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of the Pennsylvania Osteopathic Medical Association
Summer 2021

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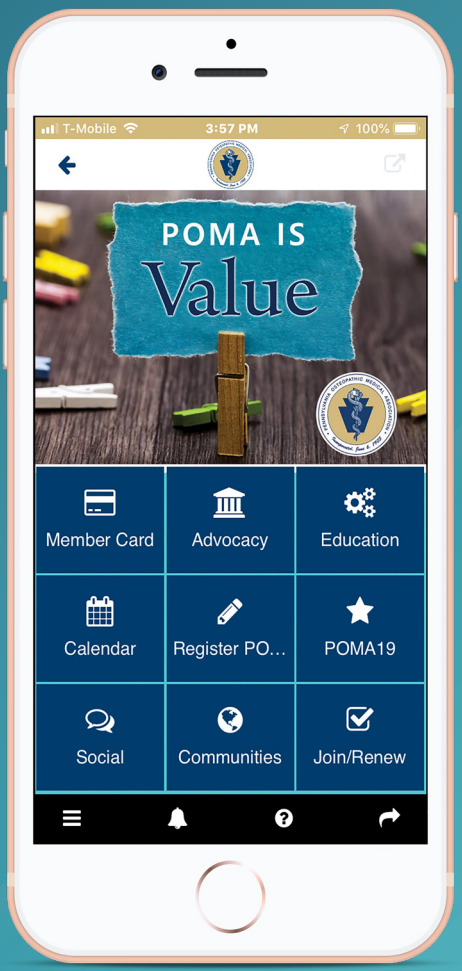

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THE Journal OF THE PENNSYLVANIA OSTEOPATHIC MEDICAL ASSOCIATION

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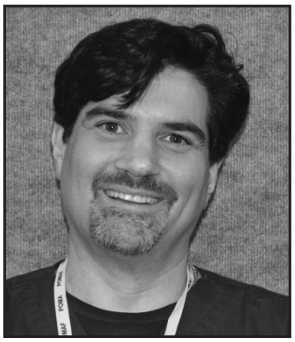
FROM THE EDITOR'S DESK

Mark B. Abraham, DO, JD



Mark B. Abraham, DO, JD
Editor-in-Chief

To our esteemed colleague and treasured member of POMA and *The Journal*, Dr. Garloff, WGRP, CGRP, please pardon the following:

> After almost two years of pure INSANITY and INTENSITY in our lives and practices, it is time for a break. This issue is to be much lighter in nature. It is designed to focus on humor.

A mask-wearing, vaccine-carrying, medical advisor walks into a bar...

Truth be told, my wife started to read my first draft and decided not only was it incomprehensible but that I would either be committed, lead someone to think that I have a substance abuse issue, or some combination thereof. Rest assured, I have no issues with intoxicants. Being committed...that could be up for debate, after all I still watch the Phillies and will go to Eagles and Flyers games this season. Those of you in the Western half of the Commonwealth, you have no idea what that feels like. My wife then found a list of several hundred "doctor jokes" with the thought that I should just run those. They are so bad that sum total they would be funny. Trust me they weren't.

Normally, I do not have a lot of trouble working humor (not the blood, bile and phlegm type which did make it into the very rough draft) into my editorials. This time it was a bit more difficult. Give me a serious or difficult subject, I will find the comedy. Take a subject designed to be funny and voila, instant serious. Now to try and break that.

Dr. Marcus Welby meet Dr. Benjamin "Hawkeye" Pierce.

Dr. Daniel Auschlander meet Dr. Drake Ramoray. (Big points if you know these two physicians)

For those of you who watch and enjoy the fictional, medical television shows, do you prefer ones which are more comedic or more serious? Or, do you prefer the "Dr. Pimple Popper" and "Botched" programs which are reality TV?

Personally, I prefer the comedy. St. Elsewhere had its moments (thanks to a very young Denzel Washington and a very young Howie Mandel) but was more of a drama. M*A*S*H, sitcom all the way with some serious moments and undertones.

Ultimately, I think that is where we are after this extraordinarily long 20 months. Too much of the seriousness has given way to funny. It had to. Don't get me wrong. There is still a pandemic. There are still other illnesses and diseases which we face and treat on a daily basis. At the same time, we have to be able to just shake our heads, and laugh, when possible, at some of the contradictions which we encounter. You know, like the patient (or tenth of the day) who is in your office with a cough, shortness of breath, feels weak, is unvaccinated against Covid and has their mask off until you walk into the room. Why are they there? Because, they want to make sure it is not Covid.

Medicine is serious. It has to be. We know this and live it. But there has to be a lighter side as well, just like everything else in life. How many of us of talked about "writing a book" with the situations we encounter daily which would make people just shake their heads? Not interesting medical cases for journals. I mean the "important" ones. The human interest. The basis for the Darwin Awards. In fact, I believe that there are some members of POMA who have written these types of books.

The wonderful thing from my perspective is that the comedic elements in the fictional medical shows have always been more memorable than the serious moments. M*A*S*H had its moments. There were many serious themes running throughout the shows and even some episodes were comedy free. Just like life. Some days are all too serious and nothing will change those. But, we keep trying.

Whether you believe in the cliché "laughter is the best medicine" or just try to not take things "too seriously", if it helps your patient, you do it. If it helps you, personally, you (should) do it. You will be fortunate to read some interesting articles on this concept in this issue of *The Journal*.

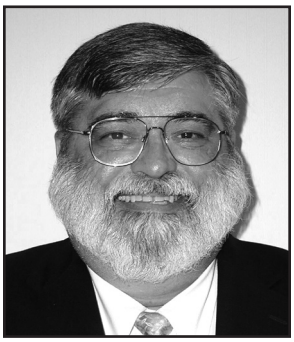
Additionally, congratulations to our new POMA President, Joseph Zawisza DO who was installed on May 1, 2021, and to Ernest Gelb, DO, who was elected President-elect of the AOA in July. If you missed it at this year's POMA Clinical Assembly, Mary Crowe, DO, is our Golden Quill winner and Jenna Cheng, DO, is our second-place writing contest winner. Their winning papers are also included in this issue.

Oh, and as for that medical advisor, if the mask was a surgical one around his mouth and not a costume mask covering his eyes, maybe he wouldn't have hit his head when he walked into that bar (and thus spill some blood which is one of the four humours...). Just remember, "From a fish you can't make a chicken."

OUT OF MY MIND

Samuel J. Garloff, DO, WGRP

Osteopathic Medicine, the Pandemic and the Four Humors



Samuel J. Garloff, DO

WGRP here. Were there humorous moments during the "Dark Days of the Pandemic"? Absolutely! No, not the humors of Hippocrates; blood, black bile, yellow bile and phlegm, but actual moments of real humor. Tough to believe, I know. Still…

Part One: The Last Shall be First.

One fine day, during the darkest moments of the year, I received an email from the front desk in my building. A package was waiting for me. I ran, well meandered, to the elevator awash with anticipation. Moments later, I received my prize. Enclosed in a mailer was a copy of "If I Bought a Duck It Would Drown". For those of you who don't know, "a Duck", is a tongue-in-cheek autobiography written by John Callahan, DO, who previously represented POMA as president. His dear wife Melissa posted this missive to me, which I gratefully received. It's pages are filled with history and humor. Those of you who know and worked with John have undoubtedly fallen victim to his stories and pranks. I know I have. His book reflects his wit and wisdom. Also, his unwavering faith and kindness. This is a fun read that will allow you to gain a fuller appreciation of the author. It continues to make me smile and be grateful for such a friend.

Part Two: She Called Us Osteopaths!

During the bleakest times, we could always find humor playing the Trump Card. Depending on where you stood politically, medically or socially, the Trump Card was up everyone's sleeve. How did this effect us? Well, as luck would have it, a DO had the distinction of being the personal physician of POTUS. So? Enter POTUS, his physician, hydroxychloroquine and Rachel Maddow. Rachel Maddow had the misfortune(?) of stating, "nothing against Osteopaths"…. Oh my. Nothing she said after that was heard. The point she was apparently making was lost. Mainly, because of her inflammatory delivery. I have read and reread her statement numerous times. Inelegant. Having spent past times dressed in BDUs, aka battle dress uniforms, fatigues, camouflage and utilizing slit latrines, (don't ask), I knew White House physicians. They were Family Physicians or Internists. Why? The White House physician was the primary care physician for the president and the president's family. When POTUS travelled, a chest physician (surgeon) was on standby at his destination. How did this happen? The government is aware of every physician in the US. They know where you trained, where you are located, if you move, change your phone number, etc. Why? In case the balloon goes up they will assign you as necessary. Remember 9-11? That morning I was sitting with the administrator of a small hospital in a rural setting. He received a call informing him that his hospital was assigned as an orthopedic center, taking care of casualties from NYC if necessary. The concept of care for the president, vice-president, White House staff and their families was always primary care. During the beginning of the pandemic the White House physician was an emergency physician. This always struck me as odd. What did we call patients who used the ER for primary care? Ah yes, GOMERS!

