A Monthly Publication by EIM Faculty THE INSIGHT HUB

MEET THE EXPERT

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What is the best advice you have received in your professional journey?

I understand what it feels like to be in a busy clinical practice, especially in a place like

Australia, and to experience disappointment in the profession. It can be disheartening when it feels like you're stuck in a cycle of doing the same things repeatedly. I noticed that my mood was even starting to affect my work partner, which only added to my frustration. When I finally opened up to him about what I was going through, he offered me some thoughtful advice: to "Master the Art of Motivation." He reminded me that making progress in our field can often be slow and challenging, but it's important to feel encouragement and celebrate even the small milestones. This insight really helped me reconnect with the "why" behind my decision to pursue this career, and I found comfort in that understanding.

What is one article all therapists should read and why?

Waddell & Turk (1996) put out an influential article called "The Biopsychosocial Model of Pain and Disability: New Concepts, New Models" in the Clinical Journal of Pain. This piece really shaped modern rehab by introducing the biopsychosocial model, which is key to understanding and managing pain and disability. It pointed out how biological, psychological, and social factors all play a role in patient experiences. The article pushed clinicians, including me, to look beyond the oldschool biomedical model and think more holistically about patients rather than just zeroing in on anatomical or structural problems.

What is one book all therapists should read and why?

Butler and Moseley's book "Explain Pain" (2003) kicked off a major shift in how we understand pain. It's an eye-opening read that digs into the science of pain perception and explains why we feel pain in an easy-to-grasp way. Instead of just framing pain as a reaction to injury, the authors see it as a complicated mix involving the brain, nervous system, and outside factors.

What are you working on right now?

I'm in the process of planning for my eventual retirement from teaching.

Do you have any advice for early-career therapists?

After 44 years in the field, I've got tons of advice for new therapists. If I had to narrow it down to three main points, they'd be:

- 1. Never Stop Learning: When I left PT school in 1980, I couldn't imagine going back, but the world of physical therapy moves fast, with new research and techniques popping up all the time. If you want to get ahead, stay curious and keep learning through courses, workshops, and certifications—like orthopedic manual therapy, dry needling, or sports rehab.
- 2. Work on Your Hands-On Skills: Early in your career, it's all about getting good at manual techniques. Don't hesitate to ask for feedback from colleagues and supervisors; it'll help you improve and grow in your profession.
- **3. Build Confidence Over Time:** It's totally normal to not have all the answers when you start. Experience is what makes you an expert and many newcomers struggle with self-doubt. Focus on your journey and remember that learning takes time.

BOOK CLUB

Immensely helpful for stabilizing my own love/hate relationship with sleep, and practical for helping my patients implement the fundamentals of cognitive behavioral therapy for insomnia. As we deepen our understanding of how sleep impacts pain, we need research-based guidance on how to help people change behavior that maintains poor sleep. This book has been a game changer for me. -Jessie Podolak, PT, DPT, Fellow of Pain Science

About the book:

A practical and compassionate guide to repairing your relationship with sleep. For the 25 million Americans who struggle with insomnia, each night feels like a battle with their racing minds instead of a blissful surrender into sleep.



HEALTH CORNER: FOOD FRENZY Jen Uschold PT, CFMT, FPS, NBC-HWC



Nutrition is a hot topic and quite controversial. Yet it is an important consideration for our patients and clients navigating pain, surgery, dysfunction and recovery.

It is easy to find the nutritional "preachers" and the strict dogmatic approaches on the "almighty internet". Today, we are going to focus on a few key statistics and where we all agree (well-most of us).

Trending at the 2024 American College of Lifestyle Medicine (ACLM) annual conference was a shift from the word "diet" to Whole Food Plant Based (WFPB) Eating Pattern- now that's a mouthful! ACLM does promote primarily a plant based eating pattern. Plant based (very few animal foods) is different from vegan (strictly no animal products).

A recent study on twins had both eating clean whole food meals.



One was carnivorous and the other was vegan. In this short eight week intervention, the twins eating vegan had improved cardiometabolic outcomes.¹ Not ready to go vegan? That's OK- here are a few more things for you to "chew on".

Would it surprise you to learn that 70% of food in grocery stores is high in sugar and highly processed?²

Here is where consensus is strong when it comes to nutrition. This is especially relevant for patients struggling with inflammation issues, sleep, and mobility:

Keep it simple!

- Eat foods with as few ingredients as possible.
- Consider that if you cannot pronounce an ingredient, maybe it isn't actually food.

- Eat your veggies!
- Eat high quality fats!
- Eat nuts and legumes.
- If you want to partake in meat and dairy—keep it clean and as fresh as possible.
- Limit sodium, which is very hard to do when eating processed food, sometimes, salt is even added to ice cream!³

Maybe this can be a fun interaction with your patients. You can challenge each other to one food swap per week.

