in the non-ordinary reality * channel for therapeutic information: 'direct-intuitive-nonlocal'	Use of manual techniques within a body-mind-spirit framework * to improve range of motion and decrease pain and associated psychosocial components * patients treated in the ordinary reality * channels for therapeutic information: 'direct-intuitive-nonlocal' or 'perceptual-cognitive-symbolic'	Use of manual techniques within a body-mind framework * to improve range of motion and decrease pain * patients treated in the ordinary reality * channel for therapeutic information: 'perceptual-cognitive-symbolic'

Cerritelli F, van Dun PLS, Esteves JE, Consorti G, Sciomachen P, Lacorte E, Vanacore N; OPERA-IT Group. ***"The Italian Osteopathic Practitioners Estimates and RAtes (OPERA) study: A cross sectional survey".*** PLoS One. 2019 Jan 25;14(1):e0211353.

Abstract

The prevalence of osteopathic practitioners, their professional profile and features of their clinical practice, particularly where statutory regulation does not yet exist, are still significantly underreported. The Osteopathic Practitioners Estimates and RAtes (OPERA) project was developed as a European-based census dedicated to profiling the osteopathic profession across Europe (1-2). The present study aimed to describe the osteopathic practitioners and the profession in Italy. A voluntary, online based, closed-ended survey was distributed across Italy in the period between February and June 2017. An e-based campaign was set up to reach the Italian osteopathic professionals. Participants were asked to complete the forms by filling in the information regarding the demographics, working status and professional activities, education, consultation fees, patient complaints, treatment and management.
The survey was completed by 4816 individuals. 196 people started the survey but did not finish, which corresponds to a 4% attrition rate. The majority of respondents were males (66.7%) distributed 31.0% in North- west, 24.0% in the North-east, 25.0% in the Centre, 16.9% in the South, and 3.1% the Islands. The ratio was 8.0 DOs/100,000 citizens. A description of the distribution of DOs across the Italian macro-regions is shown in Table 1. The geographical distribution was based on the ISTAT distribution (3). The modal age group was 30–39 (40.0%). 73.8% of respondents had a previous academic degree, mainly in the fields of sports science (36.4%) and physiotherapy (25.3%). 25.6% declared not to have a previous academic degree. The majority of respondents declared to work alone (58.4%), while the remaining declared to work in association with other professionals (Table 2). The profile of osteopaths in Italy seems to be characterised by a self-employed young adult male working mostly as a sole practitioner, who has been trained as osteopath through a part-time curriculum and had a previous degree mostly in the fields of sports science or physiotherapy.
These results provide important insights into the osteopathic profession in Italy. The varied professional educational backgrounds need to be considered with regard to the implementation of a professional licensing process and future pre-registration education in the country. The number of respondents is an estimate of the actual number of Italian osteopaths. Only the completion of the regulatory process and the creation of the mandatory official register will allow to know the number of Italy based osteopaths.

Table 1.

Table 1. Geographical distribution.

	North-west	North-east	Centre	South	Islands	Tot
National distribution	1,493 (31.00)	1,156 (24.00)	1,204 (25.00)	813 (16.88)	150 (3.12)	4816
Rate osteopaths/ 100.000 citizens	9.28	9.93	9.99	5.80	2.25	7.96
Rate macroregion/national	1.16	1.25	1.25	0.73	0.28	1.00

Values represents N(%)

Table 2. Descriptors of professional training

		N	%
Type of training	Part-time	3,207	66.59
	Full-time	1,609	33.41
Continuous Professional Development	No	341	7.08
	Yes	4,475	92.92
Percentage of working time dedicated to scientific updating	0	99	2.06
	1 to 5	1,063	22.07
	6 to10	1,528	31.73
	11 to 25	1,341	27.84
	26 to 50	627	13.02
	51 to 75	158	3.28
Percentage of working time dedicated to professional updating	0	17	0.35
	1 to 5	275	5.71
	6 to10	819	17.01
	11 to 25	1,352	28.07
	26 to 50	1,463	30.38
	51 to 75	890	18.48
Previous qualification	Physiotherapy	1,218	25.29
	Massage therapy	583	12.11
	Sports science	1,755	36.44
	Other	583	12.11
	None	1,231	25.56
Type of osteopathic degree	Other osteopathic degree	2,258	46.89
	D.O.	4,424	91.86
	D.O. (USA)	37	0.77
	Eur Ost D.O.	65	1.35
	R.O.	5	0.1
	B.Ost.	71	1.47
	M.Ost.	11	0.23
	BSc	617	12.81
	MSc	249	5.17
	Doctorate	349	7.25
	Ph.D.	49	1.02
	other	95	1.97

