

THE CHIROPRACTIC CHOICE

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It was the best of times...

By Claire M. Welsh, D.C., FICA
Southern Regional Director

"It was the best of times, it was the worst of times..." Charles Dickens opens the Tale of Two Cities. The first paragraph continues, "It was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness...."

This quote could just as easily be describing the world today as we all deal with the COVID pandemic situation as it did the times surrounding the French Revolution.

Yes, for most people this is a time of conflict, chaos, and fear. Fear of the unknown, emotional, spiritual, and financial stress, and panic is everywhere. Yes, we are living through the most challenging time of the century. Chiropractors, however, have

an entirely different view from that of the majority of the population, many of our government leaders and the medical profession. The current situation offers us a unique opportunity to rise up to educate and be the beacon of hope for our patients, our communities and the world. When the majority of the population is blindly following recommendations that are constantly changing (sometimes even on a daily basis), often based on misinformation and conjecture, we need to be the voice of calm, certainty and reason.

As essential healthcare providers we should follow the law and the government guidelines designed to ensure a safe environment as our patients receive the vital care they deserve and need. At the same time, we should be educating them on the reality that the body has an innate wisdom, is self-healing, and functions best when free of nerve interference and it is each individual's responsibility to give the body what it needs

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How to Help your Patients Who are Staying At-Home during the COVID-19 Pandemic

By Joseph Betz, DC, FICA
Member of the ICA Board of Directors

When the COVID-19 pandemic began in March many people used an unhealthy coping mechanism referred to as minimization. For Doctors of Chiropractic, including myself, this could include believing the problem wasn't serious in early March, the response was too aggressive by the end of March, or we should all be released from "quarantine" by mid April. After all, it was going to go away soon anyway, right? Or maybe it was some scheme cooked up by crooked politicians and greedy corporate interests.

Regardless, I was also minimizing for some time. I also see

many of my colleagues still stuck in this coping mechanism. The problem is that it appears this coronavirus is going to stick around.

The fatality rate is going to go down as antibody testing is performed more widely. However, the most vulnerable in our society still need some level of protection through social distancing and other measures. As the country tries to figure out the balance or returning to normalcy while still protecting the fragile in our population, we chiropractors are threading the needle of delivering needed care for our patients while keeping them, our staff and our families protected. I believe this conundrum will continue for some time to come.

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ICA AFFILIATED COLLEGES CAMPUS ROUNDS

Cleveland University completed its Spring 2020 term virtually and started its Summer 2020 term on May 11th using virtual platforms for both lecture and lab sessions.

Life University completed its Winter term virtually and started its Spring term on April 6th with nearly 100% remote instruction.

LCCW is operating virtually until further notice.

Parker University completed its winter term virtually and postponed its April 18th graduation ceremony.

Palmer College of Chiropractic has been approved by the Higher Education Emergency Relief Fund

Sherman College of Chiropractic has started the Sherman Pride Student Emergency Fund

CONFERENCES AND SEMINARS

Subluxation Summit DL II

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President's Message

Stephen Welsh, DC



The COVID Experience ... Is There a Silver Lining?

Little did we know when we went to press with the last edition of the *ICA Choice* in February, that the entire world was about to embark upon a journey of a lifetime ... a journey through a crisis that has not been experienced in over a hundred years. Little did we know that a single strand of RNA would turn the world upside down. Little did we know how important it was to be declared "essential" back when this all started; and little did we know that while health care workers and first responders around the world risked their own lives in order to serve the most vulnerable in our society, that the Achilles heel of our current health care paradigm was about to be exposed.

The International Chiropractors Association, while in the early stages of building a new organizational foundation, updating our governing documents and revamping our data base systems, diverted resources and established a COVID Resource page on the ICA website in order to assist our members world-wide by providing a chiropractic perspective, facts and guidance in a sea of mis-information circulating on social media and even in the major news media platforms. The journey began with a realization that in this crisis there was no roadmap... the current EBM (Evidence Based Medicine) Paradigm, having been hijacked by "experts" with an agenda, now had no chapter with a set of instructions ("if this ... do that ... based upon the RCT's"). With no "scientifically accepted" medical interventions, drugs or vaccines to deal with this "Novel Virus" the heroes of the past four months have been those medical professionals and first responders on the front line. These heroes have been supported by the "essential health care providers", including ICA Doctors, who have continued to serve their patients in an auxiliary role with love and compassion, and being their beacon of hope in an environment in which fear and panic has been stoked by many in the mass media that no longer seek the truth.

The importance of elevating the condition of the "Innate Immune System" over the often manipulated "Adaptive Immune System" has been met with resistance from the enemy within ... those so called "experts" in health care with a

vested interest in maintaining the status quo, and those within our own profession seeking cultural authority in exchange for abandoning our uniqueness.

Our call for increasing the clinical research required to affirm the positive effects of the chiropractic adjustment on the nervous system, and potentially the immune system has exposed the hypocrisy existing within the chiropractic research community. We now have a paradox. Having been told for 125 years that "there is no scientific evidence" that chiropractic is effective, it can now be clearly seen that medical and social procedures can be mandated without scientific evidence, based solely upon the opinion of experts. The suggestion, however, that a chiropractic adjustment, an intervention with extremely low risk, might be of benefit during these times of stress has become a forbidden topic... and the hypocrisy has been exposed ... for all to see.

I would suggest that as we emerge from the greatest public health catastrophe of our lifetime, there is a silver lining. There is a growing realization that the current "sick care" paradigm, based upon 17th Century science, is failing. It has been 20 years since Y2K, the last time the general public was put into a state of panic for what turned out to be a challenging but manageable event. This time is different. We are all living through an "Information Revolution", where the free flow of information on the internet is subverting all attempts by "the medical-industrial complex" to suppress the truth.

Society is now ready ... ready for a revolution in health care ... ready for a new health care Paradigm ... one that is focused on creating and maintaining health ... one based upon the freedom to choose ... our time is now ... it will not be easy ... but it is time to tell our story ... and it is up to us. The world is waiting.



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The landscape of the COVID-19 pandemic is ever-changing, and the impacts are deepening. Health, safety, visitor experience, and liability considerations make it impossible to plan an in-person celebration worthy of this significant milestone for our profession. Therefore, we are canceling all in-person events for the 125th Anniversary Celebration of Founder's Day scheduled for September 18-19, 2020 at Palmer College.

Vice President's Message

Selina Sigafoose-Jackson, D.C., FICA



Never such a time like this

Many of us watch movies or hear stories and think, wow, I am glad that is not my life. Or I am so glad to not have lived during that time. I can imagine future generations are going to look back at the Covid-19 pandemic and think the same.

I however feel that we are living in a time of renewal and revival. There never has been such a time like this. Do we make or break the moment? Do we learn to adapt and grow?

We expect and know that the body is a self-maintaining, self-correcting organism. We know that it has an enormous capacity to adapt and grow. So why not look at this pandemic that can threaten the body and see it as an opportunity to force our body, mind, and soul to adapt and grow? Force our practice to do the same!

Adaptation is the key to survival!

Personally, I have no interest in adapting to mainstream suggestions like the use of masks or social distancing. To me, I feel that I am forced to put on a costume for a play I never wanted to be in. But I must ask myself, what am I willing to do to adapt yet not compromise? One thing is for sure, I will not wear a typical mask. I am wearing a scarf. One that matches my outfit!! I am hugging patients! I say if I can adjust you, I can hug you.

On the surface, we are controlling the number of people in the office, we are cleaning between each patient, we are

minimizing having them touch any surface and cleaning it afterwards but I am telling them that I believe the inherent, innate recuperative power of the human body is far more resilient to handle anything it contacts and the adjustment increases that ability.

