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Study findings on pediatric osteosarcoma

This new paper by **Jessica Dallaire, DC** was published in the November issue of the *Journal of Clinical Chiropractic Pediatrics* and is reprinted here in part. The entire case-report can be found at www.JCCPonline.com

The aim of this study is to help chiropractors and other healthcare professionals recognize the signs and symptoms that can lead to the identification of a malignant condition like an osteosarcoma, especially in cases where atypical pain presents in pediatric patients.

This case study can help provide valuable information on a condition that, while rare, could present to a chiropractor's office. It could be especially useful to those professionals who specialize in the treatment of pediatric patients.

A 13-year-old boy presented with severe knee pain resulting in the inability to bear weight. There were no obvious causes for the pain that had first developed 24 hours prior to the patient's visit to the chiropractor. Treatment primarily consisted of administering an x-ray that lead to the discovery of a malignant tumor on the right proximal tibia. The patient was sent to a pediatric hospital for further investigation which resulted in a diagnosis of primary metastatic osteosarcoma. Treatment consisted of total resection of the tumor, prosthetic reconstruction, and chemotherapy to eradicate the cancer.

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Benefits of chiropractic maintenance care documented by new research study

The research concluded that regular maintenance care was more effective than symptom-guided treatment in reducing the total number of days over 52 weeks with bothersome non-specific lower back

The scientific literature is clear that chiropractic adjustments can be beneficial for acute and chronic low pain, sciatica, and other musculoskeletal conditions. Over 1 million chiropractic adjustments are performed every day around the world and people have benefited and avoided surgery and risky medications by seeing chiropractors.

Many people who see chiropractors also do so on a maintenance basis, with the objective of preventing future episodes or exacerbation of their symptoms. Previous research has found that chiropractic can effectively prevent future back pain, but this approach hasn't been studied extensively.

Now, a Swedish study has given us some new data on the benefits of chiropractic maintenance care. The research, with the catchy title of, The Nordic Maintenance Care program: Effectiveness of chiropractic maintenance care versus symptom-guided treatment for recurrent and persistent low back pain—A pragmatic randomized controlled trial, can be read here.

In this study, the authors started with a group of people who came to see a chiropractor for recurrent or persistent back pain. Of these patients, the researcher took those patients who experienced "definite improvement" from the chiropractic care and entered them into the main part of the study. These 328 patients were then randomly assigned to two groups. The first group received Maintenance Care (MC): they were put on a chiropractic adjustment schedule

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IACP

The mission of the Idaho Association of Chiropractic Physicians (IACP) is to act as the unified voice, leader and stalwart supporter of the individual licensed doctors of chiropractic and supporting associates who provide exceptional health care and wellness to the patients and communities of Idaho. In supporting our Idaho chiropractic physicians, the IACP will work diligently to protect, enhance and build opportunities for the chiropractic industry and increase public access to chiropractic care.

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In This Issue

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"Join the Pack" — Become a member of the IACP

The IACP acts as a resource, representative and leading advocate for the chiropractic industry in Idaho. We cannot continue to properly serve the chiropractic profession without the commitment and support of exceptional industry leaders, such as yourself. The IACP Board and its members believe that membership in the Association is and should be mutually beneficial to both the Doctor and the IACP, which makes it a perfect cooperative relationship. As a member, you will have multiple opportunities to obtain learning and marketing opportunities, at a discounted rate, through membership, as well as, have an opportunity to utilize the services of the IACP team and its Board. You will also have an opportunity to get involved in important issues, from the center, along with other industry leaders and spokespeople. At the same time, the Association continues to grow and provide broader services to the industry with your support. Join

The Nordic Maintenance Care program

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that was determined by the chiropractor. The second group was the control group, and their chiropractic care was symptom-guided: the patients would come in for an adjustment when they felt like they needed one.

The authors describe the philosophy of the two types of care:

"In the MC group, the aim was to schedule patients before substantial pain reoccurred (i.e. controlled by the clinician), while in the control group patients were instructed to call in if and when the pain recurred (patient controlled). If patients in the control group made a new appointment, they were treated at one or several sessions until maximum benefit was reached and were once again instructed to call when in pain. If patients in the MC group experienced a new pain episode prior to the next scheduled visit, they were instructed to call for an earlier appointment and were cared for accordingly until they were ready to be scheduled for preventive visits again. MC visits were scheduled according to the clinicians' judgement of patient need, but at intervals of no more than three months."

At the completion of the study, the authors looked at the total number of days of bothersome low back pain in all subjects. The study concluded: "MC was more effective than symptom-guided treatment in reducing the total number of days over 52 weeks with bothersome non-specific LBP but it resulted in a higher number of treatments. For selected patients with recurrent or persistent non-specific LBP who respond well to an initial course of chiropractic care, MC should be considered an option for tertiary prevention. In patients with recurrent and persistent LBP who responds well to an initial course of manual therapy, MC resulted in a reduction in number of days with bothersome LBP per week, compared with symptom-guided treatment. In total, the MC group had on average 12.8 fewer days with bothersome LBP over 12 months. The effect of the intervention was achieved at the cost of 1.7 additional visits to the chiropractor. For patients with recurrent and persistent LBP who are selected according to evidence-based criteria, MC should be considered."

About the study:

Non-specific low back pain (LBP) is one of the most common and costly healthcare problems in society today. The burden of disabling LBP on individuals, families, communities, industries and societies is substantial and is now the leading cause of activity limitation and work absence in the world. In Sweden (2012) 12% of the total cost of musculoskeletal disorders arises from spinal pain. Given that LBP is often recurrent and has a large negative impact on society, it seems logical to focus on preventive strategies. In general, interventions aimed at prevention of chronic medical conditions are often described as either secondary or tertiary strategies.

Secondary prevention aims to reduce the impact of a condition (LBP) that has already manifested. This is usually done by encouraging strategies to prevent re-injury such as performing exercises. Tertiary prevention aims to reduce the impact of persistent or chronic LBP. This is usually done by helping people manage long-term, often complex pain conditions in order to improve their quality of life and ability to function.

It is common for chiropractors to recommend "maintenance care (MC)", i.e. preventive consultations/visits for recurrent and persistent musculoskeletal pain and dysfunction. MC can be viewed as a form of secondary or tertiary prevention and may include manual therapy, individual exercise programs and lifestyle advice delivered in regularly spaced visits over longer periods of time.

Exactly how MC works is poorly understood but the main hypothesis is that treatment may improve biomechanical and neuromuscular function and address psychosocial issues, thereby reducing the risk of relapse into pain. MC is traditionally employed as a long term-approach described as: "…a regimen designed to provide for the patient's continued well-being or for maintaining the optimum state of health while minimizing recurrences of the clinical status" and "…treatment, either scheduled or elective, which occurred after optimum recorded benefit was reached, provided there was no evidence of relapse."

Pediatric osteosarcoma of the knee: a case-report

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Pediatric malignant tumors are typically very aggressive; therefore, early detection of clinical presentations and timely intervention are crucial to improve the outcomes in pediatric patients with primary metastatic osteosarcoma. This particular patient was seen at the right time and a later diagnosis would have likely impacted his prognosis. This case report provides a good example of when to refer a patient. Articular manipulation in this case would have harmed the patient.