Values represents N(%)

References

1. www.opera-project.org
2. van Dun PLS, Nicolaie MA, van Messem A, State of affairs of osteopathy in the Benelux: Benelux Osteosurvey 2013. Int J Osteopath Med. 2016; 20:3–17.
3. ISTAT. Resident population – 1st January 2018

Andrea Manzotti, Francesco Cerritelli, Jorge E. Esteves, Gianluca Lista, Erica Lombardi, Simona La Rocca, Alberto Gallace, Francis P. McGlone, Susannah C. Walker***. "Dynamic touch reduces physiological arousal in preterm infants: A role for c-T tactile afferents?"*** Development Cognitive Neuroscience 39 (2019) 100703

Abstract

Preterm birth is a significant risk factor for a range of long-term health problems and developmental disabilities (1-2). Though touch plays a central role in many perinatal care strategies (3-5), the neurobiological basis of these approaches is seldom considered. C-Tactile afferents (CTs) are a class of unmyelinated nerve fiber activated by low force, dynamic touch (6). Consistent with an interoceptive function, touch specifically targeted to activate CTs activates posterior insular cortex and has been reported to reduce autonomic arousal (7). The present study compared the effect of 5 min of CT optimal velocity stroking touch to 5 min of static touch on the heart-rate and oxygen saturation levels of preterm infants between 28- & 37-weeks gestational age (Fig. 1).

Results showed that there was a significant effect of Epoch $F(19,1710)=3.831$, $p<0.001$ partial $\eta 2 =0.041$, as well as of Group $F(1,90)=12.86$, $p=0.001$ $\eta 2 =0.125$ and a Group x Epoch interaction $F(19,1710)=1.612$, $p=0.046$, partial $\eta 2 =0.18$. As can be seen in Fig 2A, the Dynamic Group showed a reduction in heart-rate early in the Touch Period, which was maintained throughout the Post-Touch period. However, the Static Touch group did not show this effect.

To explore the observed group difference further, data were collapsed into two data points, by calculating means for the Touch and Post-Touch period. As illustrated in Fig 2B, there was a significant effect of Time $F(1,90)=7.73$, $p=0.007$, partial $\eta 2 =0.79$, reflecting a lower heart-rate, on average in the Post-Touch than the Touch period. In addition, there was significant effect of Group $F(1,90)=12.86$, $p=0.001$, partial $\eta 2 =0.125$ but no Group x Time interaction ($F<1$).

For SpO2, there was a significant effect of Group $F(1,88)=6.88$, $p=0.01$ $\eta 2 =0.073$ but not of Epoch, nor was there a significant Group x Epoch interaction ($Fs < 1$). See Fig. 2A (bottom). The second analysis, using the mean change in oxygen saturation from Baseline in both the Touch and Post-Touch periods, revealed a significant main effect of Group $F(1,88)=6.89$, $p=0.01$, patial $\eta 2 =0.73$ but again no significant effect of Time nor a Group x Time interaction ($Fs < 1$), see Fig. 2B.

In summary, CT touch produced a significant decrease in infants' heart-rates and increase in their blood oxygenation levels, which sustained throughout a 5-min post-touch period. In contrast, there was no significant change in heart-rate or blood oxygenation levels of infants receiving static touch. These findings provide support for the hypothesis that CTs signal the affective quality of nurturing touch, providing a neurobiological substrate for the apparent beneficial effects of neonatal tactile interventions and offering insight for their optimization.

Table 1.

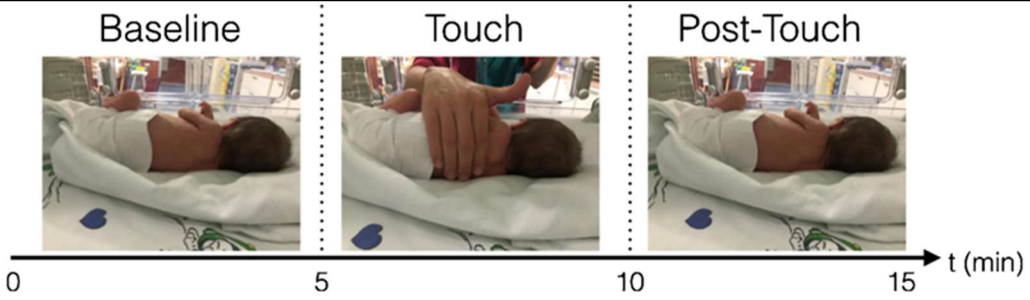


Fig. 1. Timeline of the experiment, showing the position of all infants throughout the intervention and representative positioning of the experimenter's hand during the static touch condition.