Part Three: They Can't Do That!

The national organization that represents us, you know who I mean, took an unusual stand about the above. You might have expected that the CEO or President or President-Elect might have taken time away from not seeing patients (remember that offices were closed) to call MSNBC to request time on The Rachel Maddow Show for rebuttal or public education. You might have expected an appearance on a major television network morning news program to clarify the practice of Osteopathic Medicine for the public. Uh, no. The response was "you guys do something "! We were encouraged to contact our local newspapers, news outlets, etc. to straighten them out! If we needed help, we could count on them for talking points. Wow! By the way, nothing like that took place in Chicago. You know, headquarters. I read both Chicago newspapers daily, watch local news program, and well, nothing. I guess this was an example of leading from behind. If you don't see the humor of this, I understand. But, at some level, it's hilarious.

Part Four: You Can't Do That!

Scrubs. No, not the TV show. Scrubs, you know, what you change into before entering the OR. Scrubs. The clothing you wear in

(continued on page 18)

Joseph M.P. Zawisza, DO, Installed as 110th President of the POMA

Joseph M.P. Zawisza, DO
POMA's 110th president

Joseph M.P. Zawisza, DO, FACOI, FACOP, was installed as POMA's 2021-2022 president on May 1, 2021 at the Hershey Lodge in Hershey Pennsylvania. The installation was the culminating event of POMA's first in-person function since the start of the COVID pandemic.

Dr. Zawisza has been a member of the association for over 16 years. Prior to being elected president, Dr. Zawisza served as a trustee of POMA's District 11, and chair of the Public Relations Committee, the Committee on Young Physicians-Central Region and the Credentials Committee. He also represents POMA as a delegate to the American Osteopathic Association House of Delegates.

Board-certified in internal medicine and pediatrics, Dr. Zawsiza practices primary care with his father and sister at their offices in Schuylkill Haven and Orwigsburg, Pennsylvania.

Dr. Zawisza is a graduate of Mansfield (Pa.) University and a 2005 graduate of the Philadelphia College of Osteopathic Medicine. He completed an internal medicine and pediatrics residency at Geisinger Medical Center in Danville, Pennsylvania. He is a fellow of the American College of Osteopathic Internists and the American College of Osteopathic Pediatricians.

A transcript of Dr. Zawisza's presidential speech follows:

Good evening everyone, and thank you for being here on this special night! I'm delighted that we can begin to meet again in person, although not all could be with us tonight, but I look forward to the day we can. I must admit I never thought my presidential installation would look quite like this.

Most of you have known me for a long time. I first became active with POMA as a resident representative to the Board of Trustees 15 years ago. I recall at a board meeting in Valley Forge, when there were no seats for the residents, I was told I could sit with the past presidents; I'm sure some of you remember that set up. When attendance was being taken, and a comment was made that another observer was sitting in the "past presidents' club," I meekly called out "and future presidents." I'm not sure why I said it then, and I certainly did not say it with much courage; in fact, I'm not sure anyone even heard it. But, that was the moment that I first decided that I wanted this job. Not for glory or acknowledgement, and certainly not for the long hours, headaches, and demands. But because I knew that I wanted to be a leader in an organization whose work I believe in. Fast forward to tonight, and I stand before you with the courage to take on this job. I am delighted and honored to be your president.

So, what did I learn between 2006 and 2021? At first, what I thought I was supposed to learn was how to do the job, what to say, where to be, and other presidential etiquette. Well, that's not exactly what I learned. Sure, I hope I say the right things and that I do the job well. But through the examples of some great physicians who have served before me, I have come to understand that this is more than just a job for a year. It is a vocation that requires a lot of time, being prepared for anything, and knowing that you're not always going to have the right answers on the tip of your tongue, but having the confidence to know that years of hard work to get to this point have prepared you for whatever comes. In many ways, this position parallels our vocation as physicians.

One of the sayings that my grandfather always used to say – and he had a lot of them – was that the future is not a gift, it is an achievement. Well, our history has been full of great achievements and our future will continue to be. Sure, we've had some lucky breaks, but through a lot of hard work we completed our first strategic plan and we're already making leaps and bounds into our second one through our pillar work that we've heard about over the last few days. We've successfully completed our second virtual annual convention and the fourth program overall through this

format. Unquestionably we've increased our footprint in Harrisburg over the last five years or so, and in a year where no one knew what changes we would face, we've continued all of our usual excellent work without missing a beat.

By now, you've probably heard that my theme for this year is *POMA on the Move* and the logo is a bullet train. While we can take tonight and tomorrow off to celebrate our achievements, and for the staff you've definitely earned your Monday off too, this week we get back to work. Hopefully we're all refreshed by our time in virtual conference and social gathering so that we can keep tackling our pillar goals. But we mustn't think of this as just a bunch of check boxes that we need to complete. We've seen that each goal we achieve presents two or three more that we can work on. A year from now we're not just going to have podcasts available for our members, we're going to be asking how we can make them better. We're not going to rest knowing that our advocacy in the legislature has helped pass or defeat a bill that would help or harm osteopathic physicians and their patients, we're going to be looking at the next 10 bills that we have to focus our attention on. We're going to maintain our high quality educational programs and keep asking how you make something excellent even better. And we're going to keep finding ways to increase our membership numbers and engagement, and determine what our community looks like in whatever this crazy COVID ride brings. We're going to look at our own governance and make sure we're doing things as our bylaws say we should be, while simultaneously determining what we need to do differently than the way we have always done things.

And so, I need all of you to work with me over the next year and beyond to achieve these goals and keep setting new ones. Everyone here tonight and those watching virtually, everyone who reads the newsletter, participates in a committee, treats patients or has a DO after their name or who soon will. There's still a lot of work to be done. Students, interns, residents, this includes you. I want to talk with you. You are not just the future of our profession; you are our profession. We've made great strides in including our newest osteopathic physicians and students in our organization, but there's a lot more to be done. Even though us seasoned physicians – it's amazing how quickly the point in your life comes when you can say that – were in your shoes once and had the same enthusiasm you bring to the profession, sometimes we forget about that and get settled into our ways. Keep us fresh and vibrant. Don't just give us your ideas, help see them through to fruition. Invite me to your schools and programs so that we can exchange ideas on how we can help you and you can help us. Be a driving force in this profession.

To my colleagues who can no longer call themselves young physicians, never underestimate what you still bring to this profession. Sometimes we need to be reminded that there is a good reason for "the way we've always done things." Sometimes we need encouragement that you don't feel like we're undoing all of the hard work that you dedicated so much time and effort to. Sometimes your seemingly insignificant words or gestures propel us to achieve great things. Another fond memory of being a resident with POMA was that one year I was asked to serve as a member of the caucus. Honestly, I think I was just there to fill a seat, and so I humbly stood in the back of the caucus room. So I was quite surprised when a physician came up to me and started talking to me with the same level of respect as he did with his other physician colleagues. I spoke a few minutes ago about knowing I wanted this job. Dr. Purse, you may not remember that conversation 15 years ago but for me that was a pivotal moment that let me know that I was part of this profession and organization and that I could earn this job.

I did not get here alone and to those who have helped me I hope that I have demonstrated my thanks along the way even if I didn't express it in words enough times. I'm always anxious about making a thank you list because I end up forgetting to mention someone and then at 2AM I lay awake thinking about it. Please know that even if I don't mention your name, I have not forgotten that you have helped me get here. And then come knock on my door at 2AM because I'll be awake thinking about it. Dr. Garloff, WGRP, you were a driving force in our district and I don't know that I would have had many of the opportunities I have received without that. I also don't think I would have ended up at Mansfield, but that's a story for another time. To all the other physicians from Pottsville who helped influence me along the way, thank you.