Introduction

Despite its rarity, osteosarcoma (OS) represents the second most common primary malignancy of bone, with approximately 800 new cases reported in the United States each year. Of these 800 cases, half of them involve the pediatric population, and is therefore considered the most common primary malignancy tumor of bone affecting children. Chances are that a chiropractor or a healthcare professional will never encounter a case of OS. Nonetheless, it is important that these professionals can properly recognize the signs and symptoms since, in the rare instances where a diagnosis of OS is made, early detection will provide the patient with the best chance of survival. For this reason, this case report will be of particular interest to those professionals who specialize in pediatric care.

An osteogenic sarcoma is characterized by the production of malignant osteoid arising from primitive mesenchymal bone-forming cells. 42% of OS are reported in the femur (75% distal), 19% in the tibia (80% proximal) and 10% in the humerus (90% proximal). On rare occasions, especially in older adults, OS can develop in the proximal bones like the pelvis (8%) or the skull and jaw (8%). Rapid bone growth appears to be a predisposing factor, which could explain why it is most commonly found in the metaphyseal area, adjacent to the growth plate of long bones and why it happens during the adolescent growth spurt (15-17 years for males and 13 years for females). A study, consisting of 962 patients that developed OS between 1981 and 2000, suggested that taller stature is possibly a risk factor for individuals who are 18 years and younger. This is most likely because of their rapid growth velocity, increasing cellular division and resulting in a higher probability of dysfunctional cells. Additionally, approximately 1% of people with Paget's disease will develop an osteosarcoma as a result of the abnormal bone remodeling. Other rare genetic disease like the germ-line form of retinoblastoma, Li-Fraumeni syndrome (Germ-line TP53 mutation), Rothmund Thomson syndrome, Werner syndrome, Diamond Blackfan anemia and Bloom syndrome will predispose patients to OS. Finally, ionizing radiation exposure is an environmental risk factor that can cause secondary osteosarcoma. In United States, the incidence of OS in individuals 20 years and younger is slightly higher in males (5.1 million per year) than in females (4.5 per million per year) as well as a little higher in African American than in Caucasians.

Clinical Features

A 13-year-old Caucasian boy presented to a chiropractor with right knee pain after playing soccer the previous evening. No obvious trauma was sustained during the soccer game that could easily explain the onset of pain. The source of the pain was located on the proximal tibiofibular articulation and on the patella, and radiated caudally to the ankle. The patient characterized it as deep and intense pain that felt like electric shocks. In the weeks leading to the onset of pain, the patient felt normal and experienced no nausea, loss of appetite or fatigue. Additionally, the pain was not waking him at night.

Clinical Findings

Relevant history, comorbidities and/or Interventions

With the exception of suffering from immune thrombocytopenic purpura at the age of one and being gluten intolerant, the patient led a very healthy lifestyle. In the year leading up to his diagnosis, the patient was seen four times by the same chiropractor for a mild concussion and for fat pad syndrome on the right foot. Both conditions were resolved.

Physical Examination Findings

Upon physical examination, the patient could not bear weight on the affected leg, and consequently presented with a limp. The extension, internal and external rotation of the knee were normal, however he could not flex more than 30 degrees actively and passively. The patient was also unable to perform resisted flexion or extensions and the active or passive range of motion of the right ankle all caused pain (flexion, extension, inversion and eversion). Finally, when asked to resist extension of the toes and ankle, the patient was unable to complete the task. The neurological exam, including fine touch and pain of L1 to S1, found nothing abnormal. Patellar and achille reflexes were normal. Vibration on the proximal tibiofibular articulation was painful. Upon further observation, minor edema was noted with no bruising. When examining the patient using light palpation, any contact of the proximal fibula and tibia resulted in severe

pain. The palpation of the patella, quadriceps (including the patellar tendon), hamstrings and gastrocnemius were not painful.

Diagnostic Focus and Assessment

The two first working differential diagnosis were a sprain of the right proximal interosseous membrane by overuse of the articulation and a fracture of the lateral tibial plateau. Kinesiotaping was done to help drain the swelling and to stabilize the knee join. No articular manipulation was carried out on the knee, ankle or spine. The patient was sent for X-rays, as the symptoms were too severe, to eliminate a fracture possibility. The chiropractor recommended the patient be fitted for crutches to avoid weight bearing until a firm diagnosis was reached. The X-rays showed a 5x4x4 cm lesion in the proximal metaphyseal area of the right tibia. It was mixed (lytic and blastic) with cortical destruction, accompanied by an interrupted periosteal reaction. Based on the results, the radiologist suspected a tumor (Figs 1-2), and immediately recommend the chiropractor to refer the patient to a children's hospital for further testing. The patient's family physician was also notified.

That same week, an MRI, a pulmonary X-ray, a biopsy and a radionuclide bone scan were carried out. The pulmonary x-ray showed little blastic spots on the four lobes and the other tests confirmed the first hypothesis. The diagnosis of primary metastatic osteosarcoma came two weeks following the patient's initial x-ray. The orthopedic surgeon would

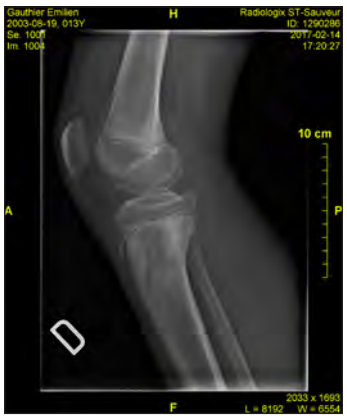

Figure 1. First lateral X-rays

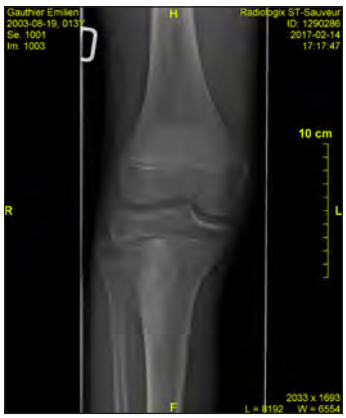

Figure 2. First anterior X-rays

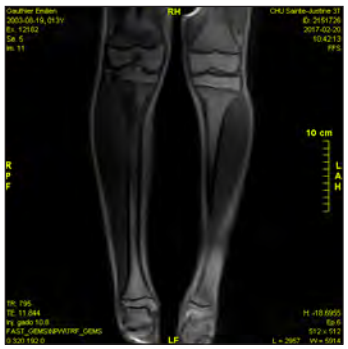

Figure 3. MRI

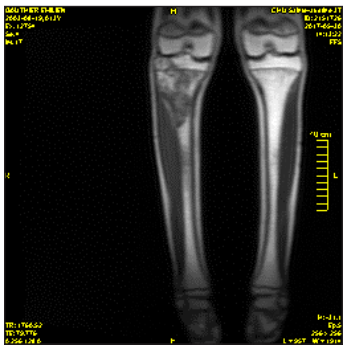

Figure 4. MRI

not provide a prognosis due to the highly variable responses to chemotherapy and limb surgery among patients.

Discussion and limitations

This case report is not a chiropractic case per se and is not meant to augment or improve treatment options for osteosarcoma. Survival rate has been the same since 1990 and more research should be done in this direction to improve the overall prognosis for these patients. It is also limited because it is a single case, so it cannot be generalized.

That said, this case study can help provide valuable information on a condition that, while rare, could present to a chiropractor's office. It could be especially useful to those professionals who specialize in the treatment of pediatric patients.