Human beings are not fragile beings. If we look at the numbers, so, so, many people are surviving Covid-19. We remind them that the chances of contacting Covid-19 is highly probable, and the chances of surviving is as highly probable. Why? What makes the difference in someone thriving or dying? We remind them again, it is the inherent, innate recuperative power of the human body. How do we make that inherent, innate recuperative power stronger? Chiropractic!

Sleep, eat well, stay active and pray that you are open to hearing, seeing, and acting on what is the best choice for you and yours to live well. Reminding each individual that they have the power to live well and live long is not an effectively well marketed idea. They are hearing that nowhere so tell them!!!!!!!!!!

Do not be afraid to use Covid-19 as an opportunity to remind your staff, remind your patients, and remind yourself that the body is wise, well, intelligent. That the same creator of the universe, the creator of your body did not leave when Covid-19 hit the scene. This is not a play and we are not puppets. Adapt and grow! Do not be afraid! We were created to be on this planet for such a time like this!



It was the best of times...

Continued from front page

to be healthy and insure it is free of toxins.

We must remain true to our philosophy and the Chiropractic principles. If chiropractors rebel and refuse to follow the mandated precautions, they may actually be increasing risks on many levels. They not only place the seniors and immune compromised patients (and their family members who may or may not be under chiropractic care) at risk, they also place all patients' and the public's confidence in our entire profession at risk.

Additionally, in caring for healthcare providers who are in daily contact with the seriously ill, they are increasing the risk

for those patients who follow them. It's our moral and ethical responsibility to do no harm, a balancing act that cannot be taken lightly. We must stay abreast of the latest information, support chiropractic research (there are currently multiple studies underway to further prove the relationship between chiropractic care and improved immune function). We must reference the latest information and utilize the current models as we educate others. It's time to step up our game.

The Chiropractic Principles remain constant and true as do the basic principles of TRUE HEALTH as they have through millennia, however, the science explaining the effectiveness of chiropractic is light-years ahead of where it was 125 years ago. We need to share this message of chiropractic and the vital components of health and wellness now more than ever.

ICA Submits Comments to the NCCIH Strategic Planning Process

July 13, 2020 (Falls Church) Today the International Chiropractors Association (ICA) submitted comments to the National Center for Complementary and Integrative Health (NCCIH) at the National Institutes of Health. The NCCIH has asked for input prior to the drafting of the strategic plan to guide the Center's research efforts and priorities over the next 5 years (2021-2026). Dr. Helene Langevin, NCCIH Director has specifically requested for feedback on whole health research. Among our statements and recommendations:

- The ICA supports the importance of building the evidence base, in patient-centered care, and in caring for the whole person.
- The ICA encourages the NCCIH to revisit this mission statement to be more inclusive to whole systems of healing which have been entirely omitted.

- ICA recommended inclusion in the plan a goal to study entire systems of healing as they are practiced in the field, putting forward the opinion that by doing so, potentially greater public health outcomes may be achieved by studying the entire practice or system of care provided by doctors of chiropractic as well as doctors of naturopathy, and the culturally specific systems of healing than simply a single adjustment, or a single component of a system.

- ICA noted that the vitalistic, subluxation-focused approach to chiropractic is the predominant approach in the United States and warrants a greater research emphasis.

- ICA called for greater research resources and requested to collaborate on a state of the science of chiropractic evaluation.

The entire submission can be [read here](#).



Acting Executive Director

Beth Clay



The ICA COVID Response

September 11, 2001 was a beautiful sunny morning, I was listening to the local news station as I drove to work at the United States Capitol Complex. Just as I was pulling into the entrance to the underground parking to show my badge and have the trunk of my car examined, a report came on of a small plane hitting one of the Twin Towers in New York City. I parked, went up to my office and turned on the news in time to see the second plane fly into the towers. And at that moment, I knew our world had changed forever.

Fast-forward to March 2020, days before our annual Fitness Symposium in Columbus, Ohio, we were hearing concerns about the Coronavirus (aka COVID-19) and in constant contact with the Arnold Classic's organizers. I had just finished texting with one of my sons, who had moved to Columbus for graduate school and stayed after graduation. I got a news alert on my cell phone and clicked to open it and see the announcement that the Governor was issuing orders to shut bars down that evening. A deep feeling of dread presented itself. It would not be long before I realized that our world had again changed forever.

Making the Tough Call: Shortly thereafter the Ohio Governor and the Columbus Mayor determined that the Expo to be held in conjunction with the Arnold Classic would have to be canceled. They were worried about 200,000 people from all over the world coming into Columbus and bringing or catching COVID-19. The Expo was canceled, the Arnold Classic was scaled back and originally, we were told that the public would be barred from any event. We looked at all our options, had discussions with leadership on everything from the germ theory debates to border closings. Retrospectively, I am confident we made the correct decision to cancel the Fitness Symposium. We will be back next year; and the Fitness Council leadership are looking at some great new options for the continuing education program. Stay tuned on that, I think you will be pleased. I hope you all plan to attend. I would like it to be the largest ICA turnout ever.

The Home Office Response to COVID: Once Governor

DeWine acted, other states began to act. Stay at home orders were issued, schools closed, businesses closed. ICA stood up a COVID-Response page. We were the first to issue a public statement reminding that chiropractors are Essential Health Care Providers. And we have worked with our Representative Assembly members to and others to keep our information up to date. As an international organization, its a daunting task to gather and maintain data on 50 states, and 190 countries that changes on an almost daily basis.

We immediately addressed the issue of socially distancing and about half the staff worked from home full time for several months. At present, some are continuing to work from home several days a week due to the shutting of our metro stop this summer for renovations, and the ongoing challenges of parents who are juggle work and their children's home schooling that began with no notice in March. I am proud that the ICA Home Office has not been forced to close; many of the other organizations in our office building closed for several months, and as such our exposure coming to and from the office was dramatically reduced. The early days of the local shut down made for some eerie feelings to see the main thoroughfare outside our office – Arlington Boulevard at Seven Corners – devoid of automobile traffic.

We immediately had requests from members for information and we gathered the existing research on chiropractic and immune function. We crafted a report in which we (1) advised clearly that chiropractors cannot make claims to cure, treat, mitigate, or prevent COVID-19 because no actual studies have been done given the newness of COVID-19 and (2) provided information on studies with descriptors of the study, leaving the interpretation of the information to the reader; and (3) provided for historical purposes the information on the Spanish Flu and chiropractic that dozens of ICA members contacted with requests to share. Our report concluded with a call for more research. Chiropractic like the rest of the complementary, alternative, and integrative health systems are always marginalized at times like these because the research on the whole person effect including the immune

response have not been done. Too often the studies we are forced to rely on are small patient populations, studies of short duration, and specified to a single biomarker. ICA is actively engaging to increase research resources. Our report was well received by our membership and many leaders in the community reached out to thank us for doing such a thorough report. There were detractors who determined to evaluate our report as if it were submitted to a peer review journal. Their article as it would turn out had among its authors and signatories many members of the editorial board of the journal through which it was published a fact that was not disclosed in the paper itself and clearly should have been.

At the end of May we went forward with our move two floors down to a new suite. Rather than the open concept floor plan of before, we have a new office suite that is updated and with a better floor plan. Each department has an office, we have a great new conference space, a library which we are developing. Better space and we cut costs! A positive action on many fronts.

Our Intention: When we started the preparations for this edition, we hoped the COVID-19 Pandemic would be winding down. The great challenge we face as an organization is forward planning. The stories everyone hears in the news each day often do not match what the data show. For example, recent headlines discuss all time highs on diagnosed cases in states; without acknowledging the all-time highs of testing. With 80% of the cases in people who show no symptoms, testing positive numbers are not the major point to follow. Hospitalization due to COVID; and death from (not with) COVID are the numbers most experts suggest are the ones to follow. Each of you as health care professionals know the long-term health consequences to being put in a fearful

state constantly. The internal fight or flight response can in the simplest of terms 'get stuck' in the 'on' position leading to physiological changes. This was a topic of frequently discussion in the weeks and months after the attacks of September 11, 2001 and the anthrax in the mail attacks that also effected Capitol Hill.

