

OsteoBPS

Perception of osteopaths with specific undergraduate biopsychosocial (BPS) training regarding its usefulness in clinical practice: a mixed-method study

BACKGROUND

Progress in Neuropsychopharmacology & Biological Psychiatry 87 (2018) 168–182



Contents lists available at ScienceDirect

Progress in Neuropsychopharmacology & Biological Psychiatry

journal homepage: www.elsevier.com/locate/pnp

Reviews



Evaluating psychosocial contributions to chronic pain outcomes

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Review

What does best practice care for musculoskeletal pain look like? Eleven consistent recommendations from high-quality clinical practice guidelines: systematic review

Ivan Lin ¹, Louise Wiles,² Rob Waller,³ Roger Goucke,⁴ Yusuf Nagree,^{5,6} Michael Gibberd,⁷ Leon Straker ⁸, Chris G Maher,⁹ Peter P B O'Sullivan¹⁰

International Journal of Osteopathic Medicine 25 (2017) 30–41



Contents lists available at ScienceDirect

International Journal of Osteopathic Medicine

journal homepage: www.elsevier.com/ijos

Masterclass

Integrating osteopathic approaches based on biopsychosocial therapeutic mechanisms. Part 1: The mechanisms

Gary Fryer, B.Sc.(Osteopathy), Ph.D. ^{a, b, *}

BACKGROUND IN MANUAL THERAPY



Contents lists available at [ScienceDirect](#)

International Journal of Osteopathic Medicine

journal homepage: www.elsevier.com/ijos

Original Article

'I just don't have the tools' - Italian osteopaths' attitudes and beliefs about the management of patients with chronic pain: A qualitative study

Andrea Formica ^{a, b, *}, Oliver P. Thomson ^{b, e}, Jorge E. Esteves ^{c, d, e}

RESEARCH

Effects of an e-learning programme on osteopaths' back pain attitudes: a mixed methods feasibility study

Jerry Draper-Rodi^{1*} , Steven Vogel¹ and Annette Bishop²



Musculoskeletal Science and Practice 27 (2017) 71–77

Contents lists available at [ScienceDirect](#)

Musculoskeletal Science and Practice

journal homepage: www.journals.elsevier.com/aquaculture-and-fisheries/


Original article

'I need to do another course' - Italian physiotherapists' knowledge and beliefs when assessing psychosocial factors in patients presenting with chronic low back pain


Giacomo Zangoni^{*}, Oliver P. Thomson

Aim of the study

To explore the perception of novice trained osteopaths on the the training received about assessment and management on patients with pain from a BioPsycoSocial perspective



The **Italian Academy of Osteopathic Medicine**, AIMO, has introduced an experimental course to improve management skills in pain management called "Pain Management" (PMC)

A decorative graphic at the bottom of the slide consisting of a dark blue triangle on the left and a blue trapezoid extending to the right.

PMC Learning Outcomes

- Analyse and interpret clinical scenarios from a bio-psycho-social standpoint
- Integrating the bio-psycho-social model in osteopathic practice to various clinical scenarios

PMC Topics

- Models of pain and disability including psychological mechanisms of pain and disability
- Psychological risk factors for persistent pain and disability.
- Clinical assessment of psychological risk factors for persistent pain and disability
- Clinical considerations regarding the diagnostic setting of osteopathic practice in a bio-psycho-social context
- Osteopath/patient communication in pain management (Therapeutic Alliance)
- Psychologically Informed Management
- Introduction to Acceptance and Commitment Therapy (ACT) integrated with the osteopathy practice value-based interventions in pain management

METHODS OF THE RESEARCH

- A mixed methods study:
- A preliminary online survey to better define the aspects to be explored with the interviews
- Subsequent focus group interview based on indications received

(Hadi et al., 2019; Creswell et al., 2011)