To reiterate, this primary osteogenic sarcoma commonly appears as sporadic intense pain in a long bone, with a predilection for the knee, usually caused by stretching of the periosteum. Pain, when severe and sudden, could also result from weakening of the bone and development of stress fractures. Up to 15% of pediatric patients will present a pathological fracture. Pain may worsen at night or with activity and can present local tenderness and a warm palpable mass. Increased skin vascularity may be palpable and pulsations may be detectable too. There is a decreased range of motion of the joint and it can lead to a limp if the lower extremities are affected. As we saw in this case, it can affect also the nearest articulations by decreasing their range of motion or their muscle resistance. Risk factors like age (15-19) or a recent grow spurt, when putted together with the previous symptoms should flag the need for testing.

It is also important for chiropractors that administer X-rays in their office to familiarize themselves with the radiological traits of OS. X-ray results should be examined for one or more of the following indications: medullary destruction and cortical bone interruption, aggressive periosteal reaction (e.g., codman triangle), a sunburst or a lamellated reaction (more seen in Ewing's sarcoma) and a soft tissue mass. The tumour will appear fluffy or cloudy and reflects a combination of bone production and calcified matrix. The differential diagnoses to consider are other malignant tumor like Ewing's sarcoma (differentiated by radionuclide bone scan), chondrosarcoma, Rhabdomyosarcoma, leiomyosarcoma, osteogenis lymphoma, bone metastasis (generally 40 yo and older) and other conditions like eosinophilic granuloma (histiocytosis), big cells tumour, aneurysmal bone cyst and osteomyelitis.

The radiological apparence of a low-grade osteosarcoma

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may also be confused with fibrous lesions like fibromatosis and fibrous dysplasia and, in certain circumstances, can only be differentiated by DNA testing (MDM2 and CDK4). OS can also be mistaken with other diagnosis like paget's disease, non-ossifying fibroma, myositis ossificans, fracture callus, ossifying hematoma, osteochondroma, desmoplastic fibroma, osteoma and giant bone island. On a clinical plan, a study of 102 patients diagnosed with OS showed that there was a broad spectrum of misdiagnoses by medical doctor. The most common diagnosis was tendinitis, which was the case for 32 patients. According to Robert Grimer, who studied 1,460 patients with newly diagnosed sarcomas, the median duration of symptoms from first patient-identifiable abnormality to diagnosis is 16 weeks.Fortunately, in this particular case study, the severity of the knee pain experienced by the patient led to the immediate decision to order X-rays.

Conclusion

Because 18% of OS have already spread at the time of diagnosis and that the metastasis have a very poor prognosis, as seen above, early diagnosis is incredibly important. In the hope that this case study will help contribute to the clinical practice guidelines of when not to manipulate an articulation of a pediatric patient and rather refer to extensive testing.

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Developing the core of chiropractic leadership

By Sharon Vallone, DC, DICCP, FICCP

Time passes unnoticed as we do what we love to do in our offices on a daily basis. Working with children and their families fuels the passion we have as chiropractors to serve their health care needs with a safe and effective alternative to the barrage of chemical and surgical interventions that are too readily offered to treat symptoms without first exploring and correcting the root of the problem. The foundation of health rests on the triad of chemical, structural and spiritual/emotional balance and although these interventions may save lives in emergent situations, any long-term improvements in health must address all of these.

As chiropractors, we address biomechanical dysfunction – we adjust the subluxation. Our treatment restores movement to the joint in turn affecting the local neural, vascular and lymphatic activity while restoring smoother communication to the central nervous system. The profound interplay between functional movement and neurology, therefore physiologic homeostasis, is being explored by other scientific bodies giving credibility to the original chiropractic premise. Therefore, we too need to remain on the cutting edge forever questioning, exploring and researching why what we offer our patients is so effective.

Time may continue to pass unnoticed, But WE must pause now and take notice! Our profession needs to continue developing its leadership to take us into the future. Leadership is about stepping up to whatever challenges are before us.

Personally and professionally, one of the first requirements of leadership is being an effective and powerful communicator. Whether it is your communication to (or about) your patients or other professionals, tweeting and blogging, to being a public speaker or author, few of us are born with the skills but are very capable of acquiring them. We acquire them through education and experience. Practice! Practice! Practice! There are books, podcasts, blogs and professional organizations that one can utilize to improve communication skills that will make you an effective leader in all of your pursuits.

Leadership is also developed by pursuing advanced education to hone specific interests or to explore completely new ones (like public speaking, professional writing or coaching the Special Olympics Baseball Team!). Those new ideas and techniques will be applied, perhaps, for example, in the office setting with patients or in the community, and then, with repetition and experience, sharing them as an instructor ranging from small groups to a university setting. Some of our leaders administrate in a social media forum where rapid fire ideas about managing your practice, chiropractic techniques and individual clinical cases are exchanged on a daily basis. Some of our leaders share their wisdom with us as chiropractors helping us learn to care

for ourselves, support our own passion to serve, or to build healthy, ethical financial stability to care for our families. The opportunities to teach are diverse and plentiful.

I can see some of you shaking your heads and declining the challenge. But I assure you, you are already on the path. Leadership begins in the home with our families. To quote a popular meme: "Children will follow what they see you do, not what they hear you say." If what we accomplish in this life is to raise healthy, happy, responsible children to adulthood, we've accomplished a very important goal.

Leadership in the workplace is demonstrated by our integrity, fairness, dependability and self-motivation. This again, is the example we set but also the bar we raise for our employees as we hold them accountable to develop those same strengths in their interaction with you and your patients.

Leadership with our patients is provided by our service to educate and support them as they seek their own journey to health. We can only bring our patients as far as we are willing to work ourselves. It is a collaborative effort on many levels!

We all have the opportunity to provide leadership in our volunteer activities in our community and in our profession. Having the courage to step forward and volunteer, knowing you may not immediately succeed but being courageous enough to try and ask for support in areas you may need mentoring. To be willing to put in the time and do the most mundane or seemingly insignificant task that might be the cornerstone of accomplishing the ultimate goal for an individual (like a political campaigner who licks the envelopes for contribution requests) or an organization (like handing out playbills at your child's orchestra performance)… No service is too small and each person who offers to help is a leader, an example of selflessness.

Professionally your leadership may move you to a role in your state, nationally or even internationally. We do not all have the desire to serve in this capacity but without those who do, we would have no forward progress let alone security to retain the gains we've already made. We are a pyramid of leaders each holding the next one on our shoulders.

Leadership doesn't always put each one of us in the spotlight. It often can be helping others be in the spotlight. A leader may help you rehearse your talk for the PTA, or edit your submission to the local newspaper. A leader may pass on an opportunity to appear on TV or request you represent the profession in front of the state legislature because they will be out of town. A true leader may be an excellent delegator who can identify and encourage the best person for the job to take the lead.

I have been blessed with the opportunity to be mentored by many of the great leaders, many in the chiropractic profession, too numerous to list without fear of leaving an important person out. To them, I am forever grateful for molding me both personally and professionally. I have also the joy of being touched by so many of our young leaders who hold the promise of our future. I encourage them to, in the words of a popular author, "Rise Strong!". In the words of the woman, Dr. Lorraine Golden, who showed me my own future in chiropractic:

"SERVICE is the best public relations that the chiropractic profession can ever have. We should never start any project with the sole purpose of getting something out of it as far as our profession is concerned. If the project is begun and carried out with the idea of serving the public – or a group of people in the general public – then it cannot help but succeed when it is pursued with the firm belief that it WILL succeed. There is work to be done– much work – so there must be people to do that work. When the foundation of a program is simply that of service, then individual differences are submerged in the sea of common interest. What better unity can be hoped for than the binding force of accomplishing together some project that seeks only to benefit persons outside the profession?"