As chiropractors, you are front lines, essential health professionals who have the opportunity to help all of those in your circle of influence remember to breathe, to help let the fight of flight response turn off, while also being responsible, and not letting your guard down on frequent hand washing, social distancing, etc.

The 125th Celebration in Davenport: As you likely have heard, the in-person events associated with 125th celebration at Palmer were just canceled, an agonizing decision I know for the college. ICA had already postponed our annual meeting from April to September to be in Davenport for the celebration. We are now forced to rethink our plans. The ICA leadership has agreed this week to cancel the in-person meetings and to move to an online platform for our Board, Representative Assembly and Annual Meeting. We will be making announcements on this in August.

The Great Lesson from COVID: We will get through these challenges. The greatest lesson from this entire COVID Pandemic Response remains that 'host health' matters the most. Helping the people in your own community, your patients, be as healthy as possible through chiropractic care and the promotion of healthy lifestyles is the best evidence-based step forward for this pandemic and likely whatever comes down the road next, be it flu season, or something else. As doctors of chiropractic you are a beacon of hope.

How to Help Your Patients Who are Staying At-Home during the COVID-19 Pandemic

Continued from front page

By most all accounts months after COVID-19 wanes this summer, it will be potentially reemerging over the next 12 months. Expect ups and downs with shutdowns, stay-at-home orders, masks, gloves, and hand sanitizer becoming part of life for a little while. Doctors should plan for this now.

After accepting this I have made sweeping changes to my practice. Like most chiropractors, we are cleaning incessantly. We wear masks, as recommended by the CDC and our state association. But perhaps the most important thing we are doing is checking in with our patients who are staying home

and not coming to the office to get adjusted. These patients are scared and concerned. Sometimes they just need to hear from a familiar, trustworthy voice that can offer comfort and advice in these difficult times. For some of these patients the only voices they hear on a daily basis are from the news channels.

My recommendation is for my fellow chiropractors to go back a month on your schedule and start calling those patients you aren't seeing any longer... not to get them on the schedule, but just to talk and tell them you were thinking about them. They appreciate this more than you will ever know.



July 6, 2020

Letter of Notification to the ICA Membership

Subject: Notification of Upcoming Vote

We are pleased to inform the ICA membership of an exciting governance change recently approved by the Association's Board of Directors. Following over six months of consideration, the Board has adopted a new set of Association Bylaws that will establish a more efficient and effective model of Association governance. The Board spent numerous meetings and countless hours deliberating about the importance of a refreshed governing board structure and its governance processes. We are confident that this work, that began in fall of 2019, will improve the Association's capacity to meet its mission and objectives, to strengthen its business model and to ensure improved services for its members. In addressing its governance, the ICA Board has put aside personal interests and worked together on behalf of your collective interests. As a result of this effort we will improve the capacity of the ICA to more effectively protect and promote chiropractic throughout the world as a distinct health care profession predicated upon its unique philosophy, science, and art of subluxation detection and correction.

As the ICA begins its 95th year of service to our profession, we do so with a refreshed commitment to the Association's leadership of our sector through effective governance. As governance practices change over time, it became clear that the future success and growth of the Association, necessitated a more independent and flexible governance model. The result, led by a new Board Governance Committee and a Task Force on Bylaws, is a new streamlined approach to a governing board structure and makeup, while ensuring the continuity of appropriate membership engagement.

On June 30, 2020, the ICA Board voted unanimously to amend the Association's Bylaws, by adopting best governance practice structure and principles, consolidating, the most essential elements of our Constitution, and removing inconsistencies, redundancies, and ineffective processes. As Dr. Stephen Welsh stated during the Board's recent meeting in which the new Bylaws were adopted, "this was a historic night". And, indeed it was!!!

The new ICA Bylaws have been included with this notice, which initiates the corresponding amendment of the ICA Constitution. Thirty days after this notice, ICA members will be invited to express their support for these important changes

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through a mail ballot that will formally amend the Constitution by consolidating its most essential elements into the newly adopted Bylaws that will serve as the sole governance document of the Association going forward.

Accordingly, this memorandum serves as notification that a ballot to adopt the Amendment to the Constitution (as noted above) will be mailed to all eligible voting members no later than August 10 with the polls closing 30 days later.

The Board of Directors are enthusiastic about the future of our Association, supported by a new set of best governance standards and practices that will be the guide star for our collective future.

Best wishes,

Jon, L. Stucky, DC
Secretary/Treasurer
On Behalf of

Dr. Stephen P. Welsh, President

Ms. Beth Clay, ICA Executive Director

Dr. Selina Sigafoose-Jackson, Vice President & Chair, ICA Task Force on Bylaws

Dr. Donald Hirsh, Chair, ICA Board of Directors

Dr. Timothy Meng, Chair, ICA Governance Committee

Choose Wisely

“Faith Stands and Fear Runs”¹

By George Curry, DC, FICA
ICA Immediate Past President

It is hard to argue in the middle of a declared pandemic that all of our lives and practices have not been altered. In the beginning of the crisis there was confusion and concern over whether we would actually be able to continue to provide chiropractic care to our patients.

The United States federal agency responsible for managing critical services, quickly declared that chiropractors were essential providers, followed by Department of Homeland Security. When the quarantine went into effect, some chiropractic offices chose to close down, some wanted to stay open but were forced to close because of Governor mandates, and some knew the truth about the power of chiropractic to unlock the human potential and remained open to serve their communities.

In every crisis there lies opportunity, and the fact that the whole world was stricken with fear and did not know which way to turn and what to do. Experts from all fields of health and science openly admitted there was no cure or treatment for COVID-19.



Dr. Fred Barge, past president of the ICA, expressed our philosophy succinctly when he said, “There is only one cause of disease, it is the inability of the body to comprehend itself or it’s environment. There is but one cure, the body’s ability to heal itself.”

It is no wonder when the horrific Spanish American flu of 1918 hit our country the recorded factual data showed that those who were under chiropractic care clearly fared better than those were on medical care only.

The fact is that the nervous system does control and directly affects the immune system. Chiropractors from states all over the country reported the same amazing results with extremely low mortality rates for those who received chiropractic care, versus those who were under medical care.

Chiropractic historians of Texas will report that the saving of so many countless lives was the impetus for gaining licensure. Has the human nervous system changed since the early 1900s from that of today?

Faith or Fear?

For 18 years BJ Palmer ran one the most prestigious clinics in our profession’s history. His goal was to provide the finest chiropractic care in the world and to perform vigorous testing to provide data that demonstrated the effectiveness of chiropractic. Meticulous bloodwork and lab studies were done before and after the adjustment, with the data proving that the white blood cell count of all patients was dramatically changed after a specific scientific chiropractic adjustment. This proves a direct relationship to chiropractic subluxation and adjustment and one of the primary immune defense systems that can be measured in our blood.

Fear or Faith

A study published in the Journal of the American Osteopathic Association looked specifically at “Manipulative Therapy of Upper Respiratory Infections in Children.” Over an 18 year period a total of 4,600 upper respiratory tract infections in children were managed by spinal manipulation to the upper cervical and upper thoracic spine. The conclusion was, “The results with manipulation are superior to those achieved by anti-microbial therapy or symptomatic therapy alone.”²

Another example of data that supports spinal adjustments can have a positive in fact on the immune system when suffering from a infection. Those that claim there is no data to support that spinal adjustments have an effect on the immune response are merely turning a blind eye to the facts.