Table 2.A

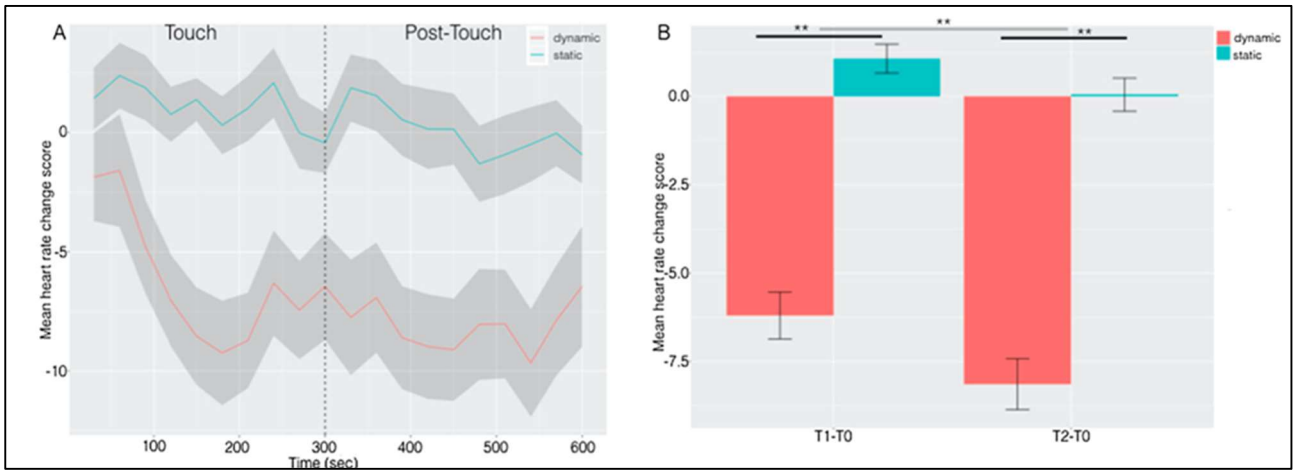


Table 2.B

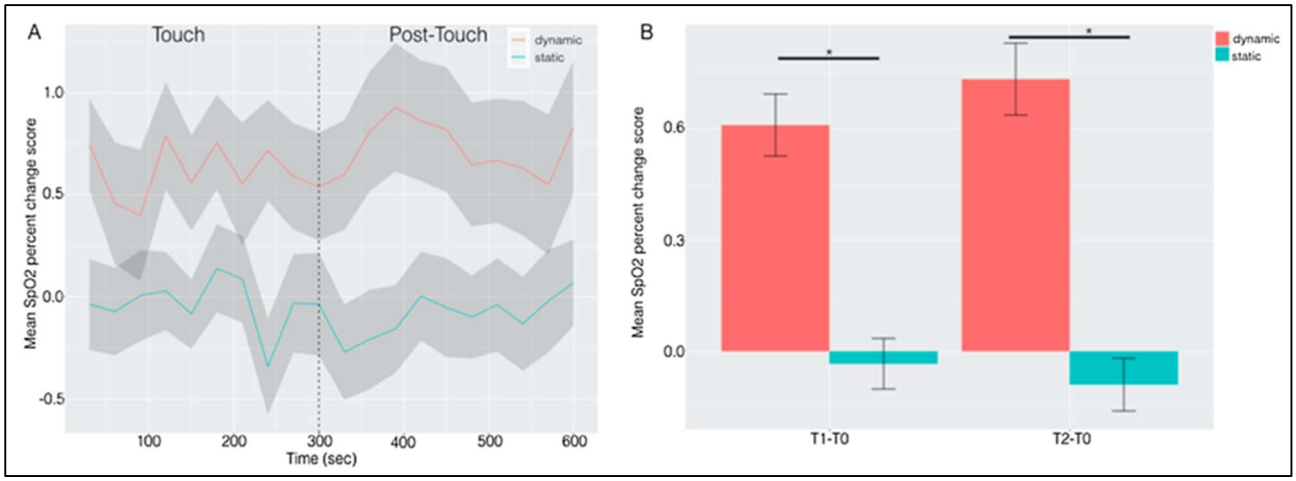


Table 2. A) The time course in seconds of heart-rate (top) and SpO2 (bottom) in response to Dynamic and Static touch during the 5-min-long Touch & Post-Touch periods. Data are presented as change in beats-per-minute from Baseline for 10*30-s-long epochs in each period. The shaded area represents +/− 1 S.E. B) Bar-chart displaying the mean heart-rate (top) and SpO2 (bottom) recorded in the Dynamic and Static touch conditions during the Touch and Post-Touch periods. Again, data are presented as change in beats or percentage saturation per-minute from Baseline. Error bars show +/− 1 S.E. Black lines indicate the significant effect of Group. The grey line indicates the significant effect of Time. *p < 0.05; **p < 0.01.

References.

1. Wong, H.S., Santhakumaran, S., Cowan, F.M., Modi, N., 2016. Developmental assessments in preterm children: a meta-analysis. Pediatrics. https://doi.org/10.1080/ 0449010X.1985.10704980.
2. World Health Organization, 2016. WHO | Preterm Birth. WHO World Health Organization.
3. Als, H., McAnulty, G.B., 2011. The newborn individualized developmental care and assessment program (NIDCAP) with Kangaroo Mother Care (KMC): comprehensive care for preterm infants. Curr. Womens Health Rev. 7, 288–301. https://doi.org/10.2174/ 157340411796355216.
4. Cerritelli, F., Pizzolorusso, G., Ciardelli, F., La Mola, E., Cozzolino, V., Renzetti, C., D'Incecco, C., Fusilli, P., Sabatino, G., Barlafante, G., 2013. Effect of Osteopathic Manipulative Treatment on Length of Stay in a Population of Preterm Infants: a Randomized Controlled Trial. BMC Pediatricshttps://doi.org/10.1186/1471-2431- 13-65.
5. Lanaro, D., Ruffini, N., Manzotti, A., Lista, G., 2017. Osteopathic manipulative treatment showed reduction of length of stay and costs in preterm infants: a systematic review and meta-analysis. Medicine (Baltimore) 96, e6408. https://doi.org/10.1097/MD. 0000000000006408.

