

Chiropractic and the Immune System: Disentangling context and looking at the Big Picture

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Introduction

As I watch from the sidelines concerning the dialogues within the chiropractic profession during this tragic COVID-19 pandemic, I have witnessed an underlying war between factions of the chiropractic profession often not noticed by the chiropractic practitioners at large. To properly disentangle what is going on it is important to understand the different players, their perceptions, and how this affects the context of the discussions as it pertains to chiropractic and immune function.

While at times there are 'bad actors' with nefarious purpose often times this designation functions as a means to create a sense of duality and demonise someone whom we perceive as an adversary. For the purpose of disentangling and unraveling this complex chiropractic tapestry, please attempt to look at it the current situation in a non-dualistic manner with all the players coming from a place of doing what they think is right.

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The players

One group of players has been led by those at the *Journal of Chiropractic and Manipulative Therapies* (JCMT) (1, 2) and the *World Federation of Chiropractic* (WFC). (3) In some way they seem to be using their concern about how a group of chiropractors portray their relationship to immunity in the light of the COVID-19 crisis to foist their position on non-musculoskeletal care and immune function and chiropractic care. Their position appears to be deep concern that the chiropractic profession responsibly represents the evidence based literature regarding chiropractic care and immune function. They also seem to believe a large faction of the chiropractic profession is using claims of chiropractic care helping immune function as a means to seek financial gain at the expense of the trusting and panicked public during a pandemic.

Therefore as this group feels compelled and responsible to call out these '*irresponsible claims by the chiropractic profession on chiropractic's care affect on immune function*' they are doing so for the benefit of public health, maintaining the good character of the chiropractic profession in the biomedical community of allied health practitioners, and to dispel any myths about the evidence based literature about chiropractic care and immune function. Their behaviour is based on their understanding of the literature, their clinical experiences, and how they perceive the future of the chiropractic profession and its relationship to the healthcare community.

Interestingly, the *Journal of Manipulative and Physiological Therapeutics* (JMPT) (4) choose to take a different path, which focused on educating healthcare professions about chiropractic's response to COVID-19 and not taking a stance against chiropractic care and immune function.

Other players in the arena include the *International Chiropractic Association* (ICA) (5) and the journal *Annals of Vertebral Subluxation Research* (AVSR). (6) In general these groups see an attempt by a self-designated group of chiropractic evidence based academic and research community to eviscerate the depth and character of what makes chiropractic care unique and profound. The ICA/AVSR are concerned for the future of chiropractic and the utilisation of the highly reductionistic use of randomised controlled trials as a means to define the depth and breath of what chiropractic care might represent. Since chiropractic research has very limited funds and its 'hands on' nature makes its study by randomised controlled trials problematic (7) they are attempting to step back and look at the big picture regarding what published information we have now and what that might mean for chiropractic care and its possible affect on immune function.

If we entertain the possibility that both of these players, JCMT/WFC and ICA/AVSR, are coming from the place of caring for the future of chiropractic and humanity, then we are left with trying to figure out what is really going on. Is it possible to mediate some mutual inclusive option to any relationship between chiropractic care and immune function?

Chiropractors are not uncaring profiteers

I have been in chiropractic clinical practice for over 40 years, been involved in the academic community during that time, began publishing in research journals in 1983, and have been actively attending every Association of Chiropractic College (ACC)/Research Agenda of Chiropractic (RAC) Conferences since 2000. In clinical circles with my colleagues I am commonly ridiculed that all I am only interested in is research, evidence based literature, and challenging my colleagues on their claims. In the research circles I am sometimes looked at askance as someone who doesn't understand research and has a clinical, and particularly a Sacro Occipital Technique (SOT), bias. Therefore I seem to be challenged most of the time, though I tend to find this gives me a larger worldview.

Ultimately my perceptions are based on what I have experienced over these 40 years. In the late 1970s when I was in college and starting a practice there was a prevalence of marketing companies finding ways of helping chiropractic businesses that used less than ethical practices as a means to get patients to feel a need for chiropractic care. This could be through trickery and fear as well as misrepresenting evidence based literature to support this behaviour. Most of the chiropractors I knew in the late 1970s and early 1980s did not understand research methods so they were understandably gullible and suggestible.

Over the past few decades I have seen less and less of that disturbing practice. My colleagues and the students I teach all seem to be very caring and patient-centred practitioners. Therefore given my experience and that I have been exposed to over 2-3 thousand chiropractors over just the last couple years (many more over the decades) I think suggesting that large factions of the chiropractic profession are built with uncaring profiteers is disingenuous.

Chiropractic care and immune function

With this backdrop I would like to share my perceptions on chiropractic care and immune function. During this pandemic to say chiropractic care will prevent and/or treat COVID-19 is irresponsible but to say chiropractic care could not have a positive effect on immune function in a subset of patients is far too limiting. Ultimately we don't have enough information to throw out a subset of patients who notice significant improved immune function with their chiropractic care.

We also should consider how immune function is improved with decreased pain/stress and increased ability to function, all something chiropractic care might offer.

One important differentiation is the need to understand the difference between a chiropractic care encounter and the spinal adjustment. For most chiropractors a chiropractic encounter does not begin and end with a spinal adjustment. Instead an encounter involves ergonomic and life style advice, rehabilitative exercises, soft tissue therapeutics, and a host of other complementary adjunctive therapies. To define chiropractic as only spinal manipulative therapy (SMT) and then seek to find very isolated changes in immune function relating to this specific interaction funnels the wide expanse of chiropractic care into a virtual pinhole. To funnel chiropractic in this manner, to demonstrate how there is not adequate research to support SMT as a means to improve immune function, is myopic.

I do not wish to look at chiropractic as only a SMT encounter but that its care treats the whole patient, which is more consistent with the thousands of chiropractors I have met over the past 4 decades. I see immune function to be similar to what we see with non-musculoskeletal effects and chiropractic. (8, 9, 10) Whereas I don't necessarily see a clear direct relationship, I have still seen a percentage of patients that self-prescribe chiropractic care for their non-musculoskeletal issues and/or immune function. At this time I have no idea how to figure out who might or might not benefit from the care. Also the percentage of patients I see who seem to have a positive relationship between chiropractic care and immune function (10-15%) isn't high enough for me to make any generalisations.

A reasonable position

What I do think is reasonable is that we may have some clear road maps regarding chiropractic care and immune function, but they are best looked at from a distance. Simply put, we know that stress and pain, both have an affect on immune function. (11, 12, 13, 14) There are many interventions that might help with stress and pain, which vary from active interventions such as medications, exercise or meditation or more passive interventions such as massage, acupuncture, and chiropractic. Chiropractic is one of the options that can be used to conservatively treat increased stress and pain. (15, 16, 17, 18, 19) So at the very least for a subset of patients that find a reduction in stress and/or pain improves their immune function, chiropractic care could be an effective low risk conservative option. Future studies with this subset of patients might elucidate a salubrious relationship between chiropractic care and immunity.

So I think a balance needs to be found between:

- i Irresponsible claims about chiropractic and immune function that are used for practice management purposes and are not patient-centred; and
- ii Discussions about subsets of patients who find a relationship between their chiropractic care and immune function or how those patients seeking relief from pain, disability, and increased stress that get relief from a chiropractic care encounter may have a positive immune response to their care.

Until we can do all the needed research to investigate the depth and breath of what chiropractic can offer a combination of responsible and reasonable claims along with effective patient-centred care that are conservative yet expansive in scope would seem the best option. This is particularly an important consideration when watching and waiting is not something a patient prefers and other interventions might offer greater risk.

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