Fear or Faith

Another peek into chiropractic's relationship with our immune system occurred when the children of 200 chiropractors were compared with the children of 200 medical doctors for the frequency of ear infections and other immune compromising children's conditions. Eighty percent of the children of medical doctors had ear infections compared to only 31 percent of the children of chiropractors.³

Fear or Faith

"They will have to re-write the textbooks" when it was definitively reported by the scientists at the University of Virginia in the spring of 2016, that there was a direct

connection between the brain and the immune system.

They just re-confirmed with the chiropractic community has known for the past 127 years. Does the human nervous system still have its supremacy over all tissues, cells, organs, and systems of the body including the immune system? Yes!

Can the removal of nerve interference by a chiropractic adjustment have a positive impact on the tissues, cells, organs, and systems of the human body including the immune system? Yes!

Our illustrious founder of the ICA, BJ Palmer stated: "While other professions are concerned with changing the environment to suit the weakened body, chiropractic is concerned with strengthening the body to suit the environment."

Fear and faith cannot live in the same house. The choice is yours. Go forth and serve, for your community needs what only you can uniquely provide.

References

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2. Journal of American Osteopathic Association 1964
3. Journal of Chiropractic Research 1989 (Summer)



Keeping a Positive Outlook

I feel like I am living in a movie, as residents of our state are mandated to stay in their homes. I am open. I am thankful to be considered an essential health care provider I am honored to care for my patients during this time.

I am finding time to work more on my practice then in my practice. I have had the opportunity to truly reflect on my practices and myself. This is a precious gift. I am using this time wisely. I am using this time to revisit my vision, mission, and purpose. Take time to evaluate your business model. Listen to your innate. Believe in yourself and your practice. Your patients deserve the very best.

Through a pandemic, we learn to appreciate our health more than ever. Let's share chiropractic with the world.

— Dr. Amanda Apfelblat

SICA Corner

By Kelly Kimball, DC

COVID-19 has brought a number of changes to both chiropractic students and new graduates. With schools transitioning to virtual learning, technique classes have suffered the loss of kinesthetic instruction. Many students, especially those in clinic, have been especially concerned about how to both maintain and improve their adjusting skills during this time. The ICA has responded to this need by hosting a webinar, "Refining your Adjusting Skills from Home" featuring instruction by Dr. Tim Young for SICA members and ICA members in their first year of practice.

New graduates have been facing a number of uncertainties. Many graduates who planned to open their practices in the spring have chosen to delay those openings. Those with associate positions lined up have had delayed onboardings

into their new positions or have had to seek other opportunities. The ICA has worked to help new graduates and long-standing chiropractors alike by releasing statements specifying chiropractic as an essential service, which has informed several states' stay-at-home orders.

After all of this, though, I am confident that we will come out stronger! The public is realizing now more than ever the importance of maintaining their health, and chiropractic needs to be at the center of those conversations. I am hopeful for new graduates and new practices, especially those who have started their marketing online during this time, as the public is spending more time online now than ever before.

We have a crucially important, timely, and relevant message for the public, and I believe that the future for chiropractic is bright!

My Corona Experience

By Timothy Meng, D.C., F.I.C.A.

While changes have occurred, my practice has not been interrupted. We have been in the office on each, and every normally scheduled occasion. Of course, we have been disinfecting as directed, keeping social distancing in common areas of the business, and keeping up a steady stream of banter trying to assist patients who seem overly fearful of the entire issue of a pandemic.

Obviously, since I am a hands-on chiropractor, I have been adjusting my patients to reduce the subluxation or subluxation complex that has brought them to my office. I have tried to reassure them that their innate immune system exists; and that they need to take this extreme warning presented by all

of the information and misinformation from media sources as a motivation to focus on their own health promotion. This can be done by taking the steps that are available to enhance individual immune through diet choices, exercise activity, sunlight exposure, hydration, good sleep habits, and keeping their nerve system as free of interference as possible.

The Kansas City and Jackson County of Missouri announced the 15th of May to begin to lift the STAY AT HOME provisions, but of course our practice was on the essential listing. We expect with the lifting of the stay at home orders, to see a dramatic increase in appointments in the next three weeks. Our business was down 70 to 80 percent in the first month of the "crisis" but has been easing back up to about 50 percent of what we projected from last year.



Managing the Stress of Family Members

By Hugo M. Gibson, D.C., FICA
Western Regional Director

Where I live with my wife and son in North Central Montana, we are very isolated from most of the rest of the country. Montana has had one of the lowest numbers of COVID cases in the entire country. In the city that I practice in, Havre, to date, we have had one case. In the city I live in, we have had none. We are still under the stay-at-home order of the governor, although he has implemented his phase 1 of reopening starting Monday the 24th.

My day-to-day routine has changed very little. Aside from changing my waiting room to be compliant with social distancing and wiping down my tables, nothing has really changed for me. My wife and son's lives, however, have changed dramatically.

My wife is a kindergarten teacher. We knew that schools were going to close, but it was still a bit of a shock when the order came in on March 13th. Her first question was, "How am I supposed to teach kindergarten online?" Her stress levels went through the roof in a moment.

The stress of how she was going to teach her students what they need to know, on top of not knowing how she was going to actually accomplish those tasks because there was nothing in place for this kind of scenario, was and continues to be very high. She had to change what she is teaching, figure out how to use some of the different platforms available for online learning, figure out how to most effectively communicate with individual parents, change her lesson plans, put lesson packets together for each student, make two instructional videos a day, and be available for communication from parents and students throughout the day. She has also had to stay on top of our 8-year-old son to make sure he is getting his schoolwork done.

Keeping as much of our daily lives as normal as possible has been one of the few things that has helped us manage the stress of the changes, we, like everyone, have had to deal with. All three of us have had a few struggles, but more so for my wife and son. She misses her students terribly and he misses his friends. Tears have been shed by both. We try and get outside for walks and bike rides, yard work, we have gone fishing a few times, to the shooting range, and my son has struck some fear into the local gopher population. All

of this has helped, but we are social beings, and there is no substitute for a good old fashioned dinner party with friends.

So, until everyone is comfortable with getting together to fellowship, we have participated in a few "Happy Hour Zoom Meetings" with friends around the country. These have been great. I highly recommend doing something like that if you are longing for some social interaction.

Laughter is the most effective stress reliever there is, so we do what we can to keep the laughs coming. My son and I have been playing practical jokes on each other to keep things light, and my wife and I have laughed ourselves silly watching some of the video clips and memes that people have created.

Even though we are managing the current situation well, we are all looking forward to the past.



COVID-19 Press Release

ChiroSecure continues to work diligently to support its insureds through the Coronavirus (COVID-19) pandemic. ChiroSecure is also consistently monitoring the situation and will provide pertinent updates as they become available. For the most current information, we recommend reviewing the [Healthcare Professionals guidance](#) offered by the Center for Disease Control (CDC). We have also compiled many resources on our [website](#).

We understand the profound concern over the well-being of your personnel, your patients, and your practice as you provide care through this pandemic. With this communication, we offer suggestions to reduce the risk to your practice by the implementation of general safety protocols. For specific inquiries regarding your practice or specialty, please seek the counsel of a licensed attorney qualified to offer advice in your state.

Please continue ongoing discussions with your staff about effective sanitation, disinfection, personal hygiene, and preserving a safe office environment. We also recommend maintaining detailed documentation of your COVID-19 safety protocols in case an inquiry about your precautionary measures arises in the future.

ChiroSecure recommends implementing the following safety guidelines in your practice to reduce the risk of transmitting COVID-19 to your staff and your patients:

PATIENT INTERACTIONS

- **Pre-Screening:** Ask the patient during appointment reminder calls if they are suffering from any COVID-19 symptoms such as fever, shortness of breath, dry cough, runny nose, sore throat, or loss of taste or smell. Reschedule the patient's appointment for a later date if they are exhibiting any respiratory symptoms, or symptoms which could be attributable to COVID-19.