6. McGlone, F., Wessberg, J., Olausson, H., 2014. Discriminative and affective touch: sen- sing and feeling. Neuron 82, 737–755. https://doi.org/10.1016/j.neuron.2014.05. 001.
7. McGlone, F., Cerritelli, F., Walker, S., Esteves, J., 2017. The role of gentle touch in perinatal osteopathic manual therapy. Neurosci. Biobehav. Rev. 72, 1–9. https://doi. org/10.1016/J.NEUBIOREV.2016.11.009.

Ilia Bresesti, Michela Ricci, Francesco Cerritelli, Angela Veneziano, Gianvincenzo Zuccotti, 4, Gianluca Lista ***"Comparison between two ocular cleansing modalities in a population of newborns admitted to neonatal intensive care Unit with clinical signs of conjunctivitis: a randomized controlled trial".*** Minerva Pediatrica – Edizioni Minerva 2019 December; 71 (6). 500-4

Abstract

BACKGROUND: Neonatal conjunctivitis is frequent and could benefit from daily cleansing with saline. Anyway super infections can occur and therefore antibiotics are frequently needed. recently alternative therapies (e.g. Echinacea an- gustifolia) are used for neonatal conjunctivitis to try to reduce antibiotics therapy. the aim of the study was to verify if the use of gauze containing Echinacea angustifolia compared to standard sodium-chloride at the onset of conjunctivitis symptoms is effective in reducing the clinical symptoms and the risk for superinfections.
MetHOdS: the study was randomized and controlled. neonates admitted in a tertiary level neonatal intensive care Unit (nicU), with clinical signs of conjunctivitis during hospital stay, were randomized in two groups: group a (3 times daily ocular cleansing for 48 h with sterile gauze; group B (3 times daily ocular cleansing for 48 h with iridium® baby gauze (neoox) containing Echinacea angustifolia and pineapple sativus). an eye swab for cultural analysis was taken at time of presentation (t0) prior to treatment and at the end of ocular cleansing (t1).