To Joan (dzien kuje), George, Tony, Jeff, Bill, and all those who quietly, or sometimes not so quietly, let me know that I had good ideas and gave me the confidence I talked about earlier, thank you. To Pam, Lisa, and Jen we've worked together on a lot of projects over the

last few years that have had great impact and I am thankful for that. Gene, I guess thanks for setting the bar so high this last year? Really though, thank you for fluidly moving us through a tumultuous year and making us look good when no one else seemed to know what was going on. Michelle and Domenic, you have an amazing husband and father and we're so grateful you let us borrow him so much this year. Please know that for every sacrifice you made this year, the fruits of his labor were unimaginable. I hope tonight is the start of many more evenings you get to enjoy together as a family.

To my colleagues in District 11 under the new leadership of Cindy Lubinsky and our past chair Rob DeColli, and Hans Zuckerman as one of our trustees, thank you for the confidence you have placed in me over the years. I know that Cindy and our new trustee Angie will serve their new roles well. Thanks to my office staff who regularly do more than just the work of a medical assistant to keep our practice running and allow me to fulfill multiple roles. And a special thank you to Dad and Meg for the increased work they'll take on this year to help me. Thanks to the POMA office staff past and present for all that you do for us as osteopathic physicians every day. You make us look good and give us the credit for it and tonight I again say thank you to all of you.

To my siblings Danny, Meg, and Irene, and their spouses Bethany, Dave, and Dylan, thank you all for your support throughout our lives together, whether it was helping transport kids or letting me know that I was being too bossy (even if I wasn't going to listen anyway and even if you were wrong). Thank you for being family. To my nieces and nephews Peter, Mila, Luke, Jacob, Hadley, Gabriel, Everly, Everett, Eli, Dominic, and Agnes, and my in-laws Tom, Linda, Mike, Amy, Nick, and Cassidy, thank you for your support during the time we've known each other, whether it was doing something funny like a joke that only a kid could tell, putting on a show on the baseball field, or understanding that vacation time is not always vacation time for me.

Mom and Dad, thank you for all the things you have taught me in life. You were my first teachers of medicine and unquestionably my biggest teachers in life. Thank you for all the sacrifices you have made for us over the years, most especially the ones that we never knew about. Thank you for teaching me about the dignity of every person and for all the opportunities you have ensured we had in our lives. Also, I hope you're not still upset that I should be turning 42 today!

In 2015, six years ago tonight, when you stood up here Dad and accepted this responsibility, you talked about complacency. I don't think anyone had any idea of how not complacent that year would be. Thank you for setting a great example for me to follow this year. And I would like to point out that I think we might be the first father-son presidents in POMA's history.

My boys, please come up here with me. Benjamin, Joshua, Nicholas, and Adam, thank you for being so patient for the last few years and for what we'll go through over the next year. I know this isn't the party that I've promised you for the last few years, but I hope we get to see a few places in Pennsylvania together. Know that the sacrifices that you make this year will be to help many people. I hope that Mommy and I have instilled in you what a tremendous value your selfless acts are. We're so proud of the wonderful young men you are becoming!

Ang, thank you for the sacrifices you have made to get me here too. Sometimes living as a single parent whether I was at a meeting or just stuck in the other room. I know I'm normally such an easy person to live with so I apologize if it gets just a little tougher this year. Just kidding. As you know my parents were always worried I would marry a girl who would let me just walk all over her with my nonsense. Thank you for not being that girl. We've accomplished a lot together and I'm excited for what the rest of our lives hold.

My final thought, is to tell you that in our faith, today is the feast day of St. Joseph the Worker, my namesake. This celebrates St. Joseph as a hard worker who provided for his family. To me this is such an appropriate day for my inauguration to take place. We have a lot of work to do, so let's get to it. After dinner of course.

Thank you!

POMA Past President Ernest R. Gelb, DO Chosen as AOA President-elect

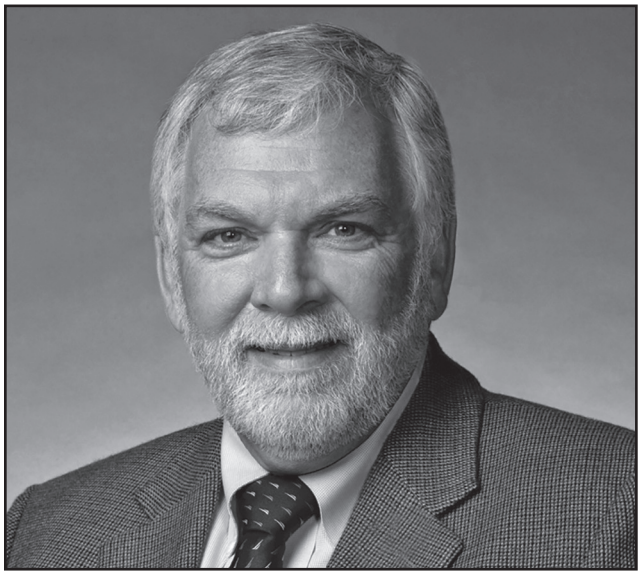
On July 18, 2021, the American Osteopathic Association's (AOA) House of Delegates members chose POMA past president Ernest R. Gelb, DO, FACOFP, as president-elect for the coming year. He will be installed as AOA president at next year's annual business meeting in Chicago, Illinois.

Dr. Gelb has represented Pennsylvania as an AOA trustee since 2011. He currently serves on the Executive, Finance and Strategic Planning committees. He has chaired the Department of Affiliate Relations, Department of Government Affairs, Department of Professional Affairs, as well as the Ethics Committee, Board of Appeals Committee and Osteopathic Family Relief. He continues to actively serve as a POMA Delegate to the AOA House of Delegates.

"Dr. Gelb has been a force in Pennsylvania Osteopathic Medicine for the better part of 35 years. He has led our organization as a district chair, trustee, president, chair of our annual clinical assembly, and now as a member of the AOA board of trustees. POMA proudly supports the nomination of Ernest R. Gelb, DO to the office of president-elect of the AOA," said Jeffery J. Dunkelberger, DO, Speaker of the POMA House of Delegates.

Osteopathic family medicine is at Dr. Gelb's core. "It is an honor to take care of patients over the course of their entire life. You really get to know a family when you are caring for grandparents all the way down to their great-grandchildren." He also knows the importance of teaching the next generation of osteopathic family physicians and enjoys sharing his passion with his residents and students. While in Pennsylvania, he served as medical director of the Sullivan County Medical Center in Laporte, Pennsylvania, and an assistant professor of family medicine at the Philadelphia College of Osteopathic Medicine (PCOM). He currently serves as core faculty for the Tidelands Health MUSC Family Medicine Residency Program in South Carolina.

Dr. Gelb has also represented Pennsylvania as a proud osteopathic family physician. He served as treasurer of the Pennsylvania Osteopathic Family Physicians Society from 2000-2018, and four years prior as a trustee. He also chaired the Awards committee. On the national level, he represented Pennsylvania at the ACOFP's Congress of Delegates and served on the Membership and Marketing/Public Relations committees.



Ernest R. Gelb, DO
AOA President-elect

Dr. Gelb has received numerous awards of distinction over his illustrious career. He was named a fellow of the ACOFP in 2001 and received the POMA Distinguished Service Award in 2007. The POFPS honored him as Family Physician of the Year in 2010 and presented him the Raymond J. Saloom, DO, FACGP Memorial Award in 2000 in recognition of his untiring efforts to promote and preserve the integrity of the osteopathic profession.

Board certified in family medicine with a certificate of added qualification in geriatrics, Dr. Gelb is a graduate of King's College in Wilkes-Barre, Pennsylvania and a 1978 graduate of PCOM. He completed his postgraduate training at Botsford General Hospital in Farmington Hills, Michigan. He served in the United States Public Health Service from 1979 to 1981.

Dr. Gelb currently resides in Pawleys Island, South Carolina with his wife, Barbara and their springerdoodle, Maggie Mae. They have four children and six grandchildren.

LECOM DEAN'S CORNER

Lake Erie College of Osteopathic Medicine

Silvia M. Ferretti, DO
LECOM Provost,
Vice President and
Dean of Academic Affairs

Laughter is the Best Medicine

The Lake Erie College of Osteopathic Medicine (LECOM) is the largest medical college and the core of the only osteopathic academic health center in the nation.

With LECOM as its stellar education hub, LECOM Health forms a highly innovative healthcare system that strives to add to the quality of life by bringing total health care to each community that it touches. LECOM is preparing the next generation of physicians, pharmacists, and dentists at campuses in Pennsylvania, New York, and Florida; inculcating the osteopathic mission that treats and cares for the whole person: mind, body, and spirit. While many health missions focus primarily upon the body as the integral and most evident aspect of health maintenance, it is proven that mind and spirit contribute significantly to total health and longevity.

One aspect that advances and enhances whole body health is that of humor.

