

Commentary

The Good, the Bad and the Ugly: musings, observations and reflections after a half-century in chiropractic education

Michael R. Wiles, DC, EdD, FRCC¹

The author reflects on experiences over a half-century of engagement in chiropractic education. Both positive and negative aspects of the profession's evolution are highlighted, including such areas as clinical education, diversity within chiropractic education, the importance of research, and the importance of gaining public trust through evidence-based practices. The paper concludes with a repeated call to action for the profession to be a major player in the solution to the global challenge of low back pain, which can be supported by integration with the healthcare-system-at-large as a trusted and valued team member.

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KEY WORDS: back pain, chiropractic, education, practice, research

Le bon, le mauvais et le terrible: réflexions, observations et remarques après un demi-siècle dans la formation en chiropratique

L'auteur réfléchit sur ses expériences accumulées après avoir participé pendant plus d'un demi-siècle à la formation en chiropratique. Les aspects positifs et négatifs de l'évolution de la profession sont mis en évidence, incluant des domaines comme l'enseignement clinique, la diversité au sein de la formation en chiropratique, l'importance de la recherche, et l'importance de gagner la confiance du public grâce à des pratiques fondées sur des données probantes. L'article se conclut par un appel répété à l'action pour faire de la profession un acteur majeur dans la solution au défi mondial de la lombalgie, notamment en intégrant la chiropratique au sein du système de soins de santé en général en tant que membre d'équipe fiable et valorisé.

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MOTS CLÉS : mal de dos, chiropratique, formation, pratique, recherche

¹ Doctor of Chiropractic Program, University of Pittsburgh, Pittsburgh PA 15219

Correspondence: Michael Wiles, 3396 Fifth Avenue, Office 412, Pittsburgh, PA 15213
E-mail: mrw157@pitt.edu
Tel: (412) 624-2586

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Background

I had several alternative titles for this paper, including “the observations and musings of an old chiropractic educator”, and perhaps, more constructively, “Some thoughts, concerns and aspirations for my beloved profession”. On May 1, 2026, I will have had the distinct honor of engagement with the chiropractic profession and chiropractic education for fifty years. Counting my education at the Canadian Memorial Chiropractic College, it adds four more years. I have been a faculty member at seven chiropractic programs and a dean at three of them. I’ve seen a lot of history. It has been said that old chiropractors don’t die, they just crack up. Well, before I crack up, I want to record these reflections in the hope that it might just make a bit of a difference in the future. I write this from the vantage point of a practitioner, and educator, a Dean, and a consultant to a profession that has been a large part of the fabric of my life. It is written with the hope that the story may inspire Doctors of Chiropractic to become change agents with individual and collective participation.

The Good

When I graduated, there were 11 chiropractic colleges in North America, and only one outside of North America, and none of these were associated with a university. Today, there are 54 chiropractic programs in 19 countries around the world, almost all of them associated in some way with a university (that is, affiliated with an existing university, or transformed from a single purpose institution into a multi-program university). These programs meet the high standards that are prescribed by recognized accreditation councils covering world-wide chiropractic education. In my program at CMCC, not unlike the general state of chiropractic education at the time, we had very few faculty members with advanced degrees (in fact, pathology was taught by a medical technician with a bachelor’s degree), and today we see it has generally become *de rigueur* to have not just one, but several advanced degrees to teach at chiropractic educational institutions. A brief look at the faculty complement at almost any DC program will reveal many PhDs, EdDs, and DCs with additional advanced degrees. As the old saying went, “we’ve come a long way, baby”.

Postgraduate education has also seen a very respectable level of growth and evolution, from the first residencies in radiology in the 1960s to the wide array of opportunities

today for graduates in residencies (many sponsored by DC programs, but also a very well-respected and growing number of residencies within the VA healthcare system) and post-doctoral fellowships (such as at Yale University and the Medical College of Wisconsin).

