Voice and Speech Review

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rvsr20

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**To cite this article:** Lydia Flock & Stephen King (2022): Vocal Manual Therapy: the Consent EQUATION (And Why You Should Care About It), Voice and Speech Review, DOI: 10.1080/23268263.2022.2112644

**To link to this article:** https://doi.org/10.1080/23268263.2022.2112644

Published online: 18 Aug 2022.

VOICE AND SPEECH REVIEW
https://doi.org/10.1080/23268263.2022.2112644

FORUM

# Vocal Manual Therapy: the Consent EQUATION (And Why You Should Care About It)

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## Setting the Scene

We recently had a client come to our multidisciplinary voice center for an initial assessment. This client told us they lost consciousness during their last vocal manual therapy session (with a vocal osteopath from a different clinic) due to the pain they were experiencing. Hardly a good advertisement for vocal manual therapy, right? We were surprised at this person's courage to seek treatment again elsewhere after what was understandably an unsettling experience.

Imagine you are this vocal manual therapy client. You have sought treatment for a challenge you are experiencing with your voice. If your vocal manual therapist has their hands around your neck, and you experience considerable pain and then lose consciousness, how might you experience that? Moreover, how might this type of interaction influence your feelings of safety, or trust in vocal manual therapy as a therapeutic practice?

Any interaction that is purportedly therapeutic, but so painful that a client loses consciousness, is likely not going to have a therapeutic outcome. It could even be that such an interaction is potentially physically and psychologically harmful. As practitioners, we have a responsibility to ensure the safety of our clients, and so we must question how the session was allowed to reach this point. Was the vocal manual therapist not cognizant of the pain the client was experiencing? Or did the client feel unable to (or were they not given the opportunity to) express their feelings of pain, discomfort, or concern?

This makes us wonder about the degree to which the above interaction was consented to or contracted. In vocal manual therapy, consent is a dynamic process in which the client gives feedback regarding whether they approve, refuse, or would like to change the therapists' technique or method of touch. Similarly, contracting the interaction ensures two-way communication between the therapist and client to establish what the therapy will involve and, from the clients' perspective, whether this feels acceptable and useful.

This forum article discusses consenting and contracting within vocal manual therapy in more detail. It explores how and why practitioners should prioritize consenting and contracting when working within a manual therapy context. We have included some recommendations and suggestions, based on our own experience, for how vocal manual therapists can integrate consenting and contracting within their current practice—including our EQUATION framework for consenting and contracting in vocal manual therapy. This is with the aim of addressing the sadly all too common stories, like the one described

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above, of clients' having painful, and potentially harmful, experiences of vocal manual therapy.

## An Introduction to Manual Therapy

The healing power of physical touch is a theme that runs throughout human history. The earliest records of the use of human touch for healing (Calvert 2002) reference the rubbing of vinegar into the skin, with hieroglyphs dating back to 4000 BCE depicting high priestesses of Isis using physical touch for healing (Hill 2010). Hippocrates is also said to have treated illness and ailments using physical touch (Field 2002). Over time, these early uses of physical touch have proliferated and developed into the different forms of "hands-on" therapy that we recognize today, including massage, physiotherapy, osteopathy, and manual therapy.

Manual therapy is an umbrella term capturing the use of the hands to facilitate healing (Lederman 2005). Manual therapy is usually specialized, requiring specific training and formal qualifications, and comprises a range of techniques, including soft-tissue work, myofascial release, joint manipulation, and dry needling (Lederman 2005). For the voice specifically, the first to reference to using manual therapy techniques to elicit voice change was Aronson (1990). He talked about deep manipulation of the larynx and firmly manipulating its surrounding tissues. Since discussed by Aronson (1990), vocal manual therapy has become increasingly popular among professional and nonprofessional voice users. It has a growing evidence base, with studies demonstrating its effectiveness in reducing sore throat and neck pain (Silverio et al. 2015), treating muscle tension dysphonia symptoms (Craig et al. 2015; DePietro et al. 2018; Dunphy 2013; Roy et al. 2009; Roy et al. 2019; Van Lierde et al. 2004), maintaining vocal wellbeing (Leppänen et al. 2009), and in aiding voice rehabilitation (Ali and Scherer 2019).