METHODS

The survey: Themes and Modalities of investigation

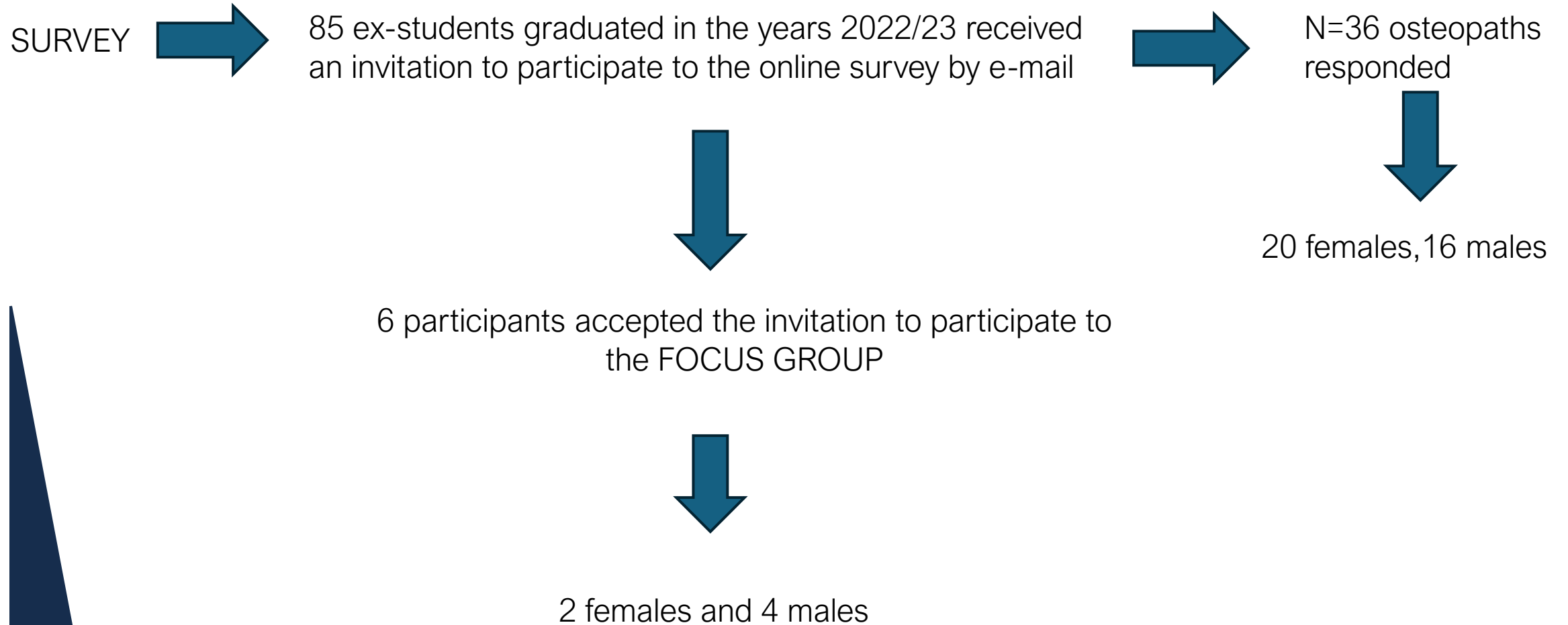
- Evaluation of the received PM Course
- Usefulness and influence of integrating osteopathic manual treatment with the BPS approach in clinical practice
- Possible barriers for the use of the BPS approach in the osteopath's clinical care

METHODS

Focus Group

- Semi-structured guide on the main themes highlighted by the survey and possible exploration of new emerging content
- Audio recorded and afterwards transcript verbatim
- Participants' control and validation of the transcribed interview
- Thematic analysis: line-by-line, focused end selective coding by three researchers independently (Halcomb, 2006)
- Subsequent agreement through comparison between researchers (Creswell, 2011)
- (COREQ) checklist

PARTECIPANTS



Survey Results

Means and standard deviations of the responses to the questions included in the online survey (Likert scale from 1- "Completely dissatisfied" to 7 - "Completely satisfied")