- **Re-scheduling:** Encourage patients to be forthcoming about their health condition by eliminating penalties for last-minute cancellations or missed appointments. Even mildly ill patients should be encouraged to stay home and contact their physician for further guidance.

- **COVID-19 Signage:** Post signs outside of Office entrance door describing potential COVID-19 symptoms. Include your office contact information on the exterior sign so the patient can reschedule the appointment without entering if they are

exhibiting symptoms.

- **Check-In Practices:** Each Patient and Personnel member should sanitize their hands prior to participating in check-in procedures.

- Ensure each Patient (and accompanying Non-Patient) is wearing a mask while interacting with check-in Office staff.
- Measure the temperature of each Patient and Non-Patient's with a contact-less thermometer at check-in.
- Sanitize all commonly-used objects such as clipboards, pens, smart screens following each check-in.

- **Passive Patient Screening:** Screen Patients for COVID-19 symptoms, or symptoms of respiratory illness, before the Patient enters the treatment area. If a Patient presents with suspected symptoms of COVID-19, or respiratory illness, isolate them immediately, provide a mask (if one is not in use), and consult county health department guidelines to refer the Patient to an appropriate treatment site.

- **Active Patient Screening:** Question the Patient about recent travel and potential exposure to COVID-19. Further question the Patient about whether they are suffering from a cough, respiratory symptoms, or any other COVID-19 symptoms. Document the Patient's chart with notes describing the questioning to show you have diligently screened each Patient.

- **COVID-19 Risk Informed Consent:** Ensure each Patient reviews, initials, and signs the COVID-19 Risk Informed Consent. To reduce waiting room crowding, e-mail intake documentation, including the new COVID-19 Risk Informed Consent, to Patients and request they bring the completed forms to their appointment.

- **Parking Lot Waiting Room:** To the extent possible, advise medically-able Patients to return to their vehicles following check-in. At their treatment time, the front office staff should text-message the Patient to enter the Office. This will greatly reduce the number of people in the office and common areas.

- **Common Area Safety:**

- Provide supplies such as facemasks, alcohol-based sanitizer, hand soap, and tissue to Patients at Office entry.
- Place chairs at least 6 feet apart, if possible.
- Remove communal objects such as reading materials, toys, and remote controls. If items must remain, clean them thoroughly several times a day.

- **Visitors:** Counsel adult Patients to attend their appointments alone, if possible. Limit non-patient presence in the office. If a non-patient individual accompanies a patient, inform them that they are required to wear a mask and have their temperature checked.

- **Public Health Notifications:** Diligently monitor the COVID-19 infection rate in your local community. Continue evolving your safety protocols consistent with CDC guidelines, as well as those of your state and local public health agencies.

PERSONNEL AND PRACTITIONER SAFETY

- **Staff Pre-Screening:** Conduct pre-screening of staff at the beginning of the shift. Assess suspicious symptoms and send the staff member home if any COVID-19 related symptoms are present.

- **Protect Personnel:** Ensure all office personnel who come in close contact with Patients wear appropriate Personal Protective Equipment (PPE) such as facemasks, eye protection, and gloves. When possible, install barriers to limit contact with Patients.

- **PPE Protocols:** Ensure Personnel is aware of PPE safety practices, including discarding gloves after use and starting each treatment with fresh PPE supplies.

- **Inventory of PPE:** Conduct regular inventory of PPE supply to ensure availability to all members of the staff.

- **Personal Hygiene Practices:** Mandate effective hand hygiene by ensuring the staff has access to alcohol-based sanitizer as well as hand soap and water. Providers should wash their hands and/or sanitize before and after each treatment.

- **Enforce Social Distancing:** To the extent possible, allow for a minimum of 6 feet of space between Personnel while inside the Office.

- **Remote Employment:** Set up remote employment for staff who perform administrative or non-patient care tasks (i.e., billing, appointment confirmations, follow-up telephone calls) to reduce unnecessary exposure in the Office.

- **Sick Leave:** Personnel who develop suspected COVID-19 symptoms, or any respiratory-related symptoms, should be instructed not to report to work. Ensure your sick leave policies align with State and [Federal regulations](#) as they come out and, that employees are aware of these policies.

FACILITY SAFETY

- **Surface Sanitization Practices – Work Stations:** Encourage regular sanitization of work stations by making cleaning products and sanitizing wipes available to all employees.

- **Surface Sanitization Practices – Patient Areas:** Disinfect all Patient areas between Patient appointments. In addition to treatment tables, all therapeutic equipment, counter tops, chairs, door handles, clipboards, and garment hooks should be disinfected prior to and following each treatment. Office floors should be steam-mopped daily.

- **Social Distancing:** Ensure premises floor is clearly marked with brightly-colored markers to indicate 6 feet of distance in areas where individuals may congregate.

- **Daily Disinfection:** Ensure the Office is disinfected prior to opening and after closing on a daily basis. Encourage and compensate Personnel to arrive early to ensure disinfection is complete prior to Office opening.

- **Food & Drink:** Do not permit or provide food and drink in the office. Discontinue serving water, tea, coffee, or any other food or drink to Patients.

- **Scheduling & Payments:** To the extent possible, appointment scheduling should be done online, via text message, or over the phone. Payments should be processed using a contact-free method. Invoices should be sent via e-mail with an option to pay online. Where Patients are unable to pay online, invoices should be mailed to a verified address and payment should be accepted via mail. Within reason, consider eliminating late payment penalties for pay-by-mail options. If a Patient insists on using cash for payment at the time of service, presume it is contaminated and place the cash in a separate envelope for decontamination. Cash change should not be provided at time of payment. If the Patient has underpaid, the remaining amount should be billed electronically. If the Patient has overpaid with cash, provide the option to credit the Patient's account with the overage; or, advise the Patient of mail or electronic methods to remit the difference.

As the COVID-19 research and findings evolve, so will the standards of safety expected of Practitioners. As such, implementing these practices early will ensure all precautions are taken to minimize risk and maximize protection of our Practitioners, Personnel, and Patients. To that end, ChiroSecure is committed to helping you optimize safety during these uncertain times.

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Dr. Stu Hoffman

Vitamin D Levels Appear to Play a Role in COVID-19 Mortality Rates

Patients with severe deficiency are twice as likely to experience major complications

After studying global data from the novel coronavirus (COVID-19) pandemic, researchers have discovered a strong correlation between severe vitamin D deficiency and mortality rates. Led by Northwestern University, the research team conducted a statistical analysis of data from hospitals and clinics across China, France, Germany, Italy, Iran, South Korea, Spain, Switzerland, the United Kingdom (UK) and the United States.

The researchers noted that patients from countries with high COVID-19 mortality rates, such as Italy, Spain and the UK, had lower levels of vitamin D compared to patients in countries that were not as severely affected. This does not mean that everyone, especially those without a known deficiency, needs to start hoarding supplements, the researchers caution.

“While I think it is important for people to know that vitamin D deficiency might play a role in mortality, we don’t need to push vitamin D on everybody,” said Northwestern’s Vadim Backman, who led the research. “This needs further study, and I hope our work will stimulate interest in this area. The data also may illuminate the mechanism of mortality, which, if proven, could lead to new therapeutic targets.”

Backman is the Walter Dill Scott Professor of Biomedical Engineering at Northwestern’s McCormick School of Engineering. Ali Daneshkhah, a postdoctoral research associate in Backman’s laboratory, is the paper’s first author. Backman and his team were inspired to examine vitamin D levels after noticing unexplained differences in COVID-19 mortality rates from country to country. Some people hypothesized that differences in healthcare quality, age distributions in population, testing rates or different strains of the coronavirus might be responsible. But Backman remained skeptical.

“None of these factors appears to play a significant role,” Backman said. “The healthcare system in northern Italy is one of the best in the world. Differences in mortality exist even if one looks across the same age group. And, while the restrictions on testing do indeed vary, the disparities in mortality still exist even when we looked at countries or populations for which similar testing rates apply.