## The "No-Pain, No-Gain" Problem

We encourage you to think back to the example outlined at the beginning of this article. How has a hands-on therapy intended as healing sadly become (sometimes) associated with pain and discomfort? Although there is no one answer, it is possible that our clients' experience reflects the "no pain, no gain" narrative that flows through some sections of our discipline. Indeed, we only need look at online media platforms, such as TikTok and YouTube, and we will see exaggerated demonstrations of big adjustments, massage guns, straps, scrapers, hammers and so on. A study on acute nonspecific back pain content on TikTok found that videos featuring the #backpain hashtag do not generally align with the evidence base and current best practice guidelines (Zheluk, Anderson, and Dineen-Griffin 2022). Furthermore, qualitative studies of client experience (Carlesso et al. 2011; Rajendran et al. 2012) find that participants often sadly expect manual therapies to be painful, and Carnes et al. (2010) propose that adverse events—i.e. events that cause pain or discomfort—sadly occur in close to half of all manual therapy cases. While it is important to note that these studies are not focusing on vocal manual therapy specifically, it is possible that they reflect a wider philosophy within our field that pain is inevitable and sometimes necessary within manual therapy.

We believe that this philosophy is outdated, and that no client should expect to experience pain because of manual therapy. Similarly, we fundamentally disagree with vocal manual therapists who believe it is acceptable or necessary to put clients in pain. As described in our earlier example, we view the experience of pain in vocal manual therapy as an issue of consenting and contracting. It is our view that clients must be given the opportunity to consent to and contract every part of the vocal manual therapy interaction. This means they should be given the chance to say how they want the therapist to approach the session and have the opportunity state their preference regarding the type, intensity, and location of touch. Critically, this understanding evolves dynamically across the session and the therapist should never make assumptions about the clients' therapeutic experience.

The remainder of this forum article outlines our approach to vocal manual therapy. It highlights personal and professional considerations when consenting and contracting in vocal manual therapy. The final section includes a hypothetical clinical example of consenting and contracting within vocal manual therapy practice using our EQUATION framework.

## Adopt a Person-Centered Approach

Vocal manual therapists wishing to integrate consenting and contracting within their practice must first adopt a person-centered (and of course, evidence-based) approach. A person-centered approach prioritizes the uniqueness of a client's experience and encourages therapist-client collaboration and communication. According to Rogers (1961), being person-centered involves three core conditions: unconditional positive regard, empathy, and congruence. It might sound obvious, but embracing and working with the client in a personalized way will likely make it easier to establish their goals. It will also facilitate the two-way feedback that is essential for effective consenting and contracting. Without this person-centered approach to consenting and contracting, we suggest that therapists might find it difficult to elicit client feedback and thereby know whether a particular technique is helpful, or even harmful.

Adopting a person-centered approach starts with trying to understand the client's goals and experiences. Using this information, the therapist should then offer a personalized introduction to why vocal manual therapy might be appropriate, linking back to the client's goal for treatment and the current evidence base. This should be a collaborative discussion in which the therapist and client gently explore the nuance of what is going on for them and how manual therapy might help.

## More Than Just Physical Touch

Lederman (2005) presents a comprehensive framework for understanding the multidimensional effects of manual therapy. He proposes that mechanisms of physical touch intersect with psychological and neurological processes, so that "hands-on" work is more than the manipulation of skin or tissue. For example, we know that somatosensory[1] experiences are psychologically and neurologically encoded in way that informs our future experiences and expectations. This means that our biopsychosocial experience of physical touch at one point in time might influence how we experience future instances of

similar physical touch. Consider the client we described at the beginning of this forum piece—what psychological or neurological representations might have been associated with their previous painful experience of vocal manual therapy?

Thinking of examples from our own practice, there are times when we might choose intra-oral techniques (using a finger inside the client's mouth), with the aim of affecting the medial and lateral pterygoid muscles. We might choose to apply relatively deep pressure to the tissues surrounding the larynx (e.g. sternocleidomastoid muscles). We might choose to anteriorly and/or laterally stretch their tongue. The decision to use these techniques is based on our understanding of vocal anatomy, the current available evidence combined with our professional experience, and is well-intended. At the same time, we must acknowledge that these techniques put the client in a vulnerable position and could be potentially psychologically or sociologically activating. Unless the client has consented to and contracted these techniques with us, how do we know that they will feel safe? And how do we know that the techniques will have the intended healing effect?