RESULTS: Sixty-three neonates were enrolled (Gra=30 and GrB=33). at t0, eye specimen positivity was found in 16/30 (48%) in group a and in 18/33 (55%) in group B (P=0.9). no statistical differences among groups at t0 regarding culture positivity. After 48 h, babies in Gr A have significantly fewer positive swabs compared to group B (group A: 18/29, group B: 10/32; P=0.009). Neonates in group B who had negative swab at T0 had a significantly reduced risk to have positive culture at t1 (Or 0.28, ci: 0.10-0,80, P=0.01), also considering confounding factors (birth weight, gestational age, mode of delivery) (adjusted Or 0.15, ci: 0.03-0.52, P<0.01). no differences in regard to antibiotic needs (P=0.95) during the course of conjunctivitis between groups.

CONCLUSIONS: Our data suggest that these gauzes containing Echinacea angustifolia might help in avoiding super- infections, contaminations and in reducing ocular bacterial load.

Vismara L., Manzotti A., Tarantino A.G., Bianchi G., Nonis A., La Rocca S., Lombardi E., Lista G., Agosti M. ***"Timing of oral feeding changes in premature infants underwent osteopathic manipulative treatment".*** Complement Ther Med. 2019 Apr;43:49-52.

Abstract

Background
The delayed transition from gavage-to-nipple feeding is one of the most significant factors that may prolong hospital length of stay (LOS). Osteopathic manipulative treatment (OMT) has been demonstrated to be effective regarding LOS reduction, but no investigations have documented its clinical validity for attaining oral feeding.

Objectives
To assess OMT utility regarding the timing of oral feeding in healthy preterm infants.

Design
Preliminary propensity score-matched retrospective cohort study.

Setting
Data were extrapolated from the neonatal intensive care unit (NICU) of Del Ponte Hospital in Varese, Italy, during the period between March 2012 and December 2013.

Interventions

Two propensity score-matched groups of healthy preterm infants aged 28+0 to 33+6 were compared, observing those supported with OMT until hospital discharge and control subjects. Main outcome measures
Days from birth to the attainment of oral feeding was the primary endpoint. Body weight, body length, head circumference and LOS were considered as secondary endpoints.

Results
Seventy premature infants were included in the study as the control group (n= 35; body weight (BW)= 1457.9±316.2 g; gestational age (GA)= 31.5±1.73 wk) and the osteopathic group (n= 35; BW=1509.6 ±250.8 g; GA=31.8±1.64 wk). The two groups had analogous characteristics at study entry. In this cohort, we observed a significant reduction in TOF (-5.00 days; p=0.042) in the osteopathic group with a greater effect in very low birth weight infants.

Conclusions
These data demonstrate the utility and potential efficacy of OMT for the attainment of oral feeding. Further adequately powered clinical trials are recommended.
Keywords. Length of stay; fascia; neonatal intensive care unit; sympathetic nervous system; osteopathic medicine.

Table 1. Propensity score-matched baseline characteristics, described by type of ventilation, clinical and perinatal features.

Table 1: Baseline characteristics of the patients.

Variable	**Control Group** (N=35)	**Osteopathic Group** (N=35)	**p-value**
Male – n. (%)[¥]	18 (51.4)	17 (48.5)	0.811
Perinatal characteristics			
Body weight – g [†]	1457.9±316.2	1509.6 ±250.8	0.477
LBW – n. (%)[¥]	14 (40.0)	13 (37.1)	0.806
VLBW – n. (%)[¥]	18 (51.4)	20 (57.1)	0.631
ELBW – n. (%)[¥]	3 (8.6)	2 (5.7)	0.643
Gestational age – wk [†]	31.5±1.73	31.8±1.64	0.196
Body length – cm [†]	39.9±3.7	40.7±2.8	0.446
Head circumference – cm [†]	28.8±2.0	29.3 ±1.6	0.310
APGAR 5 min – pt. [†]	8.26±0.94	8.62±1.27	0.285
Clinical characteristics			
IUGR – n. (%)[¥]	6 (17.1)	9 (25.7)	0.382
SGA – n. (%)[¥]	2 (5.7)	5 (14.3)	0.235
Type of ventilation			
HFNC – n. (%)[¥]	20 (57.1)	17 (48.6)	0.473
nCPAP – n. (%)[¥]	4 (11.4)	6 (17.1)	0.495
BiPAP – n. (%)[¥]	1 (0.3)	1 (0.3)	0.999

Table 2. Discharge characteristics of the primary and secondary outcomes. TOF and LOS were labelled by group and stratified according to birth weight category.

