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# Standardization of osteopathic manipulative treatment in telehealth settings to maximize patient outcomes and minimize adverse effects

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To the Editor:

We commend Kramer and De Asis [1] for their findings indicating the utilization of osteopathic manipulative treatment (OMT) via telemedicine for pediatric patients. Their results demonstrated significant decreases in pain for the majority of their patients, addressing their chief complaints [1]. These findings are incredibly insightful for further research and have the potential to help many patients in the future if replicated properly. However, Kramer and De Asis discovered that some patients in the study noted mild temporary worsening of pain that was slightly higher than the rate reported in the literature for in-person OMT visits, which could possibly be attributed to parental misapplication of technique or force [1].

In an effort to enhance the potential for OMT via telehealth and prevent the adverse outcomes noted by Kramer and De Asis, we have collected sources that could be utilized in future research to promote more widespread, standardized use of telehealth in osteopathic medicine. Research into standardization of OMT via telehealth can maximize the positive findings of Kramer and De Asis for all osteopathic physicians to implement while minimizing the potential risk factors of increased pain for patients [2]. While we are hopeful to see the end of the COVID-19 pandemic, telehealth is projected to remain a vital part of ensuring adequate healthcare for several patient populations [3]. Benefits of telehealth include a reduced

number of emergency room visits, preventing the spread of COVID-19, conservation of PPE, reduced costs to patients living in remote areas, and improving the management of outpatient visits [3].

Recent research of musculoskeletal, neurological, and cardiovascular physical exams in a telehealth setting lay a framework for future research into the telehealth osteopathic physical examination [4–7]. Specifically, some of these studies provide images demonstrating the proper techniques for patient movements and positions [5–7]. Research into the standardization of OMT with the use of images and other visual aides to demonstrate proper technique would help prevent misapplication of the osteopathic examination and treatment, thus preventing injuries. Standardized guidelines can also help address pertinent contraindications of OMT procedures. As these studies do not include osteopathic assessment tools, research conducted by leaders of osteopathic medicine into the standardization of OMT recommended during telehealth visits, such as promoting a standard of patient education for identifying a somatic dysfunction and performing subsequent treatment through telemedicine, would also be beneficial in creating reproducible results in large sample sizes while maintaining patient safety in fragile populations.

It is unlikely that patient care via telehealth technology will ever fully match the trained, palpatory skills of an osteopathic physician. However, based on the research of telehealth utilization, including the commendable article published by Kramer and De Asis [1], we call for further research, investigation, and standardization of OMT in a telehealth setting to provide training and safety protocols for physicians guiding patients through OMT. Research into OMT via telemedicine will investigate several components including the optimal instruction to parents or guardians to pediatric patients, instruction to chaperone for adult patients, and the investigation into self-administered OMT. Investigation into the various osteopathic modalities under these circumstances could open the door to reach additional patient populations and increase the utilization of osteopathic medicine while also minimizing risk of adverse effects.

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