“Instead, we saw a significant correlation with vitamin D deficiency,” he said.

By analyzing publicly available patient data from around the globe, Backman and his team discovered a strong correlation

between vitamin D levels and cytokine storm — a hyperinflammatory condition caused by an overactive immune system — as well as a correlation between vitamin D deficiency and mortality.

“Cytokine storm can severely damage lungs and lead to acute respiratory distress syndrome and death in patients,” Daneshkhah said. “This is what seems to kill a majority of COVID-19 patients, not the destruction of the lungs by the virus itself. It is the complications from the misdirected fire from the immune system.”

This is exactly where Backman believes vitamin D plays a major role. Not only does vitamin D enhance our innate immune systems, it also prevents our immune systems from becoming dangerously overactive. This means that having healthy levels of vitamin D could protect patients against severe complications, including death, from COVID-19.

“Our analysis shows that it might be as high as cutting the mortality rate in half,” Backman said. “It will not prevent a patient from contracting the virus, but it may reduce complications and prevent death in those who are infected.”

Backman said this correlation might help explain the many mysteries surrounding COVID-19, such as why children are less likely to die. Children do not yet have a fully developed acquired immune system, which is the immune system’s second line of defense and more likely to overreact.

“Children primarily rely on their innate immune system,” Backman said. “This may explain why their mortality rate is lower.” Backman is careful to note that people should not take excessive doses of vitamin D, which might come with negative side effects. He said the subject needs much more research to know how vitamin D could be used most effectively to protect against COVID-19 complications.

“It is hard to say which dose is most beneficial for COVID-19,” Backman said. “However, it is clear that vitamin D deficiency is harmful, and it can be easily addressed with appropriate supplementation. This might be another key to helping protect vulnerable populations, such as African-American and elderly patients, who have a prevalence of vitamin D deficiency.”

[Click here](#) for the full story at *ScienceDaily*.



Effects of Vitamin D on the Developing Musculoskeletal System

Whether you're out enjoying the summer sun or hunkering down indoors during the pandemic, it's important to get ample vitamin D. Vitamin D is a fat-soluble vitamin crucial for efficient calcium absorption, which in turn helps you build and maintain strong bones, decreasing your risk for osteoporosis, or bone disease. Research shows that vitamin D is crucial for keeping bones healthy — warding off rickets, osteomalacia, and osteoporosis.

While there is a lot of confusion and conflicting information about the coronavirus, getting sufficient vitamin D is not controversial. The following research paper, produced by Anna Papadopoulou, DC, and published in the June 2020 issue of the Journal of Clinical Chiropractic Pediatrics (JCCP) discusses the effects of vitamin D on the developing musculoskeletal system. The full article, with references, can be seen [here](#).

By Anna E. Papadopoulou MChiro, DC, DACNB

ABSTRACT

Introduction: Vitamin D deficiency is a global public health issue and large health agencies encourage the use of vitamin D supplementation. Vitamin D is an essential hormone which is responsible for both musculoskeletal development and systemic health. The goal of this narrative review was to investigate the following clinical issues: 1) Impact of Vitamin D on the developing musculoskeletal system in the pediatric patient and the growing child's need for nutritional intake or supplementation, 2) Factors important to determine the need for supplementation and appropriate supplementation, 3) Risk for overdose of Vitamin D. **Methods:** Literature search of large search engines. Limits used: age 0-18 years, English language and published in the last 10 years. Key words used 'Vitamin

D and pediatric', 'Vitamin D and development', 'Vitamin D and deficiency', 'Vitamin D and side effects'. **Results:** One Cochrane review, two global epidemiological reviews on nutritional rickets, six guidelines on Vitamin D supplementation, and several articles on vitamin D and musculoskeletal development were identified and considered in the study. The American Academy of Pediatrics and the Canadian Pediatric Society and European guidelines recommended 400 IU/day for infant - adolescent. The US Institute of Medicine and World Health Organization recommended adequate nutritional intake prior to supplementing children 0 –1 and 1–18 years old with 400 and 600 IU/day, respectively. Clinicians must be aware of key points that would significantly affect the correct recommendation and supplementation of Vitamin D. These are history, anthropometric measurements, physical activity levels, dietary habits and sun exposure parameters

to achieve optimal musculoskeletal results. **Conclusion:** At present, 400-600IU/day Vitamin D supplementation is the daily recommendation for pediatric population based on the global healthcare agencies. Understanding the great impact of vitamin D on the musculoskeletal system, future work must be done to examine the prophylactic use of vitamin D and its appropriate adapted supplementation.

Introduction

World Health Organization (WHO), US Institute of Medicine (IOM), the Endocrine Society in the USA and the European guidelines acknowledge that vitamin D deficiency is a global public health issue and encourage the use of vitamin D, advising on supplementation and daily recommended dosage. Vitamin D is an essential hormone, which has attracted increasing attention in the last decades. It exists in two forms D3 -cholecalciferol and D2 or ergocalciferol.

Vitamin D is unique as it is both absorbed via dietary intake, in the small intestine by chylomicrons or can be synthesized by an endogenous process. The dual absorption mechanism highlights its importance. Correct absorption is thus subject to adequate nutritional intake. Fatty fish, fish liver oil, and egg yolks are typically good sources of Vitamin D2. Endogenous synthesis is the second way of producing and absorbing pre-vitamin D3.

Sun UV exposure, (290–320 nm) interacts with 7-dehydrocholesterol and is absorbed in the skin. Factors influencing the effectiveness of this process are average skin exposure to sun light, color of skin and latitude of the country. Both versions of Vitamin D (D2 and D3) are inactive until they reach the liver, where the first hydroxylation happens and the following hydroxylation occurs in the kidney. The final product is the bioactive hormone, calcitriol. This is an important hormone as it dictates the homeostasis of several minerals (calcium and phosphate) in the plasma. These minerals and the concentration of parathyroid hormone play a paramount role in the bone metabolism throughout a lifetime.

Well-being of skin, gut, liver, kidney and bone is vital for Vitamin D metabolism. Activated Vitamin D works as a hormone, and its half-life (25(OH)D) is approximately 2–3 weeks. This allows it to be a gene expression regulator, as part of immune function, cell proliferation and differentiation, and cell apoptosis. The most commonly utilized biomarker for vitamin D sufficiency is 25(OH)D and this can be measured in the blood.

The clinical questions asked here were:

1) How does Vitamin D impact the musculoskeletal (MSK) system in the developing pediatric patient and how does this translate into the growing child's need for nutritional intake or supplementation?

2) What are the specific factors that we clinicians need to consider in order to help parents decide the appropriate supplementation for their child?

3) Is overdose a concern?

Methods

Literature search of large search engines, PubMed, Cochrane library, WHO. Key words used 'Vitamin D and pediatric', 'Vitamin D and development', 'Vitamin D and deficiency', 'Vitamin D and side effects'.

Inclusion criteria: Articles in English language, Published within the last 10 years, Vitamin D supplementation consideration for healthy pediatric population 0-18 years old. Guidelines from global health agencies.

Exclusion criteria: supplementation for disease specific conditions, articles specific to premature infants. Articles commenting on Vitamin D interaction with other drugs and micronutrients. Excluded articles older than 10 years

Results

One Cochrane review, two global epidemiological reviews on nutritional rickets, six guidelines on Vitamin D supplementation, and several articles on vitamin D and musculoskeletal interaction were identified to answer the three questions reviewed.

1) What is the Vitamin D impact on the musculoskeletal (MSK) system in the developing pediatric patient and how does this translate into the growing child's need for nutritional intake or supplementation?

