



Letter to the Editor

The importance of rigour in the reporting of evidence for osteopathic care in Covid-19 papers



Clinical insight is often the source of inspiration for major discoveries and innovations in the medical field. Qualitative research, case studies or scoping reviews are recognised valuable sources of new emerging hypotheses in health sciences. Evidence informed practice relies on knowledge mobilisation and highlights the importance of a bidirectional dialogue between clinicians and researchers. Therefore, Marin et al.'s article¹ deserves merit for attempting to explore the literature for potential mechanisms supporting the potential usefulness of manual care for Covid-19 patients.

The public and healthcare professions have been inundated with information and research regarding the Covid-19 pandemic. The implications of false or misleading information have material implications to patients and clinicians struggling with the social, medical and economic effects, and the susceptibility to misinformation about Covid-19 is recognised as a major threat to public health worldwide.² While social media has been the main source of concern regarding misinformation about Covid-19, now more than ever researchers, scientists, peer-reviewers and journal editors need to ensure the highest standards of conducting, reporting and disseminating information regarding Covid-19.³ Marin et al.'s narrative review¹ contains many scientific errors and overinterpretation. Many claims are not supported by evidence and there are many misrepresentations and overstatements. This could lead to misleading messages, poor practice, public mistrust and harm.

The aim of this letter is to question overstatements in Marin et al.'s article¹ about Covid-19 focusing on three avoidable scientific errors: false similarities and misinterpretations, cherry picking information in narrative reviews, and lack of methodological rigour.

Perhaps the most problematic and concerning issue with Marin et al.'s paper is the injudicious use of evidence to support the claims made with regard to the effects and effectiveness of osteopathic manipulative treatment (OMT) and how these relate to potential therapeutic management of Covid-19. Not only are there many examples of 'big claims made with small data', there are numerous examples of 'big claims made with no data'. Some example of this include using clinical commentaries/unsystematic reviews,⁴ preclinical animal studies,⁵ and pilot studies⁶ to support factual and causative claims of the effects of OMT in relation to fibroblastic activity, immune processes and respiratory function respectively. Rigorous scientific debate (with the ultimate aims of providing safe and effective healthcare) involves being cautious not to overstate, overreach and misinterpret the strength of evidence in relation to causal claims,

and there are some excellent resources for researchers and clinicians to support them in this endeavour.⁷

Reviewing a topic requires critical judgement and providing a balanced view of all facts based on evidence. One common error is to rely too much on preconceived opinions about a topic. This can happen if authors are not aware of their natural vulnerability to confirmation bias. Marin et al.'s article does not highlight many controversies on the topic⁸ and seems to have cherry picked articles and information supporting their prior belief that OMT could benefit patients with Covid-19. In reviews, this is also known as selection bias, an important limitation that needs to be acknowledged.^{7,9}

The concerns raised above could have been avoided if a more rigorous methodological framework had been used. Marin et al. published a narrative review which may be a good educational tool in the classroom to initiate discussion and learning on a topic but less suitable as peer-reviewed output: most journals do not accept narrative reviews for publication due to their lack of systematic methods and overemphasis on authors' perspectives.⁹ We recognise that a systematic review was likely not to have been feasible at this stage due to the absence of primary data regarding osteopathy and Covid-19. However, a scoping review which addresses an exploratory research question to map key concepts and gaps in research would have been a more suitable design for an evidence review. The strengths of scoping review compared to narrative reviews is that they systematically search, select, assess quality of and synthesise existing knowledge,¹⁰ and may have avoided some erroneous claims and inaccurate inferences made by Marin et al.¹

Theorising about potential mechanisms, and formulating hypotheses are the foundations of scientific enquiry; however, such endeavours need to be situated in the limited current evidence and speculation should be made clear and uncertainties acknowledged. The osteopathic profession should follow the lead taken by the chiropractic profession⁸ in rejecting pseudoscientific claims of benefits of manual therapy care for preventing or reducing risks of severity from Covid-19.

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