		Mean	Standard Deviation
Evaluation of the Pain Management course			
	Clarity in the explanations of the theoretical topics provided in the lesson	5,18	1,24
	Exhaustiveness of explanations,	5,09	1,03
	Applicability of information to clinical practice	4,39	1,34
	Ability to generate interest in the subject	4,91	1,54
	Time management (speed of didactic progression, alternation of theoretical explanations with examples or exercises)	4,42	1,59
Influence of the biopsychosocial approach in the participant's clinical practice			
	Patient relationship management	5,53	1,11
	Diagnostic-clinical reasoning,	4,80	1,24
	Setting of the treatment program	4,73	1,34
	Selection of manual techniques to use with the patient	5,03	1,43
Usefulness of integrating osteopathic manual treatment with the biopsychosocial approach			
	Patient relationship management	5,87	1,01
	Diagnostic-clinical reasoning	5,07	1,34
	Setting of the treatment program	5,00	1,39
	Selection of manual techniques to use with the patient	5,27	1,46

Frequencies and percentages of the responses regarding the perceived barriers for the use of the biopsychosocial approach in the osteopath's clinical care

Barrier	Frequency	Percentage
The received training is anchored in a biomedical approach	4	11.11
The received training is not sufficient	3	8.33
More confidence in addressing manually (and from a biomechanical point of view) the presumed biomedical causes underlying the symptoms	15	41.67
Lack of tools for assessing psychosocial aspects	13	36.11
Discordance between the biopsychosocial approach and osteopathic medicine	2	5.56
Lack of skills to understand the implicated psychosocial aspects	8	22.22
Lack of skills to treat the psychosocial aspects	15	41.67
Addressing psychosocial aspects goes beyond the professional competence limits of osteopaths	3	8.33
Limitations of the biopsychosocial approach	2	5.56
Other	2	5.56

Focus Group results

Recognition of psychosocial factors

More reflective clinical practice

Use of questionnaires

Changing role of the patient, osteopath and their relationship

- Detachment from a biomedical postural model
- Changing the role of the patient
- Changing the role of the osteopath
- Therapeutic alliance

Clinical challenges and professional uncertainty

- Lack of confidence
- Professional identity

Educational obstacles

- Lessons too theoretical and not enough experiential
- Consistency and connection between different departments
- Teaching-internship gap
- Organizational aspects of clinical internship

1th Theme:

Recognition of psychosocial factors

More reflective clinical practice

PF2 "all the PS elements that I perceive of the patient in the history can be useful for me to understand the patient, his pain, and how he handles the pain."

Use of questionnaires

PM4 "For example, the Tampa Scale of Kinesiophobia, or the Brief Pain Inventory, all those questionnaires allow you to go and assess these PS aspects...and they have scientific validity."

2th Theme:

Changing roles of patient and the osteopath

Roles of patient

PM3 "guiding the patient to learn independently, to manage his condition independently is the most important part of the treatment...Because it is much more effective to bring the patient to understand independently what is actually best for him"...

Role of Osteopath:

PM4 "Guiding the patient to learn independently how to handle these situations is the most important part of treatment in my opinion, because they represent the real situation in his/her life, which is not possible to achieve only with manual osteopathic treatment."

Relationship

PM3 "it's a very important part of treatment to create a therapeutic alliance with the patient and empathy I think is one of the keys to connect with the patient."

3th Theme: : Clinical challenges and professional identity

- **Lack of confidence**

PM4 "When I tried to approach the PS factors I feel I lack the confidence and tools to deal with them."

Little consideration to the ACT approach

- **Professional identity**

- *PM1: "In my opinion it is great that it gives us all the skills to identify all the yellow flags and all the factors, so that we can then refer him to a professional who is specific to that."*

4th Theme: Educational obstacles

- **Lessons too theoretical and not enough experiential**
 - *PM4 "within such a course there should be a theoretical part and then a practical part, like for osteopathic subjects, where anyway both the knowledge part and the more practical skills part are carried out... with real clinical cases"*
- **Consistency and connection between different departments**
 - *PM3 "The problem with pain management is that it is a course in the last two years that...sometimes it is disconnected from the other subjects as well"*
- **Teaching-internship gap**
 - *PM1 "In the clinical part in my opinion there is sometimes a lack of training at the level of the tutors, so there is no stimulation coming from them"*

The good news

- Contents of the lectures recognized clear and useful
- Acquired knowledge on the multidimensional nature of pain and, consequently, increased level of clinical awareness on pain
- Focus group informations aligned with survey results