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The chiropractic solution to an alarming epidemic

By: Dr. Mark N. Charrette

The opioid epidemic is a national tragedy. Death from a drug overdose, mainly opioid overdose, is the leading cause of death in adults under age 50, kills 1,000 more people than breast cancer, 18,000 more people than car accidents, and has surpassed the AIDS epidemic.[2,3,4,5,8] The opioid epidemic is destroying our communities, and it is getting worse. It may not take much more time before most Americans know of someone or a family affected by this epidemic.

The opioid epidemic was declared a public health emergency in 2017. 66% of overdose deaths involve these dangerous and addictive drugs. The rate of drug overdose deaths in the U.S. tripled from 1999 to 2016 where there were 63,600 deaths.[1] Moreover, life expectancy for U.S. adults has declined for the first time in twenty years.[2,7,8]

The death rate from synthetic opioids rose over 88% per year since 2013.[8] Each day, in the U.S., 116 people die from these opioid drugs. According to the 2018 World Drug Report, pharmaceutically produced opioids accounted for over 75% of all drug overdoses worldwide.[9]

What is the reason for this? The answer is simple. It stems from the over-prescription of highly addictive painkilling drugs like oxycodone, hydrocodone, fentanyl, and morphine. In a recent US Surgeon General Report, it stated that more Americans use prescription opioids than smoke cigarettes.[10]

A UNIQUELY AMERICAN PROBLEM

Surprisingly, 99% of the hydrocodone plus 81% of the oxycodone sold in the world is consumed by Americans. This is approximately 30 times more than medically necessary for the population of the US.[11] West Virginia, a state with 1.8 million residents, was shipped 780 million hydrocodone and oxycodone pills between 2007 and 2012. That equals 433 pills for every person in the state, including children. During that same period, more than 1,700 residents died from hydrocodone and oxycodone overdose.[12] From 2010 to 2016, BlueCross/BlueShield insurance claims involving opioid dependence increased by 500%.[3] Research shows that more than half of people who use opioids for three months will still be using them five years later. Nearly 80% of heroin addicts reported that they began using painkillers such as oxycodone and hydrocodone.[13]

ARE OPIOIDS NEEDED FOR PAIN?

Oxycodone (Oxycontin) began being sold in 1996. Later that decade the U.S. National Institute on Drug Abuse (NIDA) stated, "pharmaceutical companies reassured the medical community that patients would not become addicted to prescription opioid pain relievers, and health care providers began to prescribe them at greater rates. This subsequently led to widespread diversion and misuse of these medications before it became clear that these medications could indeed be highly addictive."[17] In 2015, it was estimated that two million Americans, due to prescription opioid pain medications, suffered from substance use disorders.[18]

Though non-opioid pain relievers have many risks, the occurrence of death from overdose and addiction is much lower. The *Journal of the American Medical Association* (JAMA) has published research that suggests that the non-opioid medications ibuprofen and acetaminophen may work just as well.[14] Government funded research published in *JAMA* in 2018 also shows that patients dealing with chronic back pain or osteoarthritic pain in the hip and knee did not expe-

rience better pain-related function than those taking non-opioid medications which are far safer.[15]

SOME POSITIVE CHANGES

In West Virginia, Senate Bill 273 "Reducing Use of Certain Prescription Drugs" was recently signed into law. The purpose of the bill is to reduce the overuse of prescriptions of opioids and create a method to provide other treatment plans rather than prescribing narcotic painkillers. Under the bill, health care practitioners treating a patient "for any of the myriad conditions that cause pain" will be required to refer the patient to alternative treatments before prescribing an opioid. West Virginia's new law will also require insurance companies operating in the state to cover at least 20 visits to alternative therapy providers for treatment of pain. And, patients will be able to seek treatment from alternative therapy providers without a doctor's referral.[16]

The American Academy of Neurology has released a new position statement regarding opioid medications. "Whereas there is evidence of short-term pain relief, there is no substantial evidence for maintenance of pain relief or improved function over long periods of time without incurring serious risk of overdose, dependence, or addiction."[19]

CBS News reported on April 19th of this year that new data shows prescriptions for opioid painkillers showed their biggest drop in 25 years. An average nationwide drop of 9% for opioids filled by retail and mail-order pharmacies. All 50 states and the District of Columbia had declines of more than 5%.[23]

NON-DRUG ALTERNATIVES

Musculoskeletal care is the number one cost in American health care today which means that structural imbalances are causing degenerative neurophysiological deficits are costing Americans more than any other condition. The chiropractic profession is positioned to be at the forefront of the solution to this devastating situation.

Chiropractic care can offer those patients with musculoskeletal problems a drug-free alternative. Chiropractors have a scope of practice that enables them to examine, x-ray, and adjust the patient from head to toe. Balancing the body, starting with the pedal foundation, utilizing custom stabilizing orthotics to establish a symmetrical base is necessary. Most patients develop asymmetrical pronation of the feet, so examining and scanning the feet is the place to start as custom stabilizing orthotics are clinically proven to reduce low back pain.

A recent US Surgeon General Report states that more Americans use prescription opioids than smoke cigarettes.

By examining the patient structurally from the ground up, functionally, and neurologically, an accurate assessment of the patient can be obtained. We know that the chiropractic adjustment has a predictable effect on the body's natural pain relievers which involve, endorphins, enkephalins, catecholamines, dopamine, serotonin, and many more. Chiropractors are also able to utilize other therapies such as laser therapy, muscle stimulation, cryotherapy, decompression therapy, and many more that have a positive effect on pain. These therapies are effective as they promote the body's innate healing mechanisms. Other therapies such as massage and acupuncture can complement chiropractic care or be utilized separately.

Many supplements including curcumin, astaxanthin, boswelia, bromelain, and ginger, affect pain and inflammation by lowering C-reactive protein and inhibiting both the activity and the synthesis of cyclooxygenase-2 (COX2) and 5-lipooxygenase (5-LOX).[20]

Modifying diet can also help with musculoskeletal symptomatology. Consuming more animal-based omega-3 fats along with reducing intake of processed foods will create less inflammation systemically. Additionally, patients can eliminate or radically reducing consumption of grains and sugars which will have the same effect.[20]

WE ALL MUST HELP

With deaths from opioid overdose increasing at an alarming rate (nearly 20% per year) may I suggest that we all make it a priority to educate our fellow healthcare practitioners and patients on the realities of opioid use. Aided by some of the information in this article we can understand the in-

Continued on next page

The chiropractic solution to an alarming epidemic

Continued from last page

credible catastrophe that is now occurring in the American health care system. Chiropractors educating the public and other healthcare professionals can make a difference in the number and amount of opioid prescriptions in the U.S. A dramatic decrease in the prescribing of these highly addictive substances must occur, and a grass-roots educational effort will surely help. You can join the fight right now by visiting the Foundation for Chiropractic Progress, which has the Opioids 1.0 and 2.0 toolkits that help you launch your campaign for chiropractic as a safe alternative to painkilling drugs. Information, banners, patient information, and more resources have been assembled for your use. My sincere thanks to everyone who is engaged in this monumental task.