Fifty years ago, a large part of clinical education experience was gained treating fellow students and their family members, with students “checking off” new patients and office visits until they reached the magic numbers (for me it was 25 new patients and 275 visits). Today, we increasingly see early and longitudinal clinical experience in a wide variety of healthcare settings and an emphasis on community-based clinical training.¹ And, while the profession is still divided on its primary purpose or mission (more of that in the “Ugly” section), there appears to be an increasing tendency to emphasize the role of the chiropractor as a spine practitioner, that is, focusing on spine-related conditions and not trying to replace the primary care physician. Schneider *et al.*² commented that, “although the chiropractic profession may debate internally about its professional identity, the chiropractic identity seems to have already been established by society, practice, legislation, and education as a profession of healthcare providers whose area of expertise is spine care”.

Early chiropractic curricula seemed to have grown by accretion from the earliest renditions at Palmer College without any major reforms for decades. Today, I see trends towards evidence-based educational principles, with integrated curricula, team-based learning, and recognition of the importance of transformative pedagogy. We can all be very proud of the evolution of chiropractic education over the past 50 years.

The Bad

My tuition for chiropractic college in 1972 was \$750 per year (and this was considered outrageous because the typical tuition for undergraduate education was \$550 per year). The value of \$1 in 1972 has been estimated to be equivalent to \$7.60 in 2025³, which means my tuition would be equivalent to \$5700 per year today. I can hear the gasps when we consider that the typical annual chiropractic tuition in the US is currently around \$40,000 (as a review of this publicly available information on program websites reveals). Something went terribly wrong with the cost of education (not just chiropractic education),

notwithstanding a correction factor for the improvements in facilities and the quality of the education.

Whether these educational costs or other factors are at play, chiropractic education also suffers from a considerable lack of diversity in its students and faculty. For example, in 2018 the US population consisted of 14.6% African Americans⁴, and in 2025, the NBCE reported that an estimated 3.5% of chiropractors were African American⁵. Similar percentage reductions are seen with other population groups such as Hispanic Americans (18.0% of the population and 6.0% of chiropractors).⁵ Incidentally a similar lack of diversity is found among medical doctors as well; in 2018 the AMA reported that only 5.0% of physicians were African American.⁶ Altruistic views aside, this means that the overall pool of qualified applicants to chiropractic schools appears to be very (and unnecessarily) limited, and we are missing out a large proportion of potential students as we continue to seek the best and brightest for admission.

We also need a quantum leap in the quality and quantity of clinical training and experience for chiropractic students.⁷ Some of the challenges in undergraduate chiropractic education were mentioned in the “good” section – and despite the status of clinical education being described as “good”, this is misleading because chiropractic students continue to be exposed to a very limited quality and quantity of clinical experiences^{7,8}, and I suspect that few practicing DCs will disagree with this statement. The need for multi-disciplinary clinical training and experience with a much wider variety of clinical problems (than current chiropractic students see) was well described by Bruce Walker in his paper calling for action towards “a new path, a new beginning, and a new direction”⁸.

MDs, DOs, and DPMs all require the completion of residency programs prior to being licensed to practice independently, and medical educators consider the post-graduate training years to be the most important element in medical education (which is why an increasing number of medical schools are able to graduate MDs after only a 3-year degree program). Approximately 35-40% of dentists complete a one-year residency⁹, and there are 280 residency programs for optometrists (including 215 in the Veterans Health Administration)^{10,11}. Chiropractors, on the other hand, can graduate Monday and (assuming State licensing requirements are met) begin practicing on Tuesday. Thankfully, we are seeing an increasing number

of one-year residencies for chiropractors in the VHA, but to date, these have only graduated a total of 70 residents over a ten year period. We desperately need to increase the training opportunities in multi-disciplinary healthcare environments, where chiropractic students and chiropractic residents can train alongside other healthcare students and residents as team members.