Table 2: Primary and secondary outcomes

Variable	Control Group (N=35)	Osteopathic Group (N=35)	p-value
Discharge characteristics			
Body weight – g	2288,1±553,4	2190,4±470,1	0.672
Body length – cm.	45,4±2,8	45,4 ±2,3	0.797
Head circumf. – cm.	32,7±1,9	32,5 ±1,6	0.831
Timing oral feeding – d.	27.0±19.6	22.0±16.8	0.042*
LBW	22.2±8.4	16.5±10.8	0.096
VLBW	32.8±14.0	25.1±14.1	0.026*
Length of stay – d.	38.4±19.6	32.8±16.9	0.065
LBW	29.6±15.4	27.9±13.2	0.240
VLBW	45.8±16.8	34.5±17.0	0.018*

Leach MJ, Sundberg T, Fryer G, Austin P, Thomson OP, Adams ***"An investigation of Australian osteopaths' attitudes, skills and utilisation of evidence- based practice: a national cross-sectional survey".*** J. BMC Health Serv Res. 2019 Jul 17;19(1):498.

Abstract

Background: Osteopaths are an integral member of the health care team, playing a pivotal role in the provision of care for patients with musculoskeletal disorders. Osteopaths, like other health care providers, are under increasing pressure to deliver evidence-based health care and to improve patient outcomes. However, the extent to which osteopaths engage in evidence-based practice (EBP), particularly in Australia, is not well understood. This study therefore set out to investigate the attitudes, skills and use of EBP, and perceived barriers and enablers of EBP uptake, among osteopaths practicing in Australia.

Methods: National cross-sectional survey of Australian registered osteopaths. Eligible participants were invited by email and other digital media recruitment strategies to complete the online Evidence-Based Practice Attitude and Utilisation Survey (EBASE).

Results: A total of 332 osteopaths completed the survey. The demographic characteristics of respondents were generally consistent with the characteristics of the Australian osteopathy workforce (Table 1). The respondents were mostly favourable of EBP, with the majority agreeing or strongly agreeing that EBP assists in making decisions about patient care (86.7%) and improves the quality of patient care (75.6%). While most respondents (88.3%) had some training in EBP, most reported a moderate level of perceived skill in EBP. The majority of respondents engaged infrequently (0–5 times) in EBP activities within the last month, and most indicated that a very small or small proportion of their clinical practice was based on clinical research evidence. Leading barriers to the uptake of EBP were lack of time and lack of clinical evidence in osteopathy. Key enablers of EBP uptake were access to the internet and online databases at work, and access to full-text articles and EBP education materials.

Conclusions: Osteopaths participating in the survey were largely supportive of evidence-based practice, yet engaged infrequently in EBP activities. An important next step in this research is to identify suitable strategies that effectively improve EBP uptake in osteopathy, and perchance, improve patient outcomes.

Table 1 Demographic characteristics of sample ($n = 332$)