We know that it is beyond the scope of vocal manual therapists to directly address the psychological or sociological impacts of our work. We should, however, be mindful that our practice extends beyond physical touch and should consider psychological and sociological experiences when thinking about consenting and contracting in vocal manual therapy.

## Be Mindful of Power Dynamics

It is critical that vocal manual therapists consider the context we are working in and associated power imbalances. Healthcare interactions, such as vocal manual therapy, are inherently hierarchical: a less powerful help-seeker (client) approaches, and seeks helps from, a more powerful help-provider (vocal manual therapist). This power imbalance is visible in the techniques we use, where we might ask clients to lie down and put themselves in a position where they might feel vulnerable. It is also visible in our therapeutic discourse, which often focuses on what is "wrong" with the client rather than their strengths or sources of resilience. Negative comments about a client's body or experience (for example, a manual therapist making an unsolicited comment about perceived neck tension) may reinforce power dynamics and add to the client's negative feelings about their experience (Ali and Scherer 2019). Even just warm and friendly language can help with this (Vranceanu et al. 2012).

It is also important to consider the broader sociocultural context and its intersections with power and marginalization. In our multidisciplinary voice center, we work predominantly with professional voice users, many of whom work in the theatre and film industries. Vocal manual therapists working with this client group must recognize that sadly many of the people we see will have likely encountered harassment, abuse, marginalization, and discrimination (e.g. Harvie 2019). They are also likely to have experienced stigma, shame, guilt, and judgment regarding seeking help (Natalie and Cooper 2018). We therefore have a personal and professional responsibility to consider these sources of power imbalance, how they intersect with our role as vocal manual therapists, and how they can be addressed to support our clients in feeling more empowered during the therapeutic interaction.

Consenting and contracting is a fundamental step in addressing this power imbalance. By working collaboratively with the client's goals and preferences, we can start to position them as the focus of our practice (see "Adopt a person-centered approach") and thereby draw on their lived/expert experience just as much as, if not more than, our professional/assumed experience.

## A Working Example Using the EQUATION Framework

Having outlined some personal and professional considerations for consenting and contracting in vocal manual therapy, we are now going to review a short case example. The example is hypothetical but draws on themes and presenting difficulties that we frequently encounter within our voice clinic. The purpose of this is to highlight some of the ways consenting and contracting can be integrated within practice. It is by no means a perfect illustration of how consenting and contracting can be helpful, nor is it the only way to do this work. Here is the case:

> MIA (pseudonym, she/her) is a 45-year-old cisgender female. She has been working professionally as a singer for approximately 20 years. In the last three months, MIA has started to experience considerable jaw pain. MIA explains that she finds it difficult to use her jaw, saying it can be too painful to open her mouth when trying to sing or eat. This jaw pain has made it difficult for MIA to fulfill work commitments, and she has had to cancel an upcoming singing performance. She says she is feeling "quite low" and confused as to why this is happening to her.
>
> MIA self-refers to our voice clinic for an initial assessment (with manual therapy) appointment. She has not had vocal manual therapy before but, as a professional singer, is used to employing strategies to look after her voice. MIA says that she would like her jaw to feel more relaxed and less painful, which she identifies as a goal for manual therapy.
>
> In consultation and assessment (before any manual therapy has been introduced), MIA explains that she is feeling nervous about participating in vocal manual therapy. She says that vocal manual therapy has become her last resort and that she "really wants it to help." If it does not help, MIA is unsure what other treatment options might be available to her. MIA describes herself as a "quiet person" and says that she sometimes feels uncomfortable when asked to talk about her physical or mental health. Throughout the consultation, MIA holds her jaw with her right-hand. When asked about this, she explains that holding the jaw when talking helps soothe the jaw pain.

We have developed a framework for consenting and contracting in vocal manual therapy, which we are now going to apply to the above case. The framework—EQUATION—is broken down into eight stages: Explain, Qualify, Understand, Ask, Think, Illustrate, Options, and Name. This framework is designed to promote therapist and client reflexivity and to ensure that consenting and contracting is established and updated throughout the therapeutic process.

### *The EQUATION Framework for Consenting and Contracting*

(1) EXPLAIN: Introduction to anatomy and relevant research—Which area of the body do you propose working in?