As it happens, scientific veracity supports the timeless maxim that indeed, "laughter is the best medicine."

Laughter activates a natural relaxation response in the body, providing a positive message to internal organs while also toning abdominal muscles.

Studies have found that laughter can have healing properties. The discovery of mirror neurons that cause one to return a smile when someone first smiles, supports the notion that laughter is contagious.

Laughter also reduces the stress response, increasing blood flow and oxygenation throughout the body. This process stimulates the heart and lungs and it triggers the release of endorphins that help one to feel more relaxed, both emotionally and physically.

A jovial bit of humor also boosts immunity and it may increase specific white blood cells that attack cancer cells.

Humor increases resilience, acting as a natural segue to success. People who are resilient are happier and often more successful. Laughter also combats depression, offering a favorable way to escape the downward spiral; and it has been found to relieve pain as perceived pain levels are reduced during happy distractions allowing one to manage discomfort.

Mohammed S. Razzaque, PhD, Professor of Pathology at LECOM recently offered a study entitled, *Laughter Therapy: A Humor-Induced Hormonal Intervention to Reduce Stress and Anxiety*.

The co-authored piece explained that "the ongoing COVID-19 Pandemic-related stress has adversely affected emotional and mental health around the globe. Besides specific pharmacological interventions, which if prolonged have detrimental health consequences, non-pharmacological interventions are needed to minimize the emotional burden related to the Pandemic. Laughter therapy is a universal non-pharmacologic approach to reduce stress and anxiety. Therapeutic laughter is a non-invasive, cost-effective, and easily implementable as a useful supplementary therapy to reduce the mental health burden. Laughter therapy can physiologically lessen the pro-stress factors and increase the mood-elevating anti-stress factors to reduce anxiety and depression."

Indeed, laughter, humor, and positivity translate well to the LECOM mission.

The LECOM Senior Living Center is the manifestation of a magnificent vision that thoroughly embodies the next generation of care for older adults and it is one that heralds joyful and uplifting interactions in adult nursing care.

LECOM provides and expands whole-body health through humor and creativity, enhancing the lives of its older adults in LECOM senior retirement communities with a view toward promoting therapeutic and whole-body healthcare benefits as the focused result.

It is indisputable that the mind and spirit enhance the completeness of health and longevity.

LECOM is profoundly proud to foster humor, joy, levity and laughter as part of its comprehensive health and wellness mission.

PCOM DEAN'S CORNER

Philadelphia College of Osteopathic Medicine

Kenneth J. Veit, DO
PCOM Provost, Senior Vice President for Academic Affairs and Dean

We have certainly all heard old adage "laughter is the best medicine." We know it can often be an effective way to relieve stress and anxiety, particularly for patients, and can ease fears associated with medical care and treatment. It has also shown benefits as a form of pain relief. With the challenges of the past year and a half, finding the humor in things and taking time to laugh have no doubt been an integral part of simply surviving the seemingly endless current of bad news and challenging circumstances.

For me, the feeling I most associate with humor and laughter is joy. Think of the joy you feel watching a good movie or sitcom that makes your sides split. The flood of endorphins your body releases in these moments brings a feeling of joy few other experiences can match. Plus, it's quite simply just fun to laugh. The questions I find myself asking as we move into a post-pandemic environment: How do we bring the joy and fun of laughter into our professions more consistently? How do we continue to discover (or rediscover) the enjoyment of taking care of people and the humor of everyday life? How do we get back to what, for some, drove us into this profession in the first place?

As physicians, we know better than most the joy found in caring for another human being. We also know it is not without moments of incredible difficultly. For our colleagues on the front lines of the pandemic, the exhaustion they felt after a long shift may have at times seemed insurmountable. Those feelings, however, were surely tempered by moments of levity and humor. How else do you make it through a once-in-a-century health crisis without finding moments to laugh amidst the pain of such a tragedy?

We are at a moment, arguably better than at any point in the history of our profession, where the opportunity to change the way we approach medicine and patient care is not only available, but also necessary. Applications to medical school are skyrocketing, in part, because the pandemic has shown a spotlight on our field and the impact we have on the lives of everyday people. Let us commit, as health professionals, to instilling the joy of our profession into the next wave of doctors, to finding the humor in our interactions with patients, and making the work we do fun – for ourselves and for our patients.

I am reminded of the other old adage, which I am paraphrasing, "when you enjoy what you do, you'll never work a day in your life." While it obviously works on its own, I would suggest a revision that is specific to our roles as physicians: When your patients enjoy what you do, you'll never work a day in your life." Ultimately, that's really the goal, to build a strong relationship with our patients and gain their trust and confidence to help them navigate their health care journey. When your patients understand the joy and passion you bring to the work, ultimately, they can feel better about the care they receive.

Reference:

"Why Laughter May Be the Best Pain Medicine" by Jennifer Welsh. LiveScience on Sept. 14, 2011. *https://www.scientificamerican.com/article/why-laughter-may-be-the-best-pain-medicine/*

A STUDENT'S VOICE — PCOM

Navkiran Kaur, PCOM OMS-II & Marshall Rosenberg, PCOM OMS-II

Navkiran Kaur, PCOM OMS-II

Marshall Rosenberg, PCOM OMS-II

Humor, the Fifth Humor

Hippocrates famously wrote about the four humors of the body based on the four temperaments: black bile, yellow bile, phlegm, and blood. These humors constituted the human body – a balance achieved homeostasis, while a disequilibrium brought disease. We propose adding humor to this classification system, due to its power to offer a sense of levity in times of distress. It is news to no one that this past year has been unlike any other in our lifetimes, an apt example of a distressing time.

As of this article's publication, the Covid-19 pandemic will have been raging for 17 months, sadly killing over three million individuals. A year of isolation and disarray, the world worked quickly to adapt to the novel coronavirus. For some, those changes have been a necessary path to eventual normalcy, but for others, they mirror Orwell's *Brave New World*. We have learned as much about each other as we have of ourselves and amazingly, found ways to navigate through this (cytokine) storm. Prior to the release of the Covid-19 vaccinations, people developed their own homegrown armor to help them battle the virus. Among the plethora of remedies, our favorite was the notion that eating a burnt orange would restore the sense of taste. Perhaps, the most universally donned armor were masks and humor.

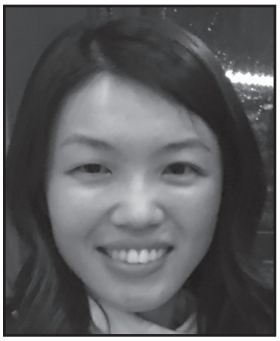
At first, we utilized humor as a coping mechanism to take on this past year in stride. At our vaccination appointments we quipped about getting the "5G" tracking chips embedded in our bodies. We also likened the "freshman 15" to the "Covid-19," and joked about how introverts did not know about the isolation orders in the first place. While we primarily used humor as a survival mechanism, it also had beneficial biological and psychological properties. Countless studies have shown that a good sense of humor releases endorphins, increases pain thresholds, and decreases blood pressure. By utilizing our sense of humor, we built resilience as a people, adding truth to the trope of the human mind's ability to sustain incredible feats in the face of adversity. This was an impressive display of adaptability as a people, a feat we should feel proud of.

During the application process for medical school, among the most common questions was, "what will my M1 year look like?" If anyone had the omnipotence to answer us honestly – that our faithful companions would have been N95s and hand sanitizer as opposed to caffeine and First Aid – we would have been inclined not to believe them. This pandemic changed our perspectives as future physicians, helping us gain a deeper appreciation for human interaction after being deprived of it. Chiefly, it reaffirmed our commitment to becoming osteopathic physicians, geared towards holistic patient care. Covid-19 put our field of medicine center-stage as the emphasis on the intricate balance between the mind and the whole body became increasingly prevalent. It provided us the opportunity to teach the world what the monogrammed "D.O." on our physicians' white coats really stands for. In essence, the past 17 months taught us how to become more resilient and adaptable through humor. Humor helped us transform difficult circumstances to more palpable ones, just as essential to our livelihood as blood. Without a good sense of humor over the past year, we all surely would have remained in disequilibrium but, thankfully, a healthy dose of levity amidst the pandemic helped maintain this crucial sense of balance. If Hippocrates were alive today to have witnessed this past year, we surmise he would be in agreement with the addition of this "fifth humor."