Another concern is exposure to research and a general philosophy of critical thinking. As chiropractic education and practice become increasingly evidence-based⁵, students need far more exposure to research – its philosophy, methods and relevance to healthcare practice. This situation is improving, to be sure, and chiropractic researchers continue to receive NIH and other foundational funding (although unfortunately, NIH funding is currently under scrutiny), but the population of chiropractic researchers remains very small (compared to other health professions) and a research career is not yet a widely available option for chiropractic graduates.

Finally, another concern in my opinion is the profession’s lack of an evidence-based preventive “chiropractic checkup”. The dental profession changed forever when they moved away from extracting decayed teeth, to a public health endorsed practice of preventive dentistry. In fact, I recently read that dentists are now recommending the first dental checkup by the time a baby is only one year old!¹² Can you imagine how the chiropractic profession would be transformed overnight if public health officials recommended that everyone have a chiropractic checkup every six months? But sadly, there is no consensus on what this might look like and just about every version of a “checkup” exists in the wildly diverse and esoteric world of chiropractors. If musculoskeletal problems are indeed the number one worldwide cause of disability, then we need to place way more emphasis on prevention, and I hope to live long enough to see the value of a chiropractic checkup equal to the value of a dental checkup.

The Ugly

The simplest explanation of systems theory is a closed system with three components: an input, a process, and an output – which leads back to the input. This all happens within a “context”. For chiropractic education, the input is students who apply and are accepted; the process is the factory where DCs are made; and the output is graduates, who by their representation as DCs influence the system

input either directly (referrals) or indirectly (through professional reputation). There are many moderating influences in the context such as state regulations and state regulators, pseudoscience and esoteric practices, the professional civil war, public health practices and DC participation, and public perception of the field. Unfortunately, we seem to be stuck in a self-perpetuating cycle where some noisy and negative aspects of our “output” continually influence our input. During the COVID pandemic there were numerous instances of DCs claiming that chiropractic boosts immunity (including a press release by 21 “straight” organizations) that created embarrassment and prompted several responsive publications by the chiropractic research community as well as students.¹³⁻¹⁵ A student authored paper entitled “Chiropractic Students Call for Action Against Unsubstantiated Claims” stated, “It is our hope that all regulatory bodies will protect the public by taking appropriate action against chiropractors making unfounded claims contradicting public health policy. We call on current chiropractors to ensure a viable profession exists moving forward”¹⁵. This is indeed a ray of hope.

Regulatory bodies and disciplinary processes come under the microscope when chiropractors violate the public trust by advertising and promoting unethical or pseudoscientific practices.¹⁶ The abovementioned issues related to the COVID pandemic are a good example of the public airing of quite different approaches or paradigms of chiropractic practice. Another issue which may play into the challenges of current day regulation of chiropractic practice is the (generally common) obsolescence of practice acts (many of which were first created decades ago, using the esoteric terminology of their day). And we are all well aware of the fear of “opening the act” that paralyzes the profession and results in (sometimes absurdly) outdated regulations and laws. I will use Florida as just one example.

The definition of the practice of medicine in Florida, in 23 words, is as follows: “Practice of Medicine means the diagnosis, treatment, operation, or prescription for any human disease, pain, injury, deformity, or other physical or mental condition”¹⁷.

The definition of the practice of podiatry in Florida, in 22 words, is as follows: “Practice of Podiatric Medicine” means the diagnosis or medical, surgical, palliative, and mechanical treatment of ailments of the human foot and leg”¹⁸.

The definition of the practice of dentistry in Florida, in 29 words, is as follows: “Dentistry” means the healing art which is concerned with the examination, diagnosis, treatment planning, and care of conditions within the human oral cavity and its adjacent tissues and structures”¹⁹.