Dr. Mark Charrette is a 1980 summa cum laude graduate of Palmer College of Chiropractic in Davenport, Iowa. He is a frequent guest speaker at twelve chiropractic colleges and has taught over fourteen hundred seminars worldwide on extremity adjusting, biomechanics, and spinal adjusting techniques. His lively seminars emphasize a practical, hands-on approach. Dr. Charrette is a former All-American swimmer, who has authored a book on extremity adjusting and also produced an instructional video series. Having developed successful practices in California, Nevada, and Iowa, Dr. Charrette currently resides in King George, Virginia.

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By Dr. Ray Foxworth, DC
President ChiroHealthUSA

One of the biggest struggles I see doctors having in practice today is hiring and maintaining a strong team. Although we are small businesses, thinking like a big business when it comes to building a team, and following the examples of successful companies across the country, can and will help you flourish in practice. What successful companies know is that happy employees help a business thrive. And losing employees costs money (advertising, interviewing, training), time with lost productivity, and increases customer service complaints and errors, which impacts your other employees, and more importantly, your patients.

Last week, a friend visited her chiropractor and, once again, there was an unfamiliar face at the front desk. She commented that, for the past year, each time she goes into her provider's office, the clinic has new staff. She has been a patient in the clinic for a decade but admits that she is annoyed each month when she walks in and sees someone new. Although not all turnover is avoidable, there are some things that we can do as business owners to increase employee engagement.

1. Make your employees feel like assets, not just expenses, to your company. Doing so helps your team to feel secure in their jobs. Assign them goals and responsibilities so that they can see how their contributions are making an impact on the business. For example, our front desk CA is responsible for collections and patient appointments. She reports weekly on the number of cancellations, and rescheduled appointments. Additionally, she reports on the total collected each week. You would be surprised how quickly different aspects of your business improve when they become the responsibility of your team.

Good employees want to please you, and when you set clear expectations and goals, they will work hard to meet and exceed those expectations. This follows a simple principal: whatever can be measured, can be improved. Set goals and expectations for collections, specifically for the front desk versus insurance collections.

A few years back, in staff meetings we were seeing 20 to 25% missed appointments and we focused on getting the number lower but no matter what we did, it still seemed to hover in that range. I then suggested, let's not focus on the negative, let's focus on our KEPT appointment ratio. Now,

we were focused to get the number higher each week and it worked! There is something that happens in our brain when we change our perspective and try to raise a number versus lower a number. It is almost counter-intuitive but it worked.

2. Provide and encourage opportunities for training and career growth. A 2018 study on employee engagement found that 86% of millennials would stay with a company that offered career training and development. There are plenty of opportunities for online training on everything from customer service to billing and coding. Take your team to conventions and seminars. This offers you the chance to help expand their knowledge and encourages team bonding. Nothing gets my team more pumped about growing and building the practice than interacting with other clinic employees from across the state or country.

3. Make them feel appreciated. Monetary bonuses are nice, but recognizing them for a job well done goes a long way toward creating loyalty. Make them feel that their contributions to the practice are essential. When employees feel unappreciated and undervalued, they look for employment elsewhere.

Sit down and evaluate your employees and ask yourself, "what can I do to help them succeed? Do they feel appreciated? How can I help them be better at their jobs?" When you start by taking care of them, they will go above and beyond to take care of you, and your patients. Changing your mindset to seeing them as business assets, and not business expenses, will improve employee engagement and satisfaction and help you achieve practice success. Looking for free online resources for you and your team? Check out the ChiroHealthUSA weekly webinar series.

Dr. Ray Foxworth is a certified Medical Compliance Specialist and President of ChiroHealthUSA. A practicing Chiropractor, he remains "in the trenches" facing challenges with billing, coding, documentation and compliance. He has served as president of the Mississippi Chiropractic Association, former Staff Chiropractor at the G.V. Sonny Montgomery VA Medical Center and is a Fellow of the International College of Chiropractic. You can contact Dr. Foxworth at info@chirohealthusa.com or 1-888-719-9990 or visit the ChiroHealthUSA website at www.chirohealthusa.com. Join us for a free webinar that will give you all the details about how a DMPO can help you practice with more peace of mind.

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Were you pain free this morning when you got out of bed?

Did your hips and knees ache? Did your hands feel stiff when you poured your morning brew? Many brush off these kinds of aches and pains, thinking they're just normal signs of aging. But, as the years pass, some find the pain intensifies, and begin to rely on regular doses of aspirin in the morning — NOT a good choice or a solution.

As we experience pain and swelling in our fingers, wrists, knees or any joint, it's easy to jump to the conclusion that our joints are "wearing down" from use, like car parts. We may even think we're developing arthritis. But our bodies are not made up of mechanical pieces with built-in obsolescence; they are made up of living cells that can actually strengthen and grow when fully nourished and used properly.

Many things can lead to chronic joint pain. More often than not, it is the simmering fires of inflammation, not old age. The pain that you feel is your body's way of telling you that it's irritated and needs your help. So instead of brushing it off or tuning it out with pills, take the time to listen to your body. Chronic inflammation plays a central role in some of the most challenging diseases of our time, including rheumatoid arthritis, heart disease, diabetes, asthma, and even Alzheimer's.

Make healthy food choices: Our diets play an important role in chronic inflammation because our digestive bacteria release chemicals that may spur or suppress inflammation. The types of bacteria that populate our gut and their chemical byproducts vary according to the foods we eat. Some foods encourage the growth of populations of bacteria that stimulate inflammation, while others promote the growth of bacteria that suppress it. Fortunately, you are probably already enjoying many of the foods and beverages that have been linked to reductions in inflammation and chronic disease. As long as you are not allergic to any of these foods or beverages, they include the following:

• **Fruits and vegetables**. Most fruits and brightly colored vegetables naturally contain high levels of antioxidants and polyphenols — potentially protective compounds found in plants.

• **Nuts and seeds**. Studies have found that consuming nuts and seeds is associated with reduced markers of inflammation and a lower risk of cardiovascular disease and diabetes.

• **Beverages**. The polyphenols in coffee and the flavonols in cocoa are thought to have anti-inflammatory properties. Green tea is also rich in both polyphenols and antioxidants.

This healthy living information is provided by your Doctor of Chiropractic and the Idaho Association of Chiropractic Physicians (IACP) .

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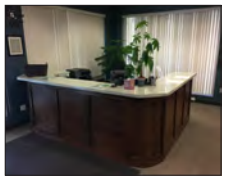


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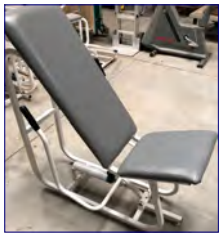

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Chiropractic News

Vitamin D update

Vitamin D is of public health interest because its deficiency is common and is associated with musculoskeletal diseases, as well as extraskeletal diseases, such as cancer, cardiovascular diseases, and infections. Several health authorities have reviewed the existing literature and published nutritional vitamin D guidelines for the general population. There was a wide consensus that serum 25-hydroxyvitamin D [25(OH)D] concentration should be used to assess vitamin D status and intake, and that musculoskeletal, and not extraskeletal, effects of vitamin D should be the basis for nutritional vitamin D guidelines. Recommended target levels for 25(OH)D range from 25 to 50 nmol/l (10 to 20 ng/ml), corresponding to a vitamin D intake of 400 to 800 International Units (10 to 20 µg) per day. It is of concern that significant sections of the general population do not meet these recommended vitamin D levels. This definitely requires action from a public health perspective.