The less good ones

- **Applicability not easy in clinical practice:**
- Lack of tools and skills for treating psychosocial aspects
- Reflections on professional identity and boundaries of the osteopathic profession
- The teaching methods were found to be too frontal and theoretical
- More confidence in addressing manually the presumed biomedical causes underlying the symptoms learned in the previous courses
- Discussion and mentoring perceived as limited in clinical practice

TAKE HOME MESSAGES

IMPORTANCE OF FOCUSING ON PERSON-CENTRED THERAPEUTIC TRAINING CURRICULUM EVEN IN COMPLEX CONTEXTS

GREATER CONNECTION BETWEEN ACADEMY AND CLINIC

MANAGEMENT PROFESSIONAL BOUNDARIES

DEVELOPMENT AND REINFORCEMENT OF COMMUNICATION ASPECTS INFORMED BY PSYCHOLOGY SUITED TO THE OSTEOPATHIC CONTEXT

CREATE A SAFETY ENVIRONMENT FOR THE DEVELOPMENT OF SOFT SKILLS TO REINFORCE THERAPEUTIC STYLE PERSON-CENTRED

MAXIMIZING ATTENTION TO THE MANAGEMENT OF BPS ELEMENTS IN CLINICAL TUTORING

THANKS TO THE CO-AUTHORS

- *DOGNINI SAMUELE DO MSc Ost*
- *RONCHI MICHELE DO MSc Ost*
- *GIUSTI EMANUELE PhD Psych*



Thank you for your attention!



References

- Abrosimoff M, Rajendran D. 'Tell me your story' - how osteopaths apply the BPS model when managing low back pain - a qualitative study. *Int J Osteopathic Med.* 2020;35:13–21
- Baliki, M. N., & Apkarian, A. V. (2015). Nociception, pain, negative moods, and behavior selection. *Neuron*, 87(3), 474-491.
- Carnes, D., Mars, T., Plunkett, A., Nanke, L., & Abbey, H. (2017). A mixed methods evaluation of a third wave cognitive behavioural therapy and osteopathic treatment programme for chronic pain in primary care (OsteoMAP). *International Journal of Osteopathic Medicine*, 24, 12-17.
- Cohen, S. P., Vase, L., & Hooten, W. M. (2021). Chronic pain: an update on burden, best practices, and new advances. *The Lancet*, 397(10289), 2082-2097.
- Cowell, I., O'Sullivan, P., O'Sullivan, K., Poyton, R., McGregor, A., & Murtagh, G. (2019). The perspectives of physiotherapists on managing nonspecific low back pain following a training programme in cognitive functional therapy: A qualitative study. *Musculoskeletal Care*, 17(1), 79-90.
- Creswell JW, Clark VLP. *Designing and conducting mixed methods research*. California: Sage Publications, Inc.; 2011.
- Delion, T. P. E., & Draper-Rodi, J. (2018). University College of Osteopathy students' attitudes towards psychosocial risk factors and non-specific low back pain: a qualitative study. *International Journal of Osteopathic Medicine*, 29, 41-48.
- Draper-Rodi J, Vogel S, Bishop A. Impact of an e-learning programme on the biopsychosocial model for non-specific low-back pain on experienced osteopaths' attitudes to back pain: a mixed-methods study. *Man Ther.* 2016; 100(25):e167–e8.
- Draper-Rodi, J., Vogel, S., & Bishop, A. (2021). Effects of an e-learning programme on osteopaths' back pain attitudes: a mixed methods feasibility study. *Pilot and Feasibility Studies*, 7(1), 1-18.
- Fitzcharles, M. A., Cohen, S. P., Clauw, D. J., Littlejohn, G., Usui, C., & Häuser, W. (2021). Nociceptive pain: towards an understanding of prevalent pain conditions. *The Lancet*, 397(10289), 2098-2110.
- Fryer G. Integrating osteopathic approaches based on biopsychosocial therapeutic mechanisms. Part 2: clinical approach. *Int J Osteopath Med* 2017;26:36–43.