(2) QUALIFY: Explain how/why this is relevant to the client—Why might it be helpful? What has the client said or demonstrated that has prompted you to make this choice?
(3) UNDERSTAND: Check understanding—How has the client understood your rationale?
(4) ASK: Give opportunity for questions—Does the client have any questions about what you have said?
(5) THINK: Reflect on what you know—What is the appropriateness and usefulness of the selected technique, given what you know about the client and their story?
(6) INTO SPACE: Place hands onto client—Does this touch prompt additional reflections for you or the client? How does their body respond to the touch?
(7) OPTIONS: Offer (and, if necessary, demonstrate) alternative techniques—Would the client prefer a different technique?
(8) NAME: Name a plan for saying no—If the selected technique is associated with distress or discomfort, or the client feels it is not useful or helpful, how can they let you know? Agree a signal for you to stop the treatment if they feel uncomfortable verbalizing this. Contract this before you apply any manual therapy techniques.

## *Applying the EQUATION Framework in Example Case: MIA*

(1) EXPLAIN—Introduction to anatomy

THERAPIST: "There is a muscle called the digastric, which is like two shoelaces. The shoelaces run from the base of your chin and loop under the hyoid bone (which is part of the larynx). They then run up either side to just underneath the ear [therapist makes gesture to region on own body]. The digastric has two bellies – an anterior (front belly) or posterior (back belly). When the anterior belly contracts, the jaw opens. [therapist demonstrates on own body]"

(2) QUALIFY—Explain how/why this is relevant to MIA and introduce technique

THERAPIST: "You have told me that it is painful or challenging for you to open your jaw. Based on this, and what we know about the digastric muscle, I feel like this area could be worth exploring together. Would you be happy to explore this area and see if we can find a bit more ease when opening the jaw?"

MIA: "Yes."

THERAPIST: "Okay, how we would that is: I will take my hand like this [gestures to hand position], and then I am going to place my hand on one side of the jaw, and my thumb on the other side of the jaw. Then I will bring my hand and thumb together, putting the tissue on a stretch. [therapist signals on own body what this would look like]"

### (3) UNDERSTAND—Check MIA's understanding of rationale

THERAPIST: "Does my explanation of the digastric muscle make sense? Does what we are going to do, and why it is relevant, make sense?"

MIA: "Yes, that all makes sense."

### (4) ASK—Give MIA opportunity to ask questions or give feedback

THERAPIST: "I want you to know that your feedback at this stage and throughout the treatment is important. I want to work with you to find what is best for you. Although I am expert in manual therapy, you are expert in your body and your experience. I know you said before that it can be hard to talk about these things, and so I want to make sure that we're working together in a way that makes sure we feel understood, safe, and heard. Is that okay? Is there anything you'd like to ask me or check about what we're doing?".

MIA: "No, there's nothing I need to check at this stage."

### (5) THINK—Reflect on what you know about MIA

We know that MIA is placing much hope in this treatment being effective. Might we speak to that at all? We also know that MIA has been holding her jaw when talking. Would it be worth asking her more about this, in case the point of contact overlaps with any of areas we are going to be working in? We also know that MIA sometimes struggles to talk about her health and wellbeing. How can we build our intervention to ensure MIA feels empowered to speak about what is potentially difficult and provide crucial feedback?

### (6) INTO SPACE—Place hands onto client

THERAPIST: "So now that we've talked about the digastric, explained what we are going to do, and chatted through our questions, we are going to start the hands-on work. In a moment, I am going to gently place my hand at the base of the mandible (lower jaw). Are you happy for me to do that now?"

MIA: "Yes."

[therapist places hand on]

THERAPIST: "Does that feel safe?"

MIA: "Yes."

It is important for the vocal manual therapist to be in-tune with the client's initial reaction at this stage. The therapist should be aware of any changes that might occur with the client's eyes, breath, body language, or affect. The therapist should, of course, be mindful of whether any similar/different changes occur for them personally during this stage.

### (7) OPTIONS—Offer alternative techniques

If the client does not consent to any of the stages outlined above, the therapist should provide an alternative option and go through each of the stages again. This should be repeated until informed consent is established. It is important for therapists to be aware that a client's preference for an alternative option may not always be voiced, and thus reflexivity is required throughout.