Vitamin D deficiency in children can have adverse health consequences, such as growth failure and rickets. In 2008, the American Academy of Pediatrics increased its recommended daily intake of vitamin D in infants, children, and adolescents to 400 IU. Infants who are breastfed and children and adolescents who consume less than 1 L of vitamin D—fortified milk per day will likely need supplementation to reach 400 IU of vitamin D per day.

Vitamin D is a pro-hormone, which means that it must be activated by something to act efficiently in the body. Vitamin D comes in two major forms: vitamin D3 and vitamin D2. D3 is the type that is activated by sunlight and the type that occurs naturally in foods. Vitamin D2 is often used for fortifying foods like fruit juice, milk, and infant formula. Vitamin D is imperative in many bodily functions. It is a fat-soluble vitamin that promotes calcium absorption in the intestines maintaining calcium levels and normal bone mineralization. Other major functions include encouraging cell growth, improving immune and muscle function, and reducing inflammation. A vitamin D deficiency can lead to an increase in infections or illnesses and even muscle loss.

This recommendation is based on expert opinion and recent clinical trials measuring biomarkers of vitamin D status. It is also based on the precedent of preventing and treating rickets with 400 IU of vitamin D. In addition to dietary sources, exposure to ultraviolet B sunlight provides children and adults with additional vitamin D. Although the American Academy of Pediatrics recommends keeping infants out of direct sunlight, decreased sunlight exposure may increase children's risk of vitamin D deficiency. Vitamin D may reduce the risk of certain infections and chronic diseases. More info: https://www.aafp.org/afp/2010/0315/p745.pdf

Chronic back pain may raise risk of mental health problems

A study, involving almost 200,000 participants, finds that individuals who have back pain are more likely to also experience a range of mental health issues. Knowing about these links could form a more successful treatment plan for both sets of conditions.

Back pain is a leading cause of disability across the globe. In fact, it causes more global disability than any other condition. According to the Global Burden of Disease study, lower back pain affects almost 1 in 10 people. There is also a wealth of evidence that back pain negatively impacts quality of life and heightens the risk of other physical health problems. Additionally, it comes with substantial healthcare cost.

One earlier study of note used data from the World Mental Health Survey and found that chronic back or neck pain was associated with increased risk for mood disorders, alcohol abuse, and anxiety disorders.

The latest and largest study to investigate the connections between back pain and psychological illness in LMICs was published in the journal *General Hospital Psychiatry*. The research team – headed up by Patricia Schofield and Brendon Stubbs from Anglia Ruskin University in the United Kingdom – took data from 190,595 individuals aged 18 or older across 43 countries, making it the largest study of its type. Of the 43 countries, 19 were low-income and 24 were middle-income.

The analysis of the questionnaire data showed that, when compared with people without back pain, those who did experience back pain were more than twice as likely to experience one of five mental health conditions – anxiety, depression, psychosis, stress, and sleep deprivation.

Continued on next page

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People with chronic back pain were also three times more likely to experience a depressive episode and 2.6 times more likely to experience psychosis. Interestingly, the results were relatively similar across all 43 LMICs, regardless of their standing on the socioeconomic ladder.

"Our data shows that both back pain and chronic back pain are associated with an increased likelihood of depression, psychosis, anxiety, stress, and sleep disturbances. This suggests that back pain has important mental health implications which may make recovery from back pain more challenging.

Chronic pain common in adults with anxiety or depression

Research says that chronic pain afflicts about half of adults who have anxiety or depression. More than 5,000 adults in Brazil diagnosed with anxiety or mood disorders such as depression and bipolar disorder were asked about other health problems. Among those with a mood disorder, half reported chronic pain; 33 percent, respiratory diseases; 10 percent, heart disease; 9 percent, arthritis; and 7 percent, diabetes. Among those with anxiety, 45 percent reported chronic pain; 30 percent, respiratory diseases; and 11 percent each for arthritis and heart disease.

Adults with two or more chronic diseases had an increased risk of a mood or anxiety disorder. High blood pressure was associated with both disorders at 23 percent, according to the Columbia University study published online June 1 in the *Journal of Affective Disorders*.

Senior author Silvia Martins, an associate professor of epidemiology at Columbia, said that the study sheds new light on a significant, and growing, health challenge. "Chronic disease coupled with a psychiatric disorder is a pressing issue that health providers should consider when designing preventive interventions and treatment services — especially the heavy mental health burden experienced by those with two or more chronic diseases."

Mediterranean Diet could alleviate chronic pain

Researchers have explored the link between the risk of depression and following a high-quality diet rich in plant foods like the Mediterranean diet (MedDiet). They found close adherence to the eating plan could substantially reduce the likelihood of developing the mental illness. The Centers for Disease Control and Prevention reports that 8.1 percent of American adults suffered from depression in a given two-week period from 2013 to 2016. Symptoms include poor sleep and appetite, as well as low mood and a loss of interest in life.

"There is compelling evidence to show that there is a relationship between the quality of your diet and your mental health. This relationship goes beyond the effect of diet on your body size or other aspects of health that can, in turn, affect your mood," said lead author Camille Lassale of University College London Epidemiology and Public Health. "We aggregated results from a large number of studies and there is a clear pattern that following a healthier, plant-rich, anti-inflammatory diet can help in the prevention of depression."

The research was a review of 41 studies. Of these, four involved an assessment of the association between adherence to the MedDiet and depression in 36,556 adults. They showed that people who followed the eating plan closely were one-third less likely to develop the mental illness than those who followed it the least. In addition, the consumption of a pro-inflammatory diet with large quantities of sugar, processed food and saturated fat was tied to a higher depression risk. According to the researchers, following a diet that avoids pro-inflammatory foods while favoring anti-inflammatory foods plentiful in vitamins, minerals, polyphenols and fiber protects against depression. Such an eating plan includes fruits, vegetables, whole grains, olive oil, legumes, nuts and fish.

"A pro-inflammatory diet can induce systemic inflammation, and this can directly increase the risk for depression. There is also emerging evidence that shows that the relationship between the gut and brain plays a key role in mental health and that this axis is modulated by gastrointestinal bacteria, which can be modified by our diet," explained Lassale.

In an interview with *Olive Oil Times*, Eugene Charles, New York chiropractor, applied kinesiologist and author of *Antidotes for Indiscretions,* elaborated about how aspects of the diet have an effect on depression.

"The MedDiet is rich in fiber, which is a prebiotic that feeds beneficial intestinal bacteria, thus promoting their growth. These bacteria play a role in the body's production of neurotransmitters, especially serotonin and gamma-aminobutyric acid, both of which elevate mood," Charles noted. "In addition to gut health, the diet contributes in other ways to help prevent depression. One is that the brain is predominantly fat; therefore, the healthy fat from olive oil and fatty fish enhance brain function. For years I have taught my patients to use olive oil in their coffee to make it a more healthy drink, a mood elevator and an exceptional 'natural remedy' for depression."

Patients who follow strict vegan or Mediterranean diets have seen a complete turnaround in their pain symptoms, according to pain management specialist William Welches, DO. He says getting regular exercise, controlling stress and eating healthy foods all work together to reduce inflammation and chronic pain.

"Research shows that diet should be an integral part of a pain management program — especially as patients age," says Dr. Welches. "A vegan or Mediterranean diet — or healthier eating inspired by these diets — can control insulin and cholesterol levels and reduce inflammation — which is the pain culprit."