ABOUT THE AUTHORS

Jenna Cheng, DO, was awarded second place in the 2021 POMA Clinical Writing Contest for her article, *"The Effect of Social Media Use on Psychiatric Hospitalization in Children and Adolescents."* Dr. Cheng is a fourth-year psychiatry resident at Millcreek Community Hospital in Erie, Pennsylvania. Originally from California, she completed her undergraduate studies at the University of California, San Diego and earned her DO degree from the Lake Erie College of Osteopathic Medicine. She completed a transitional year internship at St. Petersburg General Hospital in Florida. In her free time she enjoys dance, reading and cooking.

Mary K. Crowe, DO, received the 2021 POMA Golden Quill Award for his manuscript, "*Osteoporosis Education Initiative Improves Screening in Population Notoriously Under Managed in Long-Term Care.*" Dr. Crowe is a third-year orthopedic surgery resident at Millcreek Community Hospital in Erie, Pennsylvania. A graduate of Indiana University in Bloomington, she earned a master of physician assistant studies from the University of Nebraska Medical School in Fort Sam Houston in Texas. She went on to earn her DO degree from the Lake Erie College of Osteopathic Medicine. A three-time ironman finisher and a 2007 member of Team USA's Long Distance Triatholon World Championship Team, she enjoys coaching cross country and being a hockey mom.



Jenna Cheng, DO

Mary K. Crowe, DO

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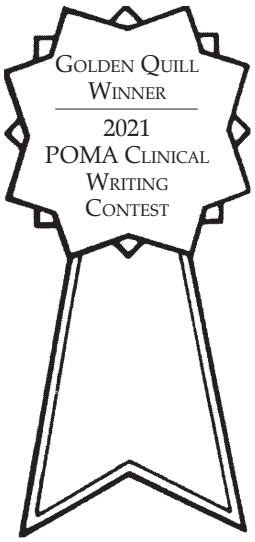
Medical Update
Osteoporosis Education Initiative Improves Screening in Population Notoriously Under Managed in Long-Term Care

by Mary K. Crowe, DO



Abstract

Estimates as to the number of long-term care residents who are diagnosed and managed for osteoporosis are limited. Available studies support that osteoporosis is under diagnosed and under treated in this population. The purpose of this study is to compare the number of residents screened, diagnosed, and treated for osteoporosis in long-term care facilities affiliated with the Lake Erie College of Osteopathic Medicine (LECOM) before and after the implementation of a facility wide initiative to improve osteoporosis education. The education initiative consists of having an osteoporosis education coordinator educate residents and their families on osteoporosis treatment benefits and provides screening and treatment guidelines from the United States Preventative Services Task Force (USPSTF) and National Osteoporosis Foundation (NOF). Prior to the implementation of the osteoporosis education initiative at the LECOM long term-care center none of the residents that met eligibility for screening and/or treatment for osteoporosis were actively being treated with pharmacological therapy for osteoporosis. Through the duration of this retrospective review of charts, seventy-one residents and their medical power of attorneys were provided education regarding osteoporosis screening and available treatment. Of the residents who received standardized education on osteoporosis, seventy-two percent of those residents desired to undergo bone density screening for osteoporosis and referral for medication management. Implementation of an osteoporosis initiative to provide education to current residents in LECOM long-term care facilities notably improved the number of long-term care residents screened and ultimately managed for osteoporosis. This study suggests that application of standardized osteoporosis education for residents of long-term care facilities may ultimately improve screening and treatment rates in a population that is at high risk for devastating and costly fragility fractures and notoriously under managed for this disease.

Introduction

Each year, an estimated 1.5 million people in the United States experience a fragility fracture secondary to osteoporosis, resulting in an annual cost of 18 billion dollars.[1] This amounts to over 430,00 hospital admissions, nearly 2.5 million medical office visits, increased disability and death.[2] The numbers are staggering with nearly half of all women and one-third of all men sustaining a fragility fracture in their lifetime.[3]

A subset of the United States' population, older adults using residential or home-based long-term care, are at an elevated risk for fragility fractures and complicated hospital courses. As the population continues to age, the number of older adults residing in residential or home-based long-term care is expected to increase from 15 million in 2000 to 27 million by 2050.[4] This population is at an increased risk of falling due to effects of aging on the sensorium combined commonly with comorbid diseases. Progressive deterioration of bone quality places these aging adults at a very high risk for sustaining the most devastating complication of osteoporosis-a hip fracture.

Research that estimates the prevalence of osteoporosis in long-term care residents is sparse. Prior studies have suggested a prevalence of osteoporosis in long-term care facilities to be as high as 85%.[5] Despite the estimated prevalence of disease, treatment rates have been estimated to be as low as 7-35% for any form of bone treatment to include application of hip protectors.[6] There are many reasons this discrepancy exists and includes uncertainty in applying screening guidelines and treatment regimens developed from the study of community dwelling aging adults to this subset of the aging adult population residing in long-term care facilities.

While there does not exist a gold standard for osteoporosis screening that is specific for residents of long-term care facilities, it is dangerous to simply ignore screening and treatment in this population. Residents of long-term care facilities are known to be at very high risk for osteoporotic fractures and furthermore, these residents are more likely to suffer from complicated hospital courses. Prior research has shown that eligibility for treatment of osteoporosis in long-term care residents can range drastically from 17% to 98% depending on the screening strategy utilized. Available screening strategies considered for use in the osteoporosis education initiative included bone mineral density screening (BMD), Fracture Risk Assessment Tool (FRAX) scoring, and heel ultrasonography.[7] The most consistent and well adopted recommendations for screening and treatment of aging adults for osteoporosis in the United States are the recommendations of the National Osteoporosis Foundation (NOF) and the United States Preventive Services Task Force (USPSTF). These are the recommendations we utilized in our osteoporosis education initiative.

In 2017, Lake Erie College of Osteopathic Medicine Senior Living Center performed an audit of resident charts for a diagnosis of osteoporosis and current osteoporosis therapies. Despite the availability of treatments for osteoporosis that have demonstrated fracture reduction in approximately one year, within our facility most all residents did not have current screening, active diagnosis or treatment for the disease. Many residents were prescribed a combination of vitamin D and calcium, but review of medication lists showed many of the regimens were below recommended daily doses of 1200mg calcium and 1000mg or greater Vitamin D supplementation.

Lake Erie College of Osteopathic Medicine Senior Living Center adopted an osteoporosis initiative in October 2017 to educate all residents and their respected medical power of attorneys as to the USPSTF and NOF recommendations for osteoporosis screening and treatment. For those residents who desired to proceed with screening, referrals for dual X-ray absorptiometry scans (DEXA) bone scans were placed and the residents were referred to the LECOM Healthy Bone Clinic, a subset clinic of the LECOM Institute for Successful Aging, for treatment recommendations and therapy. This study was designed to document the prevalence of the disease and screening for the disease before and after the implementation of a quality health improvement initiative to raise awareness and improve diagnosis and management of this silent disease in the subset of the aging population residing in long-term care.

Methods

LECOM Health System is a non-profit organization in Erie, Pennsylvania that includes two community hospitals, a multi-specialty group practice, medical school, and senior services including two long-term care facilities, two assisted living facilities and one independent senior apartment complex caring for more than five hundred aging adults. Data from seventy-one residents of one of the organizations long-term care facilities was collected between October 2017 and September 2018 for a retrospective review of trends in osteoporosis screening and management before and following implementation of a facility wide initiative to raise awareness about osteoporosis. Data summarized included age, gender, comorbid risk factors for osteoporosis, osteoporosis diagnosis, diagnostic assessments, treatments, fracture history, and fall risk. Residents receiving palliative and hospice care were excluded from the study. All residents of the LECOM long-term care facility, who were at least 50 years old at the beginning of data collection and had resided in the facility for at least 3-months prior, were included in the data collection.

The osteoporosis initiative coordinator provides education to each resident and their family members, specifically medical powers of attorney, regarding recommendation for screening and treatment by phone conversation and face-to-face meetings. Screening for osteoporosis recommendations from the USPSTF are applied as criteria for female resident testing. The USPSTF recommends screening for osteoporosis with bone mineral density testing in women 65 years and older.[8] The USPSTF found insufficient evidence to recommend routine screening for osteoporosis in men.[8] The criteria to screen men is based on the NOF recommendations to screen all men 70 years and older based on the assumption that this group has a similar osteoporotic fracture and treatment effect as 65-year-old white women.[9] After receiving education on osteoporosis screening and treatment recommendations, those residents who desire bone density testing are provided to their admitting physician who reviews their chart and places orders for testing. Upon completion of the scans, residents are referred to the LECOM Healthy Bone Clinic, the centralized clinic for osteoporosis management within the LECOM Health system. Standard care within the LECOM Healthy Bone Clinic includes a medical evaluation by a Licensed Nurse Practitioner with the onsite collaboration of a clinical pharmacist to determine the optimal treatment based on comorbities, current medications, and potential risks of medications.