References

- Formica, A., Thomson, O. P., & Esteves, J. E. (2018). 'I just don't have the tools'-Italian osteopaths' attitudes and beliefs about the management of patients with chronic pain: a qualitative study. *International Journal of Osteopathic Medicine*, 27, 6-13.
- Halcomb EJ, Davidson PM. Is verbatim transcription of interview data always necessary? *Appl Nurs Res*. 2006;19(1):38-42
- Lin, I., Wiles, L., Waller, R., Goucke, R., Nagree, Y., Gibberd, M., ... & O'Sullivan, P. P. (2020). What does best practice care for musculoskeletal pain look like? Eleven consistent recommendations from high-quality clinical practice guidelines: systematic review. *British journal of sports medicine*, 54(2), 79-86.
- Meints, S. M., & Edwards, R. R. (2018). Evaluating psychosocial contributions to chronic pain outcomes. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 87, 168-182.
- Nessen, T., Opava, C. H., Martin, C., & Demmelmaier, I. (2014). From clinical expert to guide: experiences from coaching people with rheumatoid arthritis to increased physical activity. *Physical therapy*, 94(5), 644-653.
- Nielsen, M., Keefe, F. J., Bennell, K., & Jull, G. A. (2014). Physical therapist-delivered cognitive-behavioral therapy: a qualitative study of physical therapists' perceptions and experiences. *Physical therapy*, 94(2), 197-209.
- Sampath, K. K., Darlow, B., Tumilty, S., Shillito, W., Hanses, M., Devan, H., & Thomson, O. P. (2021). Barriers and facilitators experienced by osteopaths in implementing a biopsychosocial (BPS) framework of care when managing people with musculoskeletal pain—a mixed methods systematic review. *BMC health services research*, 21, 1-15.
- Stilwell, P., & Harman, K. (2019). An enactive approach to pain: beyond the biopsychosocial model. *Phenomenology and the Cognitive Sciences*, 18(4), 637-665.
- Stilwell, P., & Harman, K. (2017). 'I didn't pay her to teach me how to fix my back': a focused ethnographic study exploring chiropractors' and chiropractic patients' experiences and beliefs regarding exercise adherence. *The Journal of the Canadian Chiropractic Association*, 61(3), 219.
- Stilwell, P., Hayden, J. A., Des Rosiers, P., Harman, K., French, S. D., Curran, J. A., & Hefford, W. (2018). A qualitative study of doctors of chiropractic in a nova Scotian practice-based research network: barriers and facilitators to the screening and management of psychosocial factors for patients with low back pain. *Journal of Manipulative and Physiological Therapeutics*, 41(1), 25-33.
- Zangoni, G., & Thomson, O. P. (2017). 'I need to do another course'-Italian physiotherapists' knowledge and beliefs when assessing psychosocial factors in patients presenting with chronic low back pain. *Musculoskeletal science and practice*, 27, 71-77.

DISCUSSION

- *Many patients experiencing back pain hope for the discovery of a clear organic cause of their pain and clinicians do their best to fulfill this expectation by providing a physical diagnosis (e.g., intervertebral disc bulge) (Stilwell et al. 2018; Stilwell and Harman 2017b).*
- **Not easy** to find a way to access the communication of new paradigms to make patients understand their pain
- **Corticolimbic Pain Thresholds Model?**
(Baliki & Apkarian 2015).

DISCUSSION

- *When applying the BPS model, there is a tendency to separate patients' pain into two (biological or psychosocial) or three (biological, psychological, or social) domains*

(Stilwell, P., & Harman, K.2019)

- ***Not easy** always integrating especially if the predominant aspect of teaching is unbalanced in favor of one of these aspects (biological)*

- **Notion of coexistence of nociceptive pain with nociplastic (and/or neuropathic) pain from the beginning of undergraduate training?**

(Fitzcharles, et al.. (2021); Cohen et al., 2021)

DISCUSSION

- *Different variables present in each person with chronic pain*
- ***Not easy** to tailor different and adapted pain management for each individual*
- *Other studies have found barriers for the application of the BPS approach also for professional osteopaths*
(Sampath et al., 2021; Abrosimoff & Rajendran 2020; Draper-Rodi et al., 2016)
- ***Students supervising experienced tutors on the BPS approach on real patients and then applying it under close supervision?***
(Carnes et al., 2017)