The American Academy of Pediatrics and the Canadian Pediatric Society, the European guidelines recommended 400 IU/day for infant through adolescent age groups. Whereas IOM and WHO recommended adequate nutritional intake and if this is not met, to supplement children 0–1 and 1–18 years old with 400 and 600 IU/day, respectively.

Homeostasis between vitamin D metabolism and parathyroid hormone ensure an efficient bone mineralization process in early infancy and childhood. Fine balance between calcium and phosphorus concentration in the bloodstream is additionally vital. Randev et al., 2018, explained that

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correct mineralization in early life safeguards against early osteoporosis in adulthood.

Shore, 2013⁷ identified that infants younger than three months are somewhat protected from Vitamin D deficiency if sufficient placental transfer from the mother has occurred. However, other studies such as Bentley, 2013 expressed their concern as it indicated that maternal calcium and vitamin D deposits are not sufficient for fully protecting the infant and supplementation is encouraged both during pregnancy and in early infancy. In terms of dosage during pregnancy, 2800 IU / day, had a positive increase in bone mineralization of offspring at both one year and six years after the supplementation.

This highlighted the importance of appropriate dosage and early vitamin D supplementation in pregnancy.

Infancy and childhood is predominantly concerned with longitudinal growth and remodeling of the axial and appendicular skeleton. On average children are expected to grow 5-6 cm and gain 2.5 kg per year until puberty, subject to gender variations. To meet these needs, the UK health department recommends 340-400 IU/day of Vitamin D. The Endocrine Society Clinical Practice Guideline and the IOM support the need of supplementation with 400IU/day in this population. Additionally they recommend at least 15 minutes of uncovered forearm and leg exposure to sunlight between May-September.

Holick et al., 2011, recommended that supplementation of 600–1000 IU/day should be considered if recommended daily sun exposures are not met. If the child is already deficient, they suggested a much higher dosage: 2000 IU/day of vitamin D for at least six weeks or 50,000 IU of vitamin D₂ once a week for at least six weeks in an attempt to normalize the blood level of 25(OH)D above 30 ng/ml.

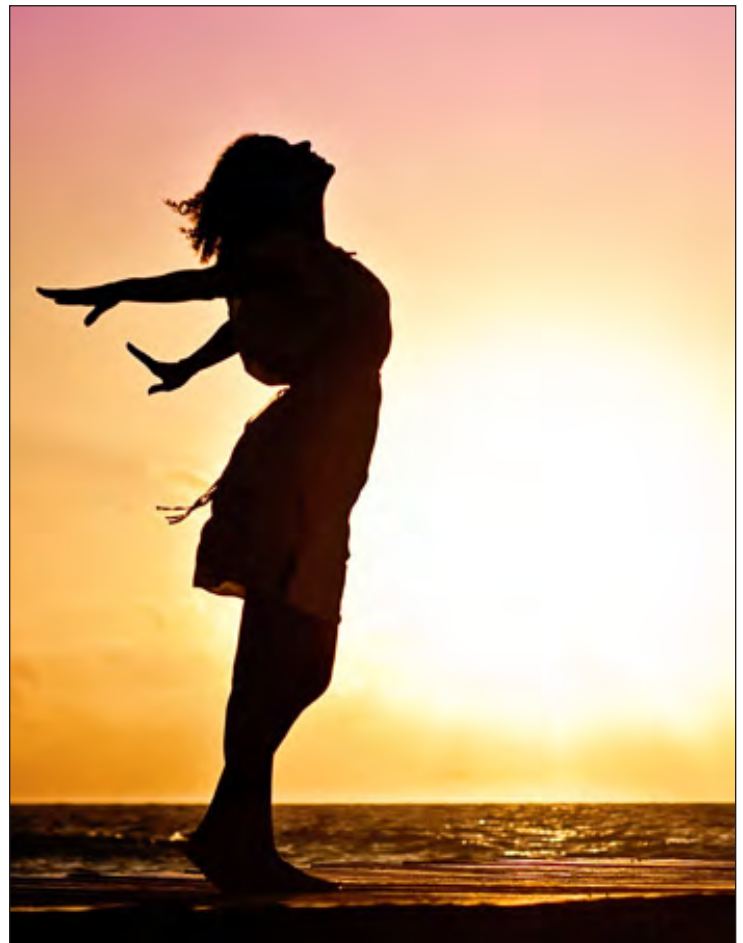
Additional adaptations of this dosage should be based on dietary vitamin D intake and overall bodyweight. Lack of agreement is seen in the statement from the European Academy of Pediatrics (EAP) which still recommends 400 IU/day during the first year of life & 600 IU/day after the first year of life (1–18 years).

The age group 9–18 years old, commonly is faced with rapid growth spurts and increased body mass, increasing the need

for dietary calcium and phosphorus to maximize skeletal mineralization and maturation. During puberty, reduction in physical activity is commonly observed in females according to the WHO Health Behavior in School-age Children survey and this gender gap increases with age. When exercise is decreased, there is less axial compression to aid bone mineralization. Similarly, if an inactive child enters a highly competitive sport, they might be more vulnerable for fracture if bone mineralization is out of balance.

2) What are the specific factors that clinicians need to consider in order to help parents decide the best supplementation for their child?

Common factors that play a significant role in appropriate supplementation of pediatric cases are: exclusive breast feeding, fortified formula, fortified nutrition in diet, average daily exercise, and daily sun exposure based on their country's latitude, cultural dietary habits, anthropometric measurements and BMI. These factors should be evaluated in the history



taking and then combined with any physical findings in the examinations.

Obesity in adolescence is a growing issue. One-third of eleven-year-old children in developed countries, in 2014 were obese. Nutritional choices in adolescence are questionable and it can be very difficult to accurately determine if sufficient vitamin D containing foods are consumed.

Obesity in adolescent children was found to have a faster exponential catalysis of 25(OH)D and parathyroid hormone compared to non-obese peers, especially females, increasing the destruction of bone minerals. This signifies the importance of considering anthropometric measurement of children when supplementing vitamin D and adjust this value according to their BMI.

One of the most commonly associated deficiencies of vitamin D in the pediatric population is nutritional rickets. Rickets was first described in the mid-17th century. Common signs and symptoms of nutritional rickets is insufficient mineralization of bone and cartilage, resulting in bowing of bones, stunted growth, and skeletal malformation. Thus rickets is the result of disruption of appropriate endochondral ossification by not properly mineralizing the osteion. Two global epidemiological reviews on nutritional rickets found that calcium deficiency is also a major component in nutritional rickets particularly in some African, Middle Eastern and Asian countries, despite their dietary lifestyle and sunshine exposure.

Rickets typically develops in infants three to 18 months of age, if the problem is due to Vitamin D bioavailability. Rickets due to lack of serum calcium can be seen up to the age of 16. Rickets characteristically has two mechanisms: first, hypocalcaemia due to inappropriate gut absorption leading to reabsorption of calcium from bones (can also lead to seizures or tetany). Secondly, alteration of parathyroid hormone can result in hyperparathyroidism, hypercalcemia, respiratory distress, muscular hypotonia, and skeletal demineralization commonly found in infants. The most effective diagnosis of rickets is done with the use of biochemical tests and x-rays (disordered mineralization and ossification of the physes of long bones).

3) Is overdose a concern?

Supplementation of vitamin D is not completely without potential adverse effects. Some signs and symptoms are weakness, nausea, loss of appetite, headache, abdominal cramps and diarrhea. However, given that the pediatric population is

likely to be deficient, the recommended dosage is very unlikely to cause toxicity. Based on the literature, it is understood that although the risk of overdosing of Vitamin D is possible, this is extremely unlikely.

Discussion

The purpose of this review was to improve understanding of the recommendations for Vitamin D supplementation for the growing child's musculoskeletal health, the required dosages, and the factors in individual patients that affect those dosages along with the risk of overdose in order to better serve my patients.