A system was established to track DEXA scans, fragility fractures, fall risk, osteoporosis risk factors, and anti-osteoporosis medication

management. Data was reviewed including patient diagnosis status, treatment; including calcium and vitamin D supplementation, as-well-as, pharmacological management of osteoporosis before and following implementation of an osteoporosis initiative to educate residents and their families on the recommendations for screening and management for osteoporosis.

Results

Consistent with available literature, LECOM long-term-care residents, like the majority of residents in U.S. long-term care facilities, were not routinely screened or treated for osteoporosis. In total seventy-one residents met the criteria for bone mineral density testing. The average age of the residents was 85.36 years (SD 8.34 years). Fifteen percent of the residents were men and eighty-five percent of the residents were women.

Prior to the implementation of an initiative to raise awareness for residents and residents' family members and/or medical power of attorneys, none of the residents that met eligibility were actively being treated with pharmacological therapy for osteoporosis. None of the eligible residents had a bone density within the previous two years. Forty percent of residents had an existing diagnosis of osteoporosis in their chart. Thirty-one percent of the residents had documentation of a fragility fracture in their medical chart. Forty percent of the residents were taking a combination of calcium 1200mg and 1000mg Vitamin D daily.

All seventy-one residents and their medical power of attorneys were provided education on osteoporosis screening and available treatments. Of the residents who were provided osteoporosis education, seventy two percent desired to undergo DEXA scanning for osteoporosis and treatment. In total, forty-eight of the fifty-five residents who desired screening obtained DEXA scans. The average T score for females was -3.044 (SD 1.44) and for men -2.922 (SD 0.61). Six residents physically incapable of completing the DEXA scanning were referred for therapy based on FRAX-BMI scores.

In total, twenty-eight percent of the residents receiving the osteoporosis education did not desire to proceed with bone mineral density testing and management. Twenty-five percent of the total male residents and twenty-four percent of the total female residents who received education declined to proceed with screening or discussion of treatment options.

Discussion

There are many missed opportunities for osteoporosis fracture prevention, specifically in the subset of the population residing in long-term care facilities in the United States. The purpose of this study was to determine the number of residents screened, diagnosed and treated for osteoporosis in long-term care facilities affiliated with the Lake Erie College of Osteopathic Medicine before and following an initiative to improve education amongst residents and their families as to the importance of continued screening and treatment of osteoporosis in those at highest risk for fragility fractures.

Estimates as to the prevalence and treatment of osteoporosis among long-term care facility residents are limited. Available studies have shown that osteoporosis is under diagnosed and under treated in the long-term care setting. Our findings within our own facility support this. Implementation of an osteoporosis initiative to educate current residents in LECOM long-term care facilities notably improved the number of long-term care residents screened and ultimately managed for osteoporosis within our facility.

Extensive review of the literature and current guidelines do not yield specific recommendation differences for those aging adults who reside in long-term care facilities versus those living in the community. Osteoporosis clinical drug trials have exclusively studied the effects of medications in community dwelling older adults. We acknowledge that our population is likely to have more comorbidities and greater mechanical unloading than those included in the clinical trials. We look forward to the results of the current studies testing sclerontin-neutralizing antibodies which showed encouraging results in rat models and represents a promising therapeutic option for severe osteoporosis induced by estrogen deficiency with concurrent mechanical unloading.[10] We acknowledge that a percentage of residents residing in long-term care facilities, are likely to have significant mechanical unloading whether bedridden, full assist and/or wheelchair bound. These residents are more likely to suffer from severe disuse osteoporosis similar to patients with spinal cord injuries, muscle dystrophies and neurological disorders. It remains unclear in the literature whether such aging adults are expected to benefit from current osteoporosis medications.

Multiple studies have shown osteoporosis therapies to be safe and efficacious in older adults who are expected to live long enough to derive a benefit. Most of the residents in our facilities have already surpassed the life expectancy of 78.7 years. Pharmacological therapies including bisphosphates and denosumab have shown significant impact on fracture reduction within a year.[11] Those residents who are not under the care of hospice or palliative care, and we expect to live a year or more, are provided education on screening and therapy for osteoporosis. We expect our greatest benefits to be in our newly admitted residents since implementation of our educational initiative. These residents receive education upon

admission, and we expect that by increasing the number of our residents that are screened and treated for this disease that we will have a reduction in the number of reportable major incidents in our facility. We plan for additional studies in the future to document whether this is in fact true.

By initiating osteoporosis education upon admission for our new residents, we expect that the additional costs to the healthcare system associated with the performance of more DEXA scans and having additional patients receiving anti-osteoporosis medication to be offset by the cost savings associated with the reduction in hip and other fragility fractures. Previous studies have shown that osteoporosis can be treated cost effectively while decreasing the hip fracture rate by as much as 50%.[12] Additionally, bone mineral density testing in appropriately selected patients has reduced the incidence of fractures; healthcare costs; including the expense of the bone mineral density testing and treatment of disease.[13]

Kaiser health plan reported a thirty-seven percent decrease in hip fractures in men and women, compared with projected rates for their members in the fifth year of an intervention that increased DEXA testing by 247 percent and treatment by 135 percent.[14] An additional study from 1996 to 2000, Geisinger Health System implemented an osteoporosis disease management program. A 5-year observational study evaluating the clinical and fiscal outcomes found that implementation of this program was associated with a significant decrease in the age-adjusted incidence of hip fractures and an estimated 7.8-million-dollar reduction in health care costs during that period. Kaiser Southern California further supported the implementation of osteoporosis initiatives by implementing an osteoporosis disease management program ("Healthy Bones Programs") in 2002. It was estimated that in 2006, 935 hip fractures, with an average cost of 33,000 dollars each, were prevented resulting in a savings of over 30.8 million for Kaiser.[14]

Many obstacles are present to maintain a culture of osteoporosis prevention awareness within the LECOM long-term care facility. Most of our residents have multiple comorbid diseases to include dementia and generalized frailty. Transporting the residents with multiple comorbidities requires specialized transportation for wheelchair accessibility, as-well-as, trained staff to assist the residents with dementia. The logistics for transporting the residents requires a team of individuals and a significant amount of logistical planning. An additional obstacle includes the design of the bone density scanner itself. The LECOM Imaging Center uses a GE Prodigy scanner. The design does not provide an option for lowering the table, which presents inherent difficulties in this frail population. The option to scan the forearm was met with additional difficulties in many residents with shoulder arthropathy, contracture from prior strokes, and the difficulty of positioning the head and neck below the scanning arm.

While additional screening options aside from DEXA scans are available, a prior study demonstrated the potential for great variability in eligibility for osteoporosis treatment ranging from 17% to 98% depending on the screening strategy applied.[7] FRAX screening has the great benefit to offer the ability to utilize FRAX with BMI in place of FRAX with BMD and negate the necessity to obtain a BMD in this population subset. A limitation to the FRAX design is that it included patients from 40-90 and 37% of our patients were over the age of 90. Additionally, the FRAX score is a ten-year risk of fracture which is far beyond the estimated 2.3-year life expectancy of a person once admitted for long term-care.[15]

Medicare data indicates that bone mineral density testing is underutilized, and drug therapy often not initiated in older seniors despite their higher likelihood of the disease and greater risk for hip fractures. A Medicare claims analysis from 2002 to 2008 demonstrated that 48% of elderly women had not had a single DEXA scan in their lifetime. The annual Medicare Part B testing rate for women over the age of 65 is only 14% despite recommendations for screening by Medicare, USPSTF and NOF.[16]

We suspect that a major deterrent to physicians treating osteoporosis in long-term care residents is the difficulty to meet current guidelines to obtain bone mineral density scans prior to initiation of the therapy for diagnosis and documentation of effects of therapy. Our osteoporosis educator found that an overwhelming number of residents and their families had preconceived ideas that people older than their early seventies were too old to benefit from pharmacological intervention to treat the disease and considered DEXA scanning in the elderly to be a frivolous test.