Characteristic	Frequency
Age, *n (%)*	
20–29 years	52 (15.7)
30–39 years	109 (32.8)
40–49 years	72 (21.7)
50–59 years	39 (11.7)
60–69 years	13 (3.9)
70+ years	2 (0.6)
Missing	45 (13.6)
Sex, *n (%)*	
Female	172 (51.8)
Male	113 (34.0)
Other	2 (0.6)
Missing	45 (13.6)
Highest qualification, *n (%)*	
Diploma/Advanced Diploma	11 (3.3)
Bachelor degree	50 (15.1)
Honours degree	11 (3.3)
Graduate Certificate/Diploma	12 (3.6)
Master's degree	198 (59.6)
PhD/Professional doctorate	5 (1.5)
Missing	45 (13.6)
Years since receiving highest qualification, *n (%)*	
< 1 year	14 (4.2)
1–5 years	63 (19.0)
6–10 years	64 (19.3)
11–15 years	69 (20.8)
16+ years	77 (23.2)
Missing	45 (13.6)
Years practiced in the field of osteopathy, *n (%)*	
< 1 year	10 (3.0)
1–5 years	49 (14.8)
6–10 years	66 (19.9)
11–15 years	64 (19.3)
16+ years	98 (29.5)
Missing	45 (13.6)
Hours per week in clinical (osteopathic) practice, *n (%)*	
0 h	2 (0.6)
1–15 h	43 (13.0)
16–30 h	108 (32.5)
31–45 h	112 (33.7)
46+ hours	22 (6.6)
Missing	45 (13.6)
Hours per week participating in research, *n (%)*	
0 h	159 (47.9)
1–15 h	121 (36.5)
16–30 h	4 (1.2)
31–45 h	1 (0.3)
46+ hours	1 (0.3)
Missing	46 (13.9)
Hours per week teaching in the higher education sector, *n (%)*	
0 h	236 (71.1)
1–15 h	41 (12.4)
16–30 h	8 (2.4)
31–45 h	1 (0.3)
46+ hours	0 (0.0)
Missing	46 (13.9)
Treatments typically provided in first osteopathic consultation, *n (%)*	
Articulation	263 (79.2)
Soft tissue therapy	246 (74.1)
Muscle energy therapy	240 (72.3)
HVLA thrust	212 (63.9)
Exercise	209 (63.0)
General osteopathic treatment	185 (55.7)
Myofascial release	181 (54.5)
Strain-counterstrain	160 (48.2)
Functional technique	112 (33.7)
Relaxation advice	104 (31.3)
Cranial technique	77 (23.2)
Other	70 (21.1)
Visceral therapy	57 (17.2)
Acupuncture/acupressure	26 (7.8)
Ice/cold treatment	24 (7.2)
Orthotics	6 (1.8)
Electrotherapy	5 (1.5)
Steroid injection	1 (0.3)
Clinical setting in which osteopathy was predominantly practiced, *n (%)*	
With a group of CAM providers	102 (30.7)
Solo practice	76 (22.9)
With a group of conventional providers	69 (20.8)
With CAM & conventional providers	34 (10.2)
Within an educational institution	3 (0.9)
Missing	48 (14.5)
Geographical location, *n (%)*	
Victoria	151 (45.5)
New South Wales	78 (23.5)
Queensland	27 (8.1)
Tasmania	13 (3.9)

Table 1 Demographic characteristics of sample ($n = 332$) *(Continued)*

Characteristic	Frequency
Western Australia	7 (2.1)
South Australia	5 (1.5)
Australian Capital Territory	2 (0.6)
Northern Territory	1 (0.3)
Missing	48 (14.5)
Osteopathy professional association membership, *n (%)*	
Osteopathy Australia	268 (80.7)
Not a member of an Osteopathy professional association	9 (2.7)
Chiropractic and Osteopathic College of Australasia	4 (1.2)
Other	2 (0.6)
Missing	49 (14.8)
Geographical region, *n (%)*	
Inner city suburbs	107 (32.2)
Outer city suburbs	88 (26.5)
Rural/remote region	58 (17.5)
City (Central business district)	26 (7.8)
Missing	53 (16.0)

CAM Complementary and alternative medicine, *HVLA* high-velocity low amplitude

PUBLICATIONS ON PEER-REVIEWED NATIONAL JOURNALS

van Dun P. (2019) ***"Holisme in de osteopathie: de kloof overbruggen tussen concept en praktijk"***; About Osteopathy, 2019 1: 28-33.

HOLISME IN DE OSTEOPATHIE: DE KLOOF OVERBRUGGEN TUSSEN CONCEPT EN PRAKTIJK

PATRICK VAN DUN

In het artikel "Reductionisme en holisme in het osteopathisch diagnostisch proces" van Rik Hoste werden er enkele interessante denkpistes uitgewerkt die een diepere analyse en discussie zeker verdienen. Dit niet enkel omdat reductionisme en holisme als de twee belangrijkste benaderingsvormen binnen de gezondheidszorg betracht worden maar ook en vooral, omdat het diagnostisch proces met haar klinisch redeneren misschien wel één van de belangrijkste elementen is om de osteopathie te differentiëren als specifieke manuele geneeswijze. Een analyse van de literatuur toont aan dat osteopaten het holisme in de breedste betekenis eerder lippendienst bewijzen en dat het duale karakter reductionisme-holisme in het klinisch redeneringsproces niet meer houdbaar is.

van Dun P, Verbeeck J, Esteves J, Cerritelli F. ***"Osteopathic Practitioners Estimates and RAtes (OPERA) study Belgium - Luxembourg: Part I"***, About Osteopathy, 2019; 1: 20-26.