Dr. Welches advocates the following three basic diet guidelines, noting that physicians should encourage all of their patients to consider them:

Eat the rainbow: Consume eight to nine servings of vegetables each day — make a couple of those servings fruit, if you like. Cruciferous vegetables such as broccoli, Brussels sprouts, cabbage and cauliflower are best.

Restrict dairy and grains: Eat dairy products in limited quantities. When choosing grains, stay away from simple carbohydrates with refined sugar. Opt for whole grains, including barley, buckwheat, oats, quinoa, brown rice, rye, spelt and wheat.

Avoid red meat: Eat red meat the way most of us eat turkey right now — twice a year, Dr. Welches says. Have it on very special occasions, very infrequently. Instead, include fish as the "meat" or eat vegetarian main dishes. Chicken is neutral — not harmful but not beneficial in the anti-inflammatory sense.

Chiropractic College News

Palmer College selects eClinicalWorks

Palmer College of Chiropractic is transitioning to the eClinicalWorks Cloud-Centric EHR. Palmer selected the eClinicalWorks cloud-centric EHR because its flexible and customizable solutions offer a seamless exchange of patient information that promotes more effective care and better outcomes.

"In order to deliver more than 170,000 patient visits annually, we required a system that could provide high-quality integrated documentation," said Ron Boesch D.C., executive dean of Palmer College of Chiropractic Clinics. "eClinicalWorks was selected because of its technological flexibility. It allows us to establish a single database for patient records. It'll combine our clinical and billing services, while also integrating with educational curriculum. Our students will now have the skills to better understand clinical documentation, quality control and regulatory guidelines."

eClinicalWorks will provide Palmer College of Chiropractic Clinics the latest version of the core EHR to streamline and improve overall efficiency and communications and encourage preventive care for its patients. The cloud-centric EHR solution will empower the organization to streamline and automate processes for more effective patient treatment.

eClinicalWorkseClinicalWorks® is a privately held leader in healthcare IT solutions. With more than 130,000 physicians and nurse practitioners using its solutions, customers include ACOs, physician practices, hospitals, community health centers, departments of health, and convenient care clinics. For more information, please visit www.eclinicalworks.com

Chiropractors prtotected by new legislation

In early October, Congress approved legislation that protects chiropractors who travel with sports teams. Whereas previously, jurisdictional issues left chiropractors who crossed state lines to care for athletes uncovered by their medical malpractice insurance, clinicians now can travel with teams worry-free.

The Sports Medicine Licensure Clarity Act of 2018 was included in a H.R. 302, an unrelated piece of legislation that passed the Senate on Oct. 3 and was signed by the President two days later. It ensures chiropractors that their license and liability insurance remain in effect across all states. This removes an enormous burden of legal and financial risk sports chiropractors faced in the past.

Lobbyists and volunteers with the American Chiropractic Association (ACA) worked closely with government officials to ensure that the bill's final language included Doctors of Chiropractic. "This legislation not only protects chiropractors and other health professionals who travel with sports teams, it also ensures consistency of care for the athletes who rely on them," said ACA President N. Ray Tuck, Jr., DC in a statement released by the ACA.

Chiropractic's role in keeping athletes healthy and performing at their best is being increasingly recognized. In addition to a new partnership with the University of Memphis, Logan University also provides chiropractic care to athletes at the University of Missouri in Columbia and Harris-Stowe State University in St. Louis.

"This is a very good thing," said Logan University President Clay McDonald, DC, MBA, JD. "Chiropractors are an essential element of care for so many athletes and shouldn't have to take on an undue amount of risk to provide the care needed to keep athletes safe."

Chiropractic students present at American Society of Biomechanics Annual Conference

Life University recently sponsored two attendees to the annual conference of the American Society of Biomechanics. Out of about 1,000 attendees, they were the only members of the chiropractic profession present. D.C. student Anna-Marie Schmidt presented a poster of her project, "Kinematic Variability in Piano Performance," which is a precursor to the analysis of movement patterns in pianists before and after chiropractic care. Drs. Brent Russell and Ron Hosek of the Dr. Sid E. Williams Center for Chiropractic Research (CRC) were co-authors on that project. Additionally, Dr. Russell presented a poster for "Posture assessment of a chiropractor performing side posture adjustments: a pilot study using an inertial measurement unit system," a project begun by recent graduate Dr. Michael Weiner. Drs. Linda Mullin, Ron Hosek and Ed Owens were also co-authors, and D.C. student Gabriel Kelly provided important assistance.

For those who are interested in knowing more about the ASB, the recent conference proceedings are available at: http://www.asbweb.org/wp-content/uploads/2018/08/asb2018Abstracts_rev.pdf

Cleveland University-Kansas City showcases research at KPHA

The Cleveland University-Kansas City (CUKC) Research Department was well represented at the annual meeting of the Kansas Public Health Association (KPHA), as the department had work selected for presentation at the event. Held Oct. 2-3 in Wichita, the meeting was attended by Dr. Mark Pfefer, director of research at CUKC, and student, Jackson Berg. Two student-led, poster presentations showcased the work of Berg and his fellow doctor of chiropractic student, Rachel Gilmore. Pfefer had a review paper accepted for a Sunflower Spotlight platform presentation.

Berg's poster presentation involved diagnosis and management of tick-borne illness, with implications for chiropractors, as patients may initially seek care for joint pain and headaches. Gilmore's presentation involved a review of research which highlighted fall prevention, and improvement in motor control in older patients receiving chiropractic care.

The platform presentation by Pfefer was titled "Opioid use reduction with chiropractic care for patients with back pain and musculoskeletal pain: A narrative review." He presented a review of research which makes the case for decreased use of opioids for patients with pain, while using guideline concordant chiropractic care and manual therapy interventions.

The KPHA is a professional association for Kansas public health practitioners, professionals, and advocates. It is the largest and oldest public health organization in the state. This year KPHA is celebrating 75 years of promoting and improving population health in Kansas.

Moody Health Center launches service-learning requirement for interns

Moody Health Center (MHC) at Texas Chiropractic College will now require all interns in Trimesters 8-10 to complete 16 hours of community service over the course of their internships. The initiative, which began in the fall trimester, is to encourage interns to build trust and partnership with the community as well as gain a better understanding and appreciation for the community around the college. The service is not related with seeing patients but rather to stress the importance of community service.

"Community involvement is a critical part of contributing back to those we serve as doctors of chiropractic," said Lawrence Wyatt, DC, DACBR, FICC, Associate Vice President for Clinics and Professor of Clinical Practices and Radiology. "It builds trust, respect and partnerships with members of the community. It also exposes us to the daily needs and desires of those in our community and gives us a better appreciation for the struggles of those near us. It enhances our compassion and empathy as well."

The policy requires interns to volunteer with any organization in the Houston metropolitan area that focuses on helping people. The organization does not have to relate to healthcare and any volunteering in chiropractors' offices cannot be used for credit. The interns will volunteer on their own or in small groups but must go with the mindset of representing TCC and MHC as a larger entity.

"Before the interns go out into the field to volunteer, they must remember they do not only represent themselves, but also the Moody Health Center, Texas Chiropractic College and the chiropractic profession," said Wyatt. "They must be professional, well organized and have a passion for sharing their knowledge and skills with the organization."

This initiative will not only help chiropractic students better understand the needs of their communities, but will also help the communities better understand the importance of chiropractic and being knowledgeable about health issues.