The definition of the practice of chiropractic in Florida, in a whopping 122 words, is as follows: “Practice of Chiropractic Medicine” means a noncombative principle and practice consisting of the science, philosophy, and art of the adjustment, manipulation, and treatment of the human body in which vertebral subluxations and other malpositioned articulations and structures that are interfering with the normal generation, transmission, and expression of nerve impulse (sic) between the brain, organs, and tissue cells of the body, thereby causing disease, are adjusted, manipulated, or treated, thus restoring the normal flow of nerve impulse which produces normal function and consequent health by chiropractic physicians using specific chiropractic adjustment or manipulation techniques taught in chiropractic colleges accredited by the Council on Chiropractic Education. No person other than a licensed chiropractic physician may render chiropractic services, chiropractic adjustments, or chiropractic manipulations”²⁰.

Now there’s an elevator speech (and perhaps one of the longest sentences in the English language). At least it is “noncombative”.

Just for the record, I would like to propose a new definition for consideration in Florida, in only 20 words: “Practice of Chiropractic Medicine” means the diagnosis, conservative treatment and prevention of disorders of the spine and related musculoskeletal structures”.

Of course, all of this “ugliness” results in a loss of the public trust due to irregular practices and lack of consistency among practices. I suspect that if a patient visited a dentist in either Miami, or Duluth, or Dubai, they would likely get the same or similar approach to dental hygiene and the practice of dentistry. That said, (and I have no other reference for this other than my own experience), there’s a reasonable likelihood that any random five chiropractors in any city in the US would offer five different approaches to the same patient and same problem (i.e. manual manipulation, no manual manipulation, or any one of a myriad of esoteric techniques, etc.). When I was in my first year of chiropractic school, my father, a housepainter, suffered from an acute lower back pain at work.

Without asking me for a recommendation, he picked a nearby DC who advertised himself as a self-proclaimed “headache specialist” (which, unfortunately, impressed my father who believed he was going to a specialist). Despite his pain being clearly localized to his right lumbo-sacral region, the DC proceeded to x-ray and manipulate his neck, whereby my father suffered from neck pain for the rest of his life. Later, it took only one visit from my college faculty instructor to relieve his lower back pain (although it took a bit of convincing to get him there).

In 1990 a survey of McLean County Chamber of Commerce members revealed that chiropractors scored 18th or 19th out of 19 professions in 9 of 12 categories related to public trust and confidence.²¹ A Gallup poll in 2003 about the perception of honesty and ethics, rated Nurses (83%), MDs (68%) and DCs (31%) as “high or very high”.²² More recently, in 2020, the figures were similar, with a slight improvement for the DCs: Nurses 85%, MDs 65% and DCs 41%.²³ Successive Gallup data on public trust and confidence in chiropractors are as follows: 2003 – 31%, 2006 – 36%, 2009 – 34%, 2012 – 38%, 2016 – 38%, 2020 – 41% (an agonizingly slow climb over two decades).

Besides the impact on the trust of potential patients, these findings also impact the attitudes of potentially referring physicians. Busse *et al.*, in 2009,²⁴ studied the attitudes of orthopedic surgeons towards chiropractic. He noted, “North American orthopedic surgeons’ attitudes toward chiropractic range from very positive to extremely negative”. In a follow up study in 2011,²⁵ he noted, “Our analysis identified a number of issues that will have to be considered by the chiropractic profession as part of its efforts to further integrate chiropractic into mainstream healthcare”. And finally, Weis *et al.*,²⁶ in 2016, wrote about the attitudes of obstetricians towards chiropractors and concluded that their major concerns were safety and the variability of practices among chiropractors. One written comment by an obstetrician is characteristic of their concern: “I realize that there may be many chiropractors who provide safe effective treatment for musculoskeletal issues and do not manage things like asthma beyond the bounds of their training. So sadly those that promote unsafe practice end up painting the entire profession in a bad light”.

More musings and reflections

The chiropractic “civil war” – historically and colloqui-

ally, “straights vs. mixers” – continues to limit or restrict legislative renewal or updates and scope expansion. Optometrists did not resist being able to use mydriatic drops to better visualize the retina, but there seems to be an obsession in chiropractic to limit our scope (and thereby limit our opportunities to help our patients get better). In Florida, where I spent five years, the DCs seem obsessed with “injecting vitamins”. I’m sure there must be a good reason for this, but I wonder if the attraction is “injecting” or “injecting vitamins”.

