Peer-reviewed studies related to shiatsu, 2019 publications

A narrative overview for the Shiatsu Research Network

by Stergios Tsiormpatzis

Clinical Studies

Qin et al. (2019) published in "Journal of Integrative Medicine" a report for a case-series proof-of-concept study that took place in 2016 as part of an MSc thesis work. The participants were seven young athletes with sport-related brain injury diagnosed within the last six months and self-reported post-injury sleep disturbance. The tested modality was hand self-shiatsu, following the protocol that was developed by Leisa Bellmore for the Brown et al. (2014) pilot study. All participants receive training for the protocol. The primary outcome used was data from a wrist-watch sleep monitor, while secondary outcomes were monitored using patient-reported outcome measures. The participants were instructed to apply the protocol daily for 21 days. Data were collected at the baseline and at two follow-up periods. No side effects were reported. Since the study was a proof-of-concept study, it is not possible to infer the effectiveness of the tested modality. The authors conclude that the study shows hand self-shiatsu promising for further investigation in a larger study, discussing methodological aspects that brought to light from this study.

Kobayashi et al. (2019) published in "Complementary Therapies in Medicine" a report for a single-blinded (researcher) randomized control trial (RCT) aiming to evaluate the

effect of a standardized Namikoshi shiatsu protocol on chronic back pain. The trial took place between 2015 and 2017 in St. Luke's International Hospital, Tokyo, Japan. 59 adult patients suffering from lower back pain for more than 3 months but able to walk and who did not receive shiatsu or other forms of CAM during the previous year were randomized in two groups: the control group (29, of which 24 completed the study) receive standard care while the experimental group (30, of which 26 completed the study) receive standard care plus shiatsu (one-hour session once per week) for four weeks (in total four shiatsu sessions), with a follow-up (standard care alone) period of four weeks. Shiatsu was provided by nationally licensed practitioners with at least three years of experience, after following a training program for the protocol of the trial (protocol provided as supplementary material with the report). The study was severely underpowered, with the authors calculating the need of 85 participants in each group. No differences found at the end of the four-weeks experimental period, suggesting no effect of shiatsu. The authors report clinically meaningful improvements in the short-term (at the end of the follow-up period) justified by a significant difference in some of the secondary outcomes too (pain intensity, disability and quality of life). Thus they suggest a possible delayed effect of shiatsu. 4 patients from the experimental group reported adverse events (3 muscle pain, 1 headache), as well as 3 patients from the control group (1 dizziness, 1 herpes zoster, 1 abdominal pain).

Tsiormpatzis, (2019a) published in "European Journal of Integrative Medicine" a report for a mixed-methods n-of-1 trial within a whole systems research case study, aiming to investigate if shiatsu affects the health-related quality of life of a person with secondary progressive multiple sclerosis (MS). The participant was a woman with the condition which did not receive any form of oriental medicine during the previous six months and did not suffer from excessive or chronic fatigue. The practitioner was the

researcher himself, a qualified practitioner with a five-year practice focused on MS, and the study was done for his MSc thesis. The single-subject trial constituted of twoweeks periods of control alternated with experimental periods, six-periods in total. During the control periods, the patient receives only her usual care, during the experimental periods, two weekly shiatsu sessions were added, 12 sessions in total. The shiatsu treatments were not standardized but personalized and according to the presentation at each session (case notes provided in the appendix of the report). Data collected with a commonly used quality of life questionnaire for MS, a semi-structured interview and case notes were used to assess the effect of the treatment. The collected data were analysed quantitatively and qualitatively and synthesised as a descriptive case study. Improvements in spasticity, bowel function, fatigue, pain, sleep and relaxation were documented and no adverse events occurred. Since this was a singlesubject study, no inferences can be made for larger populations. Yet the innovative design was able to infer some preliminary estimations of the onset and wash-out of shiatsu effects, while the author is preparing a methodological paper in which he considers this study as a methodological pilot for the application of the design in touchbased modalities.

Comments and Perspectives

Lanza et al. (2019) published in the "Journal of Evidence-Based Integrative Medicine" a comment on their published work "Shiatsu as an adjuvant therapy for depression in patients with Alzheimer's disease: a pilot study" (Lanza et al., 2018). In their comment, the authors make a brief review of possible mechanisms that might underlie the effects of shiatsu on mood and cognition as well as of the available evidence for effects of shiatsu. After briefly describing their pilot study, they address methodological issues putting their study in its right context, i.e. pilot. That is very much needed in the shiatsu

community since very often we see effectiveness conclusions mistakenly inferred by pilot studies. Finally, the authors provide useful suggestions to consider in future studies, touching issues related to the evidence-based medicine methodologies that are relevant not only to their area of work but studies of shiatsu overall.

Brizhik et al. (2019) published in the "Journal of Acupuncture and Meridian Studies" a paper, discussing their perspective on meridians under their understanding of the theoretical framework of theoretical physics called "quantum field theory". Besides a theoretical discussion, the authors draw some parallelism with the approach of meridians that Shizuto Masunaga includes in his approach of shiatsu.

Reviews

<u>Sato-Suzuki, Kagitani and Uchida (2019)</u> published in the "Autonomic Neuroscience: Basic and Clinical" a review in which they review the neural control of muscle blood flow and discuss the role of sensory stimulation on vasodilation. They provide an overview of one way in which physical therapy (mentioning shiatsu too) can increase blood flow in the tissues and bring positive effects to the body.

Mühlenpfordt et al. (2020) published in "Supportive Care in Cancer" a review of the evidence for touch-based modalities in whole medical systems (WMS) for the care of cancer patients. The authors focus only at the effect of external applications of WMS in order to be able to attribute the effect specifically to them, avoiding diffusing of the effect of other elements of the WMS. They also exclude touch-based approaches that they assess as not WMS. Yet they do not describe specific exclusion criteria related to the type of study. The results include four shiatsu-related publications, of which two are only abstract from congress presentations in Italy (de Falco, Barbuto and Iturrioz, 2009; Geremia et al., 2017) which unfortunately did not lead to full publication up to

now. The other two are from Japan (and not China as mistakenly identified in the review) (lida et al., 2000) and from the UK (Browne, Bush and Cabo, 2018). Even if the authors conclude that the review illustrates the benefits of the identified modalities, their discussion highlight how limited and weak the identified evidence is.

Begré (2019) published in "Therapeutische Umschau" an overview (in the German language) of shiatsu and of Emotional Freedom Technique, including their genesis, possible mechanisms of action, scientific evidence and method of application. The overview considers the modalities in the context of stress management in the field of "energy psychology".

Surveys

Strapps et al. (2019) report in "Advances in Integrative Medicine" the results of a workforce survey of shiatsu practitioners in Australia. The survey was conducted during the summer of 2016 using a 32-items online questionnaire (available as supplementary material with the report). 121 practitioners responded, mostly women, with median age 48 and the median number of years in practice 10. Most of them were self-employed, working less than 20 h per week. The most commonly reported symptoms with improvement in their practice were musculoskeletal pain, mental health/wellbeing, fatigue and gastrointestinal issues. Positive effects were observed on average after four treatments at weekly or biweekly intervals. Almost two-thirds of the practitioners reported regularly referring their clients to other health professionals.

Study Protocols

<u>Tsiormpatzis</u>, (2019b) published in "European Journal of Integrative Medicine" a protocol for a systematic review on safety and risks of shiatsu. The protocol begins with a comprehensive description of shiatsu and the safety issues around it. The

methods to be followed are described in detail following established PRISMA and Cochrane guidelines. According to the registration of the protocol in PROSPERO, the review is currently ongoing by four researchers.

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