OSTEOPATHIC PRACTITIONERS ESTIMATES AND RATES (OPERA) STUDY BELGIUM – LUXEMBOURG: PART I

PATRICK VAN DUN, JOHAN VERBEECK, JORGE ESTEVES, FRANCESCO CERRITELLI

Na de KCE-bevraging van de Belgische osteopaten in 2010[1] en de Benelux Osteosurvey van 2013[2] was het in 2018 aan de OPERA-enquête om de Belgische en Luxemburgse osteopathie weer netjes op de kaart te zetten. Het doel van deze studie was om de rol van de osteopaten in het Belgische en Luxemburgse gezondheidssysteem beter te begrijpen. Via een vragenlijst werden de belangrijkste kenmerken van de osteopathische praktijk en de intraprofessionele variabiliteit tussen osteopaten geëvalueerd. De vragenlijst bevatte 52 vragen naar demografie, werkstatus/werkplek en professionele activiteiten, onderwijs en levenslang leren, beroepsidentiteit, patiënten en osteopathische vaardigheden.

OPERA
OSTEOPATHIC CENSUS IN BELGIUM AND LUXEMBOURG

van Dun P. (2019). ***"Het imago van de osteopathie in België 2019: "voor alle duidelijkheid"***, About Osteopathy, 2019; 2: 19-22.

HET IMAGO VAN DE OSTEOPATHIE IN BELGIË 2019: "VOOR ALLE DUIDELIJKHEID"

PATRICK VAN DUN

"Voor alle duidelijkheid", één van de vele standaarduitdrukkingen waar politici in verkiezingsperiode graag mee uitpakken, is ook met betrekking tot de bekendheid en het imago van ons beroep de noodzakelijke insteek. De resultaten van het gevoerde onderzoek die op zich meer duidelijkheid bieden, nopen de osteopathie ertoe om nog duidelijker haar profiel te verkondigen. Samen met elke individuele osteopaat dienen we het best mogelijke verhaal uit te dragen.

van Dun P., Verbeeck J., Esteves J. E., Cerritelli F. (2019); ***"Osteopathic Practitioners Estimates and RAtes (OPERA) study Belgium - Luxembourg: Part II***', About Osteopathy, 20192: 31-36.

OSTEOPATHIC PRACTITIONERS ESTIMATES AND RATES (OPERA) STUDY BELGIUM – LUXEMBOURG: PART II

PATRICK VAN DUN, JOHAN VERBEECK, JORGE ESTEVES, FRANCESCO CERRITELLI

Na de KCE-bevraging van de Belgische osteopaten in 2010[1] en de Benelux Osteosurvey van 2013[2] was het in 2018 aan de OPERA-enquête om de Belgische en Luxemburgse osteopathie weer netjes op de kaart te zetten. Het doel van deze studie was om de rol van de osteopaten in het Belgische en Luxemburgse gezondheidssysteem beter te begrijpen. Via een vragenlijst werden de belangrijkste kenmerken van de osteopathische praktijk en de intraprofessionele variabiliteit tussen osteopaten geëvalueerd. De vragenlijst bevatte 52 vragen naar demografie, werkstatus/werkplek en professionele activiteiten, onderwijs en levenslang leren, beroepsidentiteit, patiënten en osteopathische vaardigheden.

OPERA
OSTEOPATHIC CENSUS IN BELGIUM AND LUXEMBOURG

Wagner C, van Dun P. (2019***) "Oraal squameus celcarcinoom (OSCC), een mogelijke rol voor osteopathie in het kader van een multidiciplinaire nazorg: een casusrapport",*** About Osteopathy, 2019; 3: 31-35.

ORAAL SQUAMEUS CELCARCINOOM (OSCC), EEN MOGELIJKE ROL VOOR OSTEOPATHIE IN HET KADER VAN EEN MULTIDISCIPLINAIRE NAZORG: EEN CASUSRAPPORT

CONSTANZE WAGNER[1], PATRICK VAN DUN[1]

[1] Praxis für Osteopathie, Am Etlingsbrunnen 1, 34317 Habichtswald, Deutschland

Deze casus belicht de mechanische invloeden in de onstaanswijze van oraal squameus celcarcinoom (OSCC) en toont aan dat osteopathische zorg een duidelijke meerwaarde kan bieden in de multidisciplinaire nazorg van de gevolgen van operatieve, radio-en chemotherapie van OSCC.

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