(8) NAME—Name a plan for MIA to say no

THERAPIST: "MIA, while now it feels like our plan is acceptable and meaningful, if at any point that feeling changes, I want you to feel comfortable communicating that. When we start, there might be times when you would prefer me to do something differently. I will ask you throughout whether the technique feels safe and useful, but we should also agree how you are going to tell me if things start to feel less comfortable.

"If at any point you feel unsafe or would like to stop or pause, I give you full autonomy to tell me to stop, hold up a stop sign with your hand [therapist demonstrates stop sign signal] if you do not feel comfortable verbalizing, or to remove my hands yourself. Does that sound okay to you?"

MIA: "Yes, I'll tell you to stop if I need to. Or I'll use the stop signal."

Once—and only once—the framework stages have been met should the technique be applied. We recommend that the vocal manual therapist use the framework each time a new technique is implemented. In addition to the framework, we suggest that consent and contracting can be agreed dynamically during the vocal manual therapy treatment via the questions "Does this feel safe?" and "Does this feel useful?" and other similar questions.

## Conclusion

This forum piece has discussed consenting and contracting in vocal manual therapy. It has described some key considerations for therapists using vocal manual therapy techniques. It has outlined our framework—EQUATION—for consenting and contracting within vocal manual therapy practice. As emphasized throughout, when we bring consenting and contracting into the therapy room, we can create more of a safe space for vocal manual therapy clients to be heard. This is the eternal paradox of working in vocal health: people struggling with their voice who seek manual therapy need to be heard, listened to, and understood. It is our hope that the suggestions made here can help this to happen.

## Note

1. Merriam-Webster defines this as "of, relating to, or being sensory activity having its origin elsewhere than in the special sense organs (such as eyes and ears) and conveying information about the state of the body proper and its immediate environment."

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Notes on contributors

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***Stephen King*** owns the multidisciplinary Voice Care Centre (www.voicecarecentre.co.uk) in London's West End. A published researcher and passionate about professional development, Stephen has acquired a breadth of knowledge from his qualifications in advanced clinical massage, medical acupuncture, manual maxillofacial therapy, spinal manipulation, anatomy (including human dissection) and voice pedagogy and is now continuing his studies into counseling and psychotherapy. As an educator, Stephen co-founded the not-for-profit Vocal Health Education (www.vocalhealth.co.uk), seeking to educate every single voice user around the world on the subject of vocal health with the pioneering; Vocal Health First Aid (www.vocalhealth.co.uk/vocal-health-first-aid).

## References


Ali, Dehqan, and Ronald C. Scherer. 2019. "Positive Effects of Manual Circumlaryngeal Therapy in the Treatment of Muscle Tension Dysphonia (MTD): Long Term Treatment Outcomes." *Journal of Voice* 33 (6): 866–871. doi:10.1016/j.jvoice.2018.07.010.

Aronson, Arnold. 1990. *Clinical Voice Disorders*. New York: Thieme.

Calvert, Robert Noah. 2002. *The History of Massage: An Illustrated Survey from around the World*. Vermont: Inner Traditions/Bear & Co.

Carlesso, Lisa C., John Cairney, Lisa Dolovich, and Jennifer Hoogenes. 2011. "Defining Adverse Events in Manual Therapy: An Exploratory Qualitative Analysis of the Patient Perspective." *Manual Therapy* 16 (5): 440–446. doi:10.1016/j.math.2011.02.001.

Carnes, Dawn, Thomas S. Mars, Brenda Mullinger, Robert Froud, and Martin Underwood. 2010. "Adverse Events and Manual Therapy: A Systematic Review." *Manual Therapy* 15 (4): 355–363. doi:10.1016/j.math.2009.12.006.

Craig, Jennifer, Carey Tomlinson, Kristin Stevens, Kiran Kotagal, Judith Fornadley, Barbara Jacobson, C. Gaelyn Garrett, and David O. Francis. 2015. "Combining Voice Therapy and Physical Therapy: A Novel Approach to Treating Muscle Tension Dysphonia." *Journal of Communication Disorders* 58: 169–178. doi:10.1016/j.jcomdis.2015.05.001.

DePietro, Joseph D., Samuel Rubin, Daniel J. Stein, Hadas Golan, and J. Pieter Noordzij. 2018. "Laryngeal Manipulation for Dysphagia with Muscle Tension Dysphonia." *Dysphagia* 33 (4): 468–473. doi:10.1007/s00455-018-9875-x.