Based on the Medicare claims data demonstrating the lack of utility of DEXA scans in older adults and the abundance of research that proves that osteoporosis is an undermanaged disease, we suspect that the basis for these assumptions begins in physician offices where DEXA scans are notoriously under ordered in aging adults and decreases incrementally with increasing age. Based on our observations we are pursuing additional studies into understanding biases, which may exist in the medical community regarding the diagnosis and treatment of this disease as patients grow older. Determining whether such prejudices exist will help us to understand the reasons why so many aging adults once admitted for long-term care are not routinely

screened and treated for osteoporosis. Our present study supports that osteoporosis education provided to residents of long- term care facilities and their medical power of attorneys will ultimately increase the number of older adults residing in long-term facilities who are screened and treated for osteoporosis.

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OUT OF MY MIND *(continued from page 5)*

the ER to save your clothing from Betadyne, Blood, Urine, Vomit and other, even worse stains.

Not if you wear scrubs from FIGS. FIGS featured an ad showing a female DO, in pink scrubs, reading "Medical Terminology for Dummies" upside down. The heavens shook! That aforementioned national organization took immediate retaliatory action.

FIGS made two errors. First, the model was a female. Sorry, making fun of a minority faction in medicine is strictly forbidden. She portrayed a DO! Please reread the previous sentences. If the model portrayed a middle aged male MD, we would still be laughing.

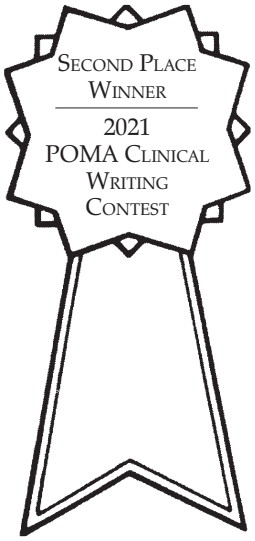
The national response was swift. "We will fight them with our wallets"! Fearing a loss of osteopathic revenue stream, corporate Mea Culpas resounded throughout the land. That'll teach 'em! Let's face it. Nothing and I mean nothing demonstrates the superior intelligence of a physician more than spending over a hundred dollars for a set of scrubs. NOTHING!!!

Postscript:

I close on an educational note. Pay attention Dr. Callahan. Never buy a Duck without a Preen (Uropygial) gland. It'll drown….

Medical Update
The Effect of Social Media Use on Psychiatric Hospitalization in Children and Adolescents

by Jenna Cheng, DO



Abstract

Background: Social media is an increasingly dominating influence in the lives of children and adolescents. This may be due to increasing suicidal ideation, homicidal ideation, psychosis, or aggression. Social media usage also raises concern for its own form of addiction disorder, similar to the effect of internet gaming disorder recently added to DSM-V. Increased risk of hospitalization may be explained by social isolation via lack of depth in online relationships, cyberbullying, access to age-inappropriate information, and impaired reality testing. This study attempts to answer whether the increase in social media use correlated with increase in psychiatric hospitalization in children and adolescents.

Method: Participants of any age who can read up to age 18 presenting to the Millcreek Community Hospital emergency room for behavioral health evaluation with their legal guardian were surveyed before or after their behavioral health evaluations. Both the participant and his or her legal guardian took an 11-item questionnaire on the participant's social media usage patterns and experiences.

Results: The data shows that the knowledge of time spent on social media is mostly consistent between the child and the parent. However, notably 17% of parents are not aware that the child spends 7 or more hours on social media when 31% of the children answered that they do spend 7 or more hours on social media. There is a significant number of parents who do not know of the details of their children's activities on social media: 29% of parents also do not know if their children use their real names or not, and 25% of parents do not know if their children check their phones first thing in the morning. Parents and children are matched in their understanding of whether the child tried to stay away from social media but could not, both around 40%. A critical data point is that almost 50% of children experience cyberbullying on social media, however only 20% of parents know this and 42% of parents do not have any idea whether their child is cyberbullied or not. Furthermore, 50% of parents do not know if their child has been threatened by others to be harmed online, and 40% do not know if someone commanded their child to harm him or herself.

Discussion/Conclusion: Social media use appears to be much higher in children who are admitted to the hospital for psychiatric reasons. Additionally, there appears to be a large discrepancy about what parents know and what children are actually doing on social media. An important conclusion is that of the 20 patients admitted, they had significantly higher time spent on social media compared to those who were discharged. Those who were admitted also experienced social media as a negative platform more than those who were discharged. Thus, recognizing the risk and encouraging a more open discussion of the appropriate use of social media, both its benefits and risks, is crucial for promoting safe use of social media in children and adolescents.

Introduction

Social media is an increasingly dominating influence in the lives of children and adolescents. Given its accessibility and pervasiveness, it is important for mental health professionals to be cognizant of the effect of social media usage on mood and behavior. The American Academy of Pediatrics defines social media as "any website that allows social interaction."[1] Some of the most prominent examples include Facebook, Instagram, Twitter, YouTube, Twitch, and Snapchat. US teenagers ages 13 to 18 spend more than 6.5 hours of the day on the screen, whether by watching television, online videos, or using social media.[2] Of these hours spent on the screen, half of them are on mobile phones.[2] Moreover, 92% of US adolescents use specifically social media daily (Muzzafar et al., 2018). Such extensive pervasiveness of social media in the lives of children and adolescents raises the question, can social media be considered an environmental trigger in an epigenetic phenomenon that may provoke negative mental health effects for those with genetic vulnerabilities for

psychiatric disorders? Even if a user has no genetic vulnerabilities for depression, anxiety, psychotic disorders, or learning and developmental disorders, what are the risk factors that lead a user to be harmed by the effects of social media? Recent literature has been increasingly interested in the influence of social media on the psychological status, particularly in young people. The correlation between internet social media usage and psychiatric disorders is complicated, as we will delve into in this review, and appears to depend on the type of experience encountered on social media and the user's risk factors.

First, it is important to consider theoretical constructs surrounding the influence of social media on psychological states. There are two competing theories; first is the Hyperpersonal Model which hypothesizes that selective self-presentation has positive influence on the self because it allows individuals to take time to select, emphasize, and present information that they find positive about themselves.[4] The personal information can be received more favorably by viewers, which in turn creates opportunities for positive relationships.[4] There is evidence that social media also serves as a platform for self-expression and fills the "need for stimulation" in young adults,[5] which is unceasing in today's digital world. Ongoing research is currently assessing the potential of social media as an educational outreach to a wide adolescent audience and promote mental well-being.[6] It can also serve as a resource to call for help in mental health crisis situations. With its wide accessibility and availability for children and adolescents, it is a resource that warrants exploration.

On the other hand, the Objective Self-Awareness Theory suggests that social media leads the self to become the object, resulting in diminished impression of the self as an identity and thus lower self-esteem.[4] A typical Facebook user may have multiple visits to his or her own profile page, thus undergoing self-evaluation over and over, comparing his/her achievements with those of others'. The user then incorrectly perceives the social lives of others and becomes envious. The profile comes to define the entire self, and the user is unable to expand his or her identity into the real world. These reactions may be benign and transient in some individuals, but for others it may lead to overwhelming emotional disturbance and ultimately depression, anxiety, or aggression.[3] The key is finding out what separates those who are resilient and those who are not, which presumably, will involve identification of risk factors.

This study attempts to answer whether the increase in social media use correlated with the increase in psychiatric hospitalization in children and adolescents. More specifically, survey questions will attempt to answer the question of whether social media use is correlated with increased psychiatric hospitalizations. The potential causes for such a pattern includes exacerbation of mood disorder or behavioral issues, trauma due to cyberbullying, and obsessive/compulsive or addictive patterns of use.

Methods

Participants of any age who can read up to age 18 presenting to the Millcreek Community Hospital emergency room for behavioral health evaluation with their legal guardian were surveyed before or after their behavioral health evaluations. This excluded any prospective subjects who are being evaluated for an involuntary commitment, and any subjects for whom the principal investigator Dr. Cheng or Dr. Thomas-Clark are involved in the admission decision or in any evaluation, treatment or other care prior to the admission decision being made. The survey was provided to the participant by the principal investigator in the Emergency Room before the participant is evaluated by the psychiatrist, or after being evaluated by the psychiatrist and awaiting treatment recommendations. The survey consisted of an 11-item questionnaire and took less than 10 minutes to complete.

The diagnosis on admission or discharge was compared to the amount of social media usage. This analysis will examine different age groups and gender differences. The legal guardian and subject were asked the same questions from their respective perspectives, thus their responses were compared to examine what percentage of legal guardians agree with or disagree with the patient's responses. The guardian's survey responses were linked to the child's survey responses by labeling with the same subject code number and stored together. The difference between social media use in those who were admitted to the hospital and discharged from the hospital were compared. Additionally, the child's answers and the guardian's answeres were compared.