"While doing community service, we can promote healthier behaviors, help identify key health issues within communities and engage in service-learning activities with underserved populations," said Wyatt. "On a community level, the organization for which they volunteer is likely to collaborate with other volunteer organizations and local governments, providing services that help build a healthier, more prosperous community."

D'Youville College and Catholic Health form partnership

D'Youville College and Catholic Health have agreed to a partnership brought about through D'Youville's upcoming Health Professions Hub. Experts from Catholic Health will be brought on to explore what is needed to operate the community clinic that will be located inside The Hub.

The purpose of the clinic will be to provide medical services with a focus on primary care and chronic disease management. This effort will enhance D'Youville's educational of-

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ferings and meet the needs of the medically underserved population on the West Side of Buffalo. With the full complement of medical care all under one roof, the total care of the patient will be the focus as all the major health disciplines will be represented.

Catholic Health President and CEO Mark Sullivan initiated the conversation with D'Youville College President Lorrie Clemo to discuss how the system could become involved in the Hub. In announcing their collaboration, the two organizations underscored their shared values of quality, education, service, compassion, care and affordability.

"D'Youville values its strong relationships with our area healthcare systems and we have benefited from each institution's willingness to collaborate in unique ways that make a positive impact for those we serve," shares D'Youville President Lorrie Clemo. "This new dynamic partnership of two of the region's leading mission-driven institutions signifies our joint promise to make the Health Professions Hub a model that serves our community in perpetuity."

"When D'Youville announced its HECap grant funding in July, I sat in the audience thinking about the synergies that exist between our two organizations and the potential to collaborate on this project," said Sullivan.

"There is no doubt that our missions align, but we also share a commitment to improve access to high quality health care for the underserved, while expanding educational opportunities for students at all levels. Given the future demand for skilled health professionals, the clinic will enable students to work hand-in-hand with experienced Catholic Health providers, while meeting the health needs of families on Buffalo's West Side. We look forward to this partnership, as well as the opportunity for many D'Youville graduates to apply the skills and real-life experiences they will gain through the Hub and the clinic, working for Catholic Health in the future."

As part of the agreement, Catholic Health will provide expertise and resources to operate the community clinic inside the Health Professions Hub. Other highlights of the partnership include opportunities for healthcare workers to upskill and upscale their training through the Hub's simulation center and workforce development programs.

The Hub will prepare future healthcare providers through innovative educational methods with an emphasis on interprofessional practice. This will assure that all health professions students can truly function on an integrated team focused on high-quality, patient-centered care. Construction is scheduled to begin July 2019 with completion projected for Fall 2020.

University of Western States professor named chair of CCE

In January, Gary Schultz, DC, DACBR, professor and department chair in the college of chiropractic at University of Western States (UWS) began a two-year tenure as chair of the Council on Chiropractic Education (CCE).

CCE is a professional accrediting agency for doctor of chiropractic (DC) educational programs and is recognized by the United States Department of Education and the Council for Higher Education Accreditation (CHEA). The council ensures that the educational quality and institutional integrity are held to the highest of standards for the 15 doctor of chiropractic degree programs at 18 locations in the U.S. The CCE is recognized by the Council for Higher Education Accreditation (CHEA), is a member of the CHEA International Quality Group (CIQG), and the Association of Specialized and Professional Accreditors (ASPA).

As elected chair, Dr. Schultz will serve to support the vision of the CCE, which is promoting excellence and assuring quality in chiropractic education. CCE operates through established values including integrity as the foundation in all interactions; accountability to students and the public; collaboration in community of people with a culture of respect; quality as informed by the use of evidence; and improvement to advance excellence.

"I originally became involved in CCE, because I support and believe in the value of the CCE's mission for the betterment

of the chiropractic profession," said Dr. Schultz. "I've served in multiple capacities with CCE during well over a decade of involvement. It is a great team to which I enjoy committing my time, talent and energy. Having the position of chair of the council offers me an opportunity to do more in that regard and to continue to build teams that will improve the agency long after my tenure in leadership is done. I'm a huge fan of teams and teamwork – I take that very seriously and believe that teams best position any agency to be the best version of themselves and to most effectively respond to challenges, whatever they may be and whenever they may surface."

Dr. Schultz will lead 18 organizational board members referred to as councilors. Of the board members, 10 are representatives of educational programs, six are private practitioners and two are members of the public. He will be eligible to serve another term, but will need to be reelected.

Gregory Snow, DC new Dean of Academic Affairs

Palmer College's West campus in San Jose, Calif., has announced the appointment of Gregory Snow, D.C., as the new dean of Academic Affairs. Dr. Snow succeeds Thomas Souza, D.C., DACBSP®, who served as the academic dean at the West campus since 2003, and recently transitioned from his administration role to a faculty position.

A 1990 Palmer West graduate, Dr. Snow has served as the dean of West clinics since 2003. He maintained a private practice from 1990 to 2003, and was a Palmer faculty-clinician for seven years (1997-2003). He is a past-president of the Palmer West Associated Student Government, and also served as president of the former Palmer West Alumni Association.

In his role as dean of clinics, Dr. Snow managed oversight of all clinic-related programs (including the campus-based public-clinic, five outreach clinics, Sports Council events, and Department of Defense and Veterans Affairs clerkships) as well as the West campus field-training and postgraduate programs.

A search will initiate shortly to identify Dr. Snow's successor as the dean of West clinics. During the interim period, Dr. Snow will work collaboratively with Kyle Prusso, D.C., CCSP®, director of Clinics, and Brian Nook, DC, associate dean of Academic Affairs, to manage both divisions.

Palmer Center for Chiropractic Research gets $7 million NIH grant

Scientists at the Palmer Center for Chiropractic Research (PCCR), along with partner organizations, received a $1.46 million award from the National Center for Complementary and Integrative Health and the Office of Research on Women's Health at the National Institutes of Health (NIH). The award (UG3-AT009761) funds a two-year research planning project to address the short-term pain and functional outcomes associated with different numbers of chiropractic visits, and the long-term effectiveness of chiropractic care delivered at Veterans Health Administration (VHA) clinics.

If the NIH determines initial project goals are met after the two-year planning phase and pending available funds, the project and funding will extend over an additional four years totaling approximately $7 million, making this the largest award ever granted by the NIH to a chiropractic institution.

"There is a pressing need to address the devastating impact of chronic low-back pain in U.S. Veterans," said Principal Investigator Christine Goertz, D.C., Ph.D., Palmer College of Chiropractic's vice chancellor for research and health policy. "I'm extremely excited about the outstanding multidisciplinary team Palmer has brought together to look at dosing of chiropractic services, both during an episode of low-back pain and in preventing future episodes. We believe the results of this study have the potential to directly impact chiropractic health policy within the VHA and beyond."

This award is part of a multi-disciplinary initiative sponsored by the NIH, Department of Defense and the Veterans Health Administration. It includes 11 pragmatic clinical studies, as well as a coordinating center that will support these projects. Partner organizations with the PCCR on this project are the Dartmouth Institute for Health Policy & Clinical Practice, Iowa City VA Health Care Systems, Minneapolis VA Health Care System, the University of Iowa, VA Connecticut Healthcare System, VA Greater Los Angeles Healthcare System, and Yale University

The Idaho Association of Chiropractic Physicians

The IACP News

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The Idaho Association of Chiropractic Physician's *IACP News* is a full-color digital newsletter, published monthly and distributed to member doctors of chiropractic across Idaho as well as out-of-state members and student members.

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