Although the recommendations vary slightly among organizations, consensus occurs in the recommendation of 400 IU/day in the infant and early childhood ages and 600IU/day in adolescent age population. Although these recommendations are fairly straight-forward, the question that we are called to answer as MSK clinicians, is whether these supplementation values are appropriate for the population we treat. For example, most of the pediatric population in developed countries is not likely to have been exclusively breastfed for the recommended time (only 42% globally are breastfed to six months age or more). Further, 144 milion children globally have stunted growth and a further 38.3 million are overweight. Add those to uncertain sun exposure and the risk for poor vitamin D status is high. Additional consideration and adaptation of recommended dosages is essential in obese patients, malabsorption syndromes, or on medications that interact with vitamin D absorption.

Therefore, it is important that we as clinicians take careful nutritional and physical activity histories of the pediatric patient particularly regarding exclusive breast feeding, fortified formula, nutrition and mean time of sunshine exposure, as well as if the family moved from a different location to current geographic latitude. Ideally, vitamin D deficiency is diagnosed based on a blood test via the GP. If access to blood tests is difficult or isn't the best first step, then the current 'over the counter' recommendation of 400 IU daily is indicated.

The WHO, in a position report in 2019, highlighted that not all health care practitioners are on board with supplementation despite exclusive breast feeding and skin pigmentation considerations. The WHO is urging primary health clinicians to be familiar with daily recommended dosages, and to be vigilant in picking up early signs of vitamin D deficiency.

Wagner et al in 2008 urged pediatricians and health care pro-

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professionals to make vitamin D supplements readily available, considering the high likelihood of deficiency. Other authors support this point. Supplementation is now recommended to be initiated within the first few weeks of life and continue throughout childhood.

Fortunately, Vitamin D supplementation provides a cost effective and easy way to tackle nutritional rickets and once again reduce its prevalence in the pediatric population around the world which will help safeguard the next generation against adult conditions such as early osteoporosis. Despite the fortification of food, the standards are variable across the globe. Thus a revision of early supplementation with higher dosage should be investigated. A very small number of articles have been currently available where investigation of 2000-5000IU/

day have been tested. This is a fast changing subject and thus results are subject to updates. We clinicians need to stay aware of this rapidly changing data as it becomes available for the betterment of our patients.

Conclusion

At present, 400-600IU Vitamin D supplementation is the daily recommendation for the pediatric population based on the large healthcare agencies. However, as primary care clinicians, these values must be modified based on the history of each case. Anthropometric measurements, physical activity levels, dietary habits and sun exposure are key points that would significantly affect the correct recommendation and supplementation of Vitamin D. Correct advice can help reduce nutritional rickets in children and safeguard the developing musculoskeletal system.

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Campus Rounds

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Cleveland University Kansas City

Cleveland University completed its Spring 2020 term virtually and started its Summer 2020 term on May 11th using virtual platforms for both lecture and lab sessions. The health center reopened on a limited basis on May 20th and began accepting new patients again on June 1st. Cleveland University also worked with the Student American Black Chiropractors Association and Student Council to coordinate town hall meetings via zoom on June 16th, 17th, and 18th for solidarity and healing.



Life University

Life University completed its Winter term virtually and started its Spring term on April 6th with nearly 100% remote instruction. The graduation ceremony scheduled for March 27th was unfortunately cancelled, although graduates still earned their degrees and were invited to participate in the July ceremony. A virtual ceremony was also held on April 3rd to recognize the graduates. Life University has also been posting videos with COVID-19 related information through their TCL: Today's Conversations on Leadership series on YouTube. Life University has a phased reopening planned to begin on July 13th with the start of the summer quarter. There are currently no confirmed or presumptive cases of COVID-19 at Life University.



Life Chiropractic College West

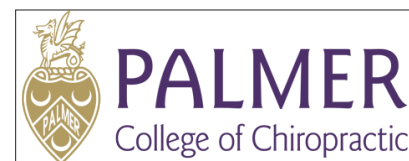
LCCW is operating virtually until further notice. LCCW has also regularly posted videos with COVID-19 related information

through the Life West Leadership Line, which is available on YouTube. The graduation ceremony scheduled for June 12th has been cancelled, with plans to reschedule in late summer. A phased reopening is planned to begin on July 13th with the start of the summer quarter. The Health Center closed briefly in early March after a shelter-in-place order for the county, and has since re-opened with modified procedures to respect social distancing. Dr. Annette Walker, Life West's Diversity & Inclusion Officer, is working to implement the Diversity and Inclusion Network, a platform for dialogue and engagement, at Life West.



Parker University

Parker University completed its winter term virtually and postponed its April 18th graduation ceremony. The university started its summer term in May online and is continuing with virtual instruction until further notice. All of the affiliated Parker clinics are also closed until further notice.



Palmer College of Chiropractic

Palmer College of Chiropractic has been approved by the Higher Education Emergency Relief Fund (HEERF), a federal program to provide emergency funding for higher education students, and will be distributing funds to eligible students. On the Davenport campus, the Bittner center (campus fitness center) reopened with restrictions on May 18th and graduation will occur in person with a two-guest limit on June 19th. The Florida campus is having its in-person graduation ceremony for both the spring and summer graduating classes on July 13th, although only graduates will be permitted to attend in person. In-person classes with restrictions and required attendance at clinic will begin for the start of the summer term

Continued on following page

Campus Rounds

Continued from previous page

on July 13th for the West campus and July 14th for the Davenport and Florida campuses. Palmer's clinics have remained open, initially without students and later with increasing levels of student involvement, throughout COVID-19. Palmer has also committed to not increase tuition for the Summer 2020 term.

Sherman College of Chiropractic

Sherman College of Chiropractic has started the Sherman Pride Student Emergency Fund for students facing financial difficulties. They have also been approved by the Higher Education Emergency Relief Fund (HEERF) and are making these funds available to eligible students. Sherman has adopted a



phased re-opening which began on May 26th with optional, appointment-only small group sessions available. On June 1st, students were able to return to the Chiropractic Health Center on a limited basis. Virtual instruction will remain in place with optional in-class options until Phase 4 is scheduled to begin on September 29th, when they plan to return to live in-person classes for the start of the fall quarter. Sherman College will be holding Lyceum as a live-streamed event.



Show Your Support for the ICA By Shopping Online

The ICA is pleased to announce the launch of our online store in collaboration with Impact Corporate Promotion (ICP). The ICA online store is your place to buy official ICA and ICA Council related apparel and gift items featuring the ICA and Council logos!

Every sale supports the ICA's programs.

This store features a wide variety of the most popular corporate apparel in the industry. Brand names including NIKE, OGIO, CornerStone, Red Kap, Eddie Bauer, and many others. There is a wide variety of apparel, hats and bags currently available. The store will be updated on a regular basis with new items.

There are no minimums, you can order as many or as few as you want or need. The listed price includes the embroidery which is done in house by ICP in the US.

A link to the store is available on the top bar of the ICA website. [Click here to shop now.](#)



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Dr. George Curry

Advanced Review of
Evidence-Based Practice



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- Advertising allows you to target ideal customers only – when you match a very personal message to a very select audience you get far greater connection.
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- Advertising adds credibility to your message – The perception that you can afford advertising is often enough to sell and resell prospects and customers alike and makes it easier to get attention for your entire message. Happily, advertising in The ICA Choice is inexpensive!
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Ad rates are on the last page of the magazine,
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The ICA Choice flagship magazine published by the International Chiropractors Association (ICA), chiropractic's oldest and most distinguished international organization. Published in a digital newspaper format for easy reading, *The ICA Choice* covers issues of importance and relevance to the practicing chiropractor; provides a forum for debate on controversial issues, and addresses topics to help the practitioner become more successful as a business person as well as a clinician. Articles written by recognized chiropractic leaders and experts in the field are timely, and compelling.

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