Years ago, during my residency, I attended a weekend seminar taught by Graham Apley (of “Apley’s test”). We saw over 30 patients at the hospital during the seminar (in one weekend – more than the number of new patients I saw during my chiropractic education). I distinctly remember a patient with what appeared to be a frozen shoulder. “Mr.” Apley (he was from the UK and insisted upon the respectful title for a physician in England) asked the patient to abduct his arm, which of course he couldn’t do. Apley then injected the tendon area with a local anesthetic and reminded us that if there was a tear, the patient still would not be able to lift his arm, but if it was simply inflamed, he would be able to do it painlessly. Within about five-to-ten minutes, he could lift his arm, thereby confirming the diagnosis and referring the patient to physical therapy instead of orthopedic surgery. In chiropractic practice, without this opportunity to use a local anesthetic, we are limited to applying ice packs (which nobody likes, and besides they aren’t that effective). It is this kind of scope expansion that I would like to see, to improve our ability to differentially diagnose musculoskeletal conditions; but the profession remains split over this with one side fearing that we’ll all be prescribing drugs before too long, like the osteopaths.

In fact, Emary *et al.*²⁷ described a survey of 187 Swiss chiropractors, who have been licensed since 1995 to dispense medications. In 2018 their permitted formulary was expanded, and although 42% of the DCs were interested in continuing to expand their range of medications, the majority of DCs reported using medications with about only 5% of patients. In a 2019 survey of chiropractic students at D’Youville College (now D’Youville University), Emary *et al.*²⁸ showed that 90% of the students agreed with scope expansion to include some medications.

The relative isolation of the chiropractic profession from mainstream healthcare was no more evident than

during the COVID pandemic. While there were some positive examples of DCs being able to assist the massive public health efforts with vaccinations in the Canadian province of Quebec, and in the UK, the situation varied within the US. In Florida, on April 5, 2021, the Department of Health published a list of professions whose members were authorized to administer vaccines, including COVID-19 vaccines. The list included 20 professions, including dentists, midwives, optometrists, respiratory therapists, and (yes) veterinarians. Conspicuously absent from the list were chiropractors.

Referring back to the cybernetic model of systems theory, applicants for admission to chiropractic schools are sometimes motivated by the wrong reasons, and the chiropractic civil war manifests itself in student bodies who also experience the schism. Nim *et al.*²⁹ wrote of this situation at the University of Southern Denmark. He reported, “the level of conservatism (i.e. “straight chiropractic orientation”) was moderately associated with inability to recognize non-indications to treatment. Three outliers...revealed a highly inappropriate handling of clinical cases”. More evidence of the schism among chiropractic students was reported by Swain *et al.*³⁰ in 2021, and this was a large international study of 2396 students from 25 institutions. It was shown that 45% supported traditional theory (“adjusting the spine corrects dis-ease”) and 55% agreed that “evolving scientific evidence is more important than traditional principles”. Further they concluded that, “chiropractic students’ professional association membership status, pre-chiropractic education ...were associated with ideologically conflicting responses”. So the problem appears to be self-perpetuating.

The schism among chiropractors has even resulted in a call for a professional divorce.³ Writing in “Chiropractic, one big unhappy family: better together or apart?”, LeBoeuf *et al.* suggest, “there is a need to pause and consider if the many reasons for disharmony within the chiropractic profession are, in fact, irreconcilable”, and “it is time to openly debate the issue of a professional split”... “for this to happen, the middle group of chiropractors will have to become engaged and consider the benefits and risks of respectively staying together or breaking up”. This is clearly a very difficult and emotional topic but at least it has been put out there for discussion.

The result of all of this is, of course, that chiropractic is still conspicuously absent from many public health initia-

tives⁸, publicly funded universities (that is, within North America, with the exceptions of the University of Quebec and the new program at the University of Pittsburgh)^{32,33} and from military commissions in a Chiropractic Corps. Many in the public remain confused about the field and still raise eyebrows when you mention chiropractic (check out the chiropractic page on Wikipedia, for example).