Dunphy, Christopher. 2013. "Critical Review: The Hands on Approach: Perilaryngeal ManualTherapies in the Treatment of Muscle Tension Dysphonia." University of Western Ontario.

Field, Tiffany. 2002. "Massage Therapy." *Medical Clinics* 86 (1): 163–171. doi:10.1016/s0025-7125(03)00078-6.

Harvie, Jen. 2019. "The Power of Abuse." In *The Routledge Companion to Theatre and Politics*, edited by By Peter Eckersall and Helena Grehan, 163–168. Abingdon: Routledge.

Hill, Jenny. 2010. "Massage in Ancient Egypt." Ancient Egypt Online. https://ancientegyptonline.co.uk/massage

Lederman, Eyal. 2005. *The Science & Practice of Manual Therapy*. London: Elsevier Health Sciences.

Leppänen, Kirsti, Anne-Maria Laukkanen, Irma Ilomäki, and Erkki Vilkman. 2009. "A Comparison of the Effects of Voice Massage™ and Voice Hygiene Lecture on self-reported Vocal well-being and Acoustic and Perceptual Speech Parameters in Female Teachers." *Folia Phoniatrica Et Logopaedica* 61 (4): 227–238. doi:10.1159/000228000.

Natalie, Bradshaw, and Amy L. Cooper. 2018. "Medical Privacy and the Professional Singer: Injury Stigma, Disclosure, and Professional Ramifications on Broadway." *Journal of Singing* 74 (5): 513–520.

Rajendran, Dévan, Philip Bright, Steven Bettles, Dawn Carnes, and Brenda Mullinger. 2012. "What Puts the Adverse in 'Adverse Events'? Patients' Perceptions of post-treatment Experiences in osteopathy–a Qualitative Study Using Focus Groups." *Manual Therapy* 17 (4): 305–311. doi:10.1016/j.math.2012.02.011.

Rogers, Carl R. 1961. *On Becoming A Person: A Therapist's View of Psychotherapy*. London: Constable.

Roy, Nelson, Maria Dietrich, Michael Blomgren, Amanda Heller, Daniel R. Houtz, and James Lee. 2019. "Exploring the Neural Bases of Primary Muscle Tension Dysphonia: A Case Study Using Functional Magnetic Resonance Imaging." *Journal of Voice* 33 (2): 183–194. doi:10.1016/j.jvoice.2017.11.009.

Roy, Nelson, Shawn L. Nissen, Christopher Dromey, and Shimon Sapir. 2009. "Articulatory Changes in Muscle Tension Dysphonia: Evidence of Vowel Space Expansion following Manual Circumlaryngeal Therapy." *Journal of Communication Disorders* 42 (2): 124–135. doi:10.1016/j.jcomdis.2008.10.001.

Silverio, Kelly Cristina Alves, Alcione Ghedini Brasolotto, Larissa Thaís Donalonso Siqueira, Christiano Giácomo Carneiro, Ana Paula Fukushiro, and Rinaldo Roberto de Jesus Guirro. 2015. "Effect of Application of Transcutaneous Electrical Nerve Stimulation and Laryngeal Manual Therapy in Dysphonic Women: Clinical Trial." *Journal of Voice* 29 (2): 200–208. doi:10.1016/j.jvoice.2014.06.003.

Van Lierde, Kristiane M, Sophia De Ley, Gregory Clement, Marc De Bodt, and Paul Van Cauwenberge. 2004. "Outcome of Laryngeal Manual Therapy in Four Dutch Adults with Persistent moderate-to-severe Vocal Hyperfunction: A Pilot Study." *Journal of Voice* 18 (4): 467–474. doi:10.1016/j.jvoice.2004.02.003.

Vranceanu, Ana-Maria, Megan Elbon, Margaritha Adams, and David Ring. 2012. "The Emotive Impact of Medical Language." *Hand* 7 (3): 293–296. doi:10.1007/s11552-012-9419-z.

Zheluk, Andrey, Judith Anderson, and Sarah Dineen-Griffin. 2022. "Analysis of Acute Non- Specific Back Pain Content on TikTok: An Exploratory Study." *Cureus* 14 (1): 1–16.