Results

The data indicates that in general, children who were admitted spend more time on social media than those who were discharged. As seen in Graph 1, significantly more children who were admitted spend 4-6 hours on social media than those who were discharged (53% versus 13%), though those who spend 7+ hours are more likely to be discharged. 97% of those who were admitted used their real names, while 72% of those who were discharged used their real names. As seen in Graph 3, 67% of those who were admitted reported that the longest time away from social media was minutes or hours, while 44% of

those who were discharged reported the same. 57% of those who were admitted checked social media immediately upon awakening in the morning, while 72% of those who were discharged did this. 57% of those who were admitted tried to stay away from social media but could not, and only 17% of those who were discharged struggled with this. The percentage of those who perceived social media to be a negative experience more than doubled for those who were admitted (27%) compared to those who were discharged (11%), as shown in Graph 4. Cyberbullying and being threatened online was similar across those admitted and discharged (50% vs. 44%; 27% vs. 22%). However, being told to self-harm was almost tripled in those who were admitted (30%) compared to those who were discharged (11%). Lastly, 80% of those who were admitted believed that everything they read online was real while only 33% of those who were discharged believed so.

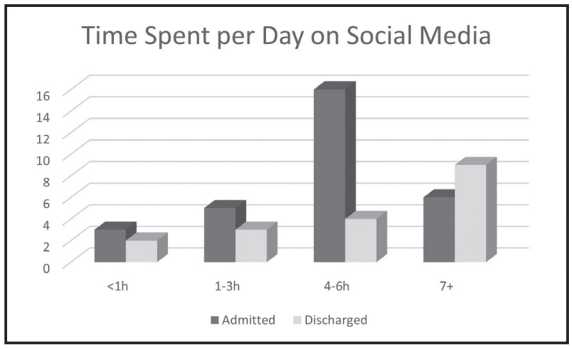
Additionally, the data shows that the knowledge of time spent by the child on social media is mostly consistent between the child and the parent. However, notably 17% of parents are not aware that the child spends 7 or more hours on social media when 31% of the children answered that they spend 7 or more hours on social media. There is a significant number of parents who do not know of the details of their children's activities on social media: 29% of parents do not know if their children use their real names or not, and 25% of parents do not know if their children check their social media platforms first thing upon awakening in the morning. Parents and children match in their understanding of whether the child tried to stay away from social media but could not, both 40%. A critical data point is that almost 50% of children experience cyberbullying on social media, however only 20% of parents know about the cyberbullying and 42% of parents do not have any idea whether their child is cyberbullied or not. Furthermore, 50% of parents do not know if their child has been threatened by others to be harmed online, and 40% do not know if someone commanded their child to harm him or herself.

Discussion & Conclusion

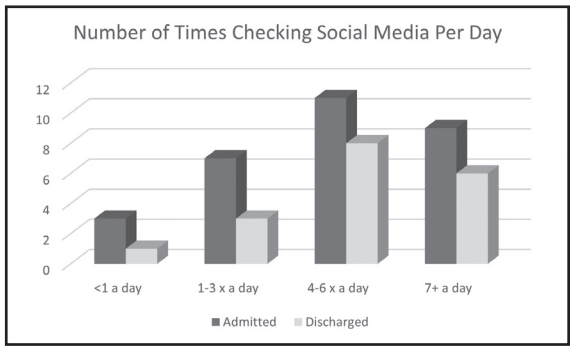
Childhood and adolescence is a critical time for social development and some social anxiety is inevitable. Online interactions may be particularly attractive to young people who are just starting to learn to socialize or those with social anxiety, as it allows for more control over self-presentation and a low-pressure environment free from need for immediate responses.[3] However, there appears to be a large discrepancy about what parents know and what children are actually doing on social media. An important conclusion is the children and adolescents who were admitted had significantly higher time spent on social media compared to those who were discharged, however, those who spent seven or more hours were actually more likely to be discharged. This may speak to the fact that children who are spending most of the day on social media may be more emotionally stable. Another factor that complicates this study is that some children are from residential facilities, where they have limited or no computer and phone time. This is a weakness of the study and future studies should control for children from residential facilities.

The overall experience of the social media platform varied between those who were admitted and discharged. Those who were admitted experienced social media as negative significantly more than those who were discharged. The percentage of those who perceived social media to be a negative experience more than doubled for those who were admitted (27%) compared to those who were discharged (11%). Thus, recognizing the risk and encouraging a more open discussion of the appropriate use of social media, both its benefits and risks, is crucial for promoting safe use of social media in children and adolescents.

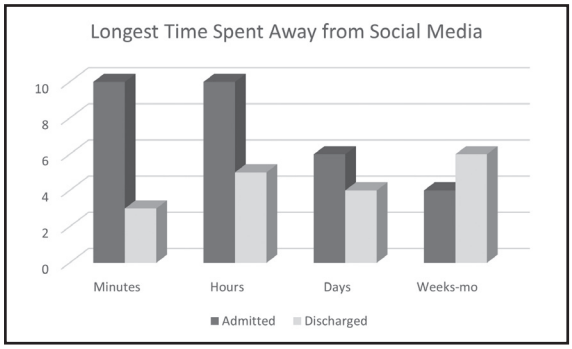
Although the rate of cyberbullying and threats were similar across the two groups, being told to self-harm almost tripled in those who were admitted (30%) compared to those who were discharged (11%). An interesting future study is to evaluate the degree of self-harm and psychiatric admis-



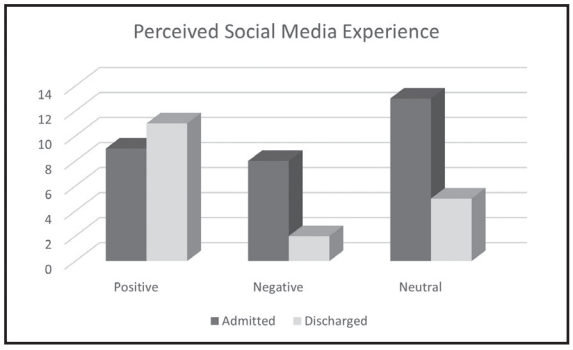
Graph 1: Time spent per day on social media.



Graph 2: Number of times checking social media per day.



Graph 3: Longest time spent away from social media.



Graph 4: Perceived social media experience.

sions in children and adolescents coming from the community. Another highlight was that a whopping 80% of those who were admitted believed that everything they read online was real, while only 33% of those who were discharged believed so. This speaks to the extent to which the children who are emotionally unstable have poor reality-testing, looking to social media for information which are often skewed. Furthermore, the addictive aspect of social media is highlighted in this study. 57% of those who were admitted tried to stay away from social media but could not, and only 17% of those who were discharged struggled with this. An improvement for future studies would be to add a question about whether the child or the parent felt that social media use caused significant impairment or distress in their relationships, school, or work. Similarly to any addictive disorder such as internet gaming disorder as described in the DSM-5, the addictive potential of social media poses threats to the child's ability to build social skills, frustration tolerance, and flexibility in real-life situations.

There is a range of concerns for families and health professionals on the dominating presence of social media on children, which is ever-rising. Now, many primary school systems are transitioning to online assignments and examinations. This study highlights both the difference in social media use among high-risk children who were ultimately admitted to an inpatient psychiatric unit and those who were discharged, as well as the discrepancy between what parents know and what their children actually do online. It is imperative that psychiatrists, therapists, social workers, nurses and the healthcare system as a whole be aware of the risks of excessive and uncontrolled social media use on emotionally vulnerable children and adolescents.

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CME Quiz

Name _____ **AOA #** _____

1. What is the percentage of US women that will suffer a fragility fracture in their lifetime?
a. 10% b. 20% c. 50% d. 75% e. 100%

2. As the population continues to age in the US, the number of people residing in long term care facility is expect to:
a. Decrease b. Increase c. Stay the Same

3. The USPSTF recommends screening women at what age for osteoporosis?
a. 55 b. 65 c. 75 d. 85

4. What percentage of adolescents in the US use social media daily?
a. 50% b. 75% c. 92% d. 100%

5. What percentage of those who were admitted were told to self-harm on social media?
a. 10% b. 30% c. 50% d. 75%

6. What percentage of children experience cyberbullying on social media?
a. 10% b. 20% c. 50% d. 75%

7. Of the children who are cyberbullied, what percentage of parents know about cyberbullying?
a. 5% b. 20% c. 50% d. 80%

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Answers to Last Issue's CME Quiz

Questions appeared in the Spring 2021 JPOMA

1. c 2. c 3. b 4. b 5. b 6. b

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