Some good news and a plea for action

French, Downie and Walker³⁴ issued a “call to action” for the profession in 2018. I will repeat this in terms of a plea for action. These authors stated, “our low back pain ‘call to action’ for the chiropractic profession is to get our house in order”, and “the chiropractic profession is perfectly placed to be a major player in providing a part of the solution to the global challenge of LBP. But the profession has been shut out of this role...due to...internal political conflict, lack of political will, and a minority of chiropractors who provide non-evidence-based approaches.” The challenge couldn’t have been better stated.

We have a strong foundation to rally to this challenge. There is a far more sophisticated chiropractic educational community of practice in 2025 than ever before. We have groups such as the Chiropractic Educators Research Forum (CERF) just to cite one example of this community coming together and sharing their ideas and research. And, from experience, I can state with certainty that there is a growing (and exciting) level of collaboration among chiropractic educational institutions (and other healthcare institutions). And we can be very proud of the Council on Chiropractic Education and its continued good work to ensure the high quality of chiropractic education. Finally we have the strong and significant international growth of chiropractic schools.

At the 2021 ACCRAC meeting, Dr. Lou Sportelli identified four key elements in the profession’s growth, as he spoke of our evolution from “Jail to Yale”. First, he mentioned the shift from isolation to integration. We see this in many examples throughout the country, but the increased opportunity for chiropractic services within the Veterans Health Administration has been perhaps the finest example of this shifting position of the chiropractic profession.

Next, Dr. Sportelli mentioned the changing paradigm of chiropractic care, and this is evidenced by the increased emphasis on evidence-based practices, well-

ness and the quality of life, especially among an aging population (and hopefully to be followed by Medicare reform for DCs). Thirdly, he stated that “research is the weapon of tomorrow”. This is very true, and it may be said that the development of a new DC program at the University of Pittsburgh is mostly due to the volume and significance of the research performed there, largely by Dr. Michael Schneider, the chiropractic program Director. In fact, one might say that the focus on research may be seen as a great awakening in the chiropractic profession, with the recent introduction of various national and international academies, forums and collaborations with creative acronyms such as CARL, CERF, ACORN and CIRCuit.³⁵⁻³⁸

And, finally, emphasizing his theme of Jail to Yale, Dr. Sportelli spoke of the profession’s early challenges and imprisonment of chiropractors for “practicing medicine without a license” (many of whom built practices within the jails during their incarceration!). He spoke of chiropractors now being invited and welcomed into large multidisciplinary healthcare centers around the country, such as the Cleveland Clinics and Mayo Clinics, as well as fellowship opportunities for chiropractors at both Yale and Harvard Universities.

I will conclude with a personal story illustrating the shifting times that Dr. Sportelli described so well. Chiropractors may recall the challenges in dealing with the American Medical Association in the early to mid-20th century. During these years, the AMA attempted to “contain and eliminate” the chiropractic profession through a policy of isolation and restriction of opportunities for interprofessional practices. To say that the relationship of these professions was vitriolic would be an understatement. Fast forward to 2018, and while I was serving as Dean of the College of Chiropractic Medicine at Keiser University in West Palm Beach, FL, I was invited by the Palm Beach Medical Society to a private dinner in which they were hosting the new AMA president, Dr. David Barbe, who gave the keynote address at the dinner. I was seated among AMA dignitaries at a table at the front of the room, adjacent to Dr. Barbe. Yes, times are indeed a-changin’.

Let us do what we can, while we can. I am reminded of a saying that I once heard from a University Chaplain, and I will paraphrase it for the chiropractic profession. She said, “I am only one; but I am one; and I can’t do

everything; but I can do something; and while I can, I will do what I can to advance the chiropractic profession.”

I hope others will share my dream which is to see the Doctor of Chiropractic as a trusted, valued, and necessary member in all health-related environments.

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