Lifestyle Medicine can prevent/ treat/reverse up to 80% of lifestyle related diseases. Nutrition is a critical piece of this. We could prevent 1.8 million global deaths if we increased our intake of veggies, 2.5 million deaths if we increase nuts and seeds, and 4.9 million deaths if we increase fruit.⁴

Still not sure about integrating nutrition into your practice. "A doctor (allied health professional) who doesn't know about food is like a firefighter who doesn't know about water." -John Robbins^{5,6}

If you want to learn more about the Twin Study, check it out on Netflix here: **You Are What You Eat: A Twin Experiment**

 Landry MJ, Ward CP, Cunanan KM, et al. Cardiometabolic Effects of Omnivorous vs Vegan Diets in Identical Twins: A Randomized Clinical Trial. JAMA Netw Open. 2023;6(11):e2344457. doi:10.1001/jamanetworkopen.2023.44457

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- Lichtenstein AH, Appel LJ, Vadiveloo M, Hu FB, Kris-Etherton PM, Rebholz CM, Sacks FM, Thorndike AN, Van Horn L, Wylie-Rosett J. 2021 Dietary Guidance to Improve Cardiovascular Health: A Scientific Statement From the American Heart Association. Circulation. 2021 Dec 7;144(23):e472-e487. doi: 10.1161/ CIR.000000000001031. Epub 2021 Nov 2. PMID: 34724806.
- 4. Lim SS, Vos T, Flaxman AD, et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010 [published correction appears in Lancet. 2013 Apr 13;381(9874):1276] [published correction appears in Lancet. 2013 Feb 23;381(9867):628. AlMazroa, Mohammad A [added]; Memish, Ziad A [added]]. Lancet. 2012;380(9859):2224-2260. doi:10.1016/S0140-6736(12)61766-8
- 5. Robbins, Ocean "The Intersection of Health and Planet: Why Food Choices Matter for Our Future" 2024 ACLM conference
- 6. Michael Pollan's 7 rules for eating. Travis Hellstrom. Accessed 12/12/20. https://travishellstrom.com/advance-humanity/michael-pollans-7-rules-for-eating

RESEARCH CORNER

Evidence In Motion, by nature of its name, is focused on research. Our 300+ post-professional faculty publishes close to 100 papers per year, speak at national and international conferences and push boundaries when it comes to forward-thinking in rehabilitation. Each month we will feature some of these new papers, and reflect on a key paper/study all clinicians should have in their library.



EIM

Impact of physical therapy techniques and common interventions on sleep quality in patients with chronic pain: A systematic review

Santiago Navarro-Ledesma, Dina Hamed-Hamed, Ana Gonzalez-Muñoz, Leo Pruimboom

This systematic review aims to find effectful healthcare strategies, with special focus on drug-free interventions and physical therapy, as part of the treatment for sleep in patients with chronic musculoskeletal pain. Seventeen RCTs from different healthcare fields complied with our inclusion criteria. Two RCTs investigated manual therapy, five RCTs therapeutic exercise, one RCT Fu's subcutaneous needling, two RCTs physical agents (one on balneotherapy and one on cryo-stimulation), two RCTs cognitive-behavioral therapy, and four RCTs pharmacological therapy and their effect on sleep quality and/or quantity in patients suffering from chronic pain. Additionally, two RCTs on neurofeedback and limbic neuromodulation were also included. Secondary negative effects were found for the possible overuse of certain medicines such as morphine, a huge problem in the United States. Sleep deficiency is an independent risk factor for many diseases, including chronic pain syndrome and therefore more studies are needed to find non-toxic interventions for people suffering sleep disorders associated with systemic diseases and pain.

Orthopaedic Manual Physical Therapy: A Modern Definition and Description

Jason L. Silvernail ,DPT,DSc, Gail D. Deyle, DPT, DSc, Gail M. Jensen, PT, PhD, Eric Chaconas, DPT, PhD, Josh Cleland, DPT, PhD, Chad Cook, PT, PhD, Carol A. Courtney, PT, PhD, Julie Fritz, PT, PhD, Paul Mintken, DPT, Elaine Lonnemann, DPT

Currently, orthopaedic manual physical therapy (OMPT) lacks a description of practice that reflects contemporary thinking and embraces advances across the scientific, clinical, and educational arms of the profession. The absence of a clear definition of OMPT reduces understanding of the approach across health care professions and potentially limits OMPT from inclusion in scientific reviews and clinical practice guidelines. For example, it is often incorrectly classified as passive care or incorrectly contrasted with exercise-therapy approaches. This perspective aims to provide clinicians, researchers, and stakeholders a modern definition of OMPT that improves the understanding of this approach both inside and outside the physical therapist profession. The authors also aim to outline the unique and essential aspects of advanced OMPT training with the corresponding examination and treatment competencies. This definition of practice and illustration of its defining characteristics is necessary to improve the understanding of this approach and to help classify it correctly for study in the scientific literature. This perspective provides a current definition and conceptual model of OMPT, defining the distinguishing characteristics and key elements of this systematic and active patient-centered approach to improve understanding and help classify it correctly for study in the scientific literature.

Improved outcome after lumbar microdiscectomy in patients shown their excised disc fragments: a prospective, double blind, randomized, controlled trial.

M J Tait, J Levy, M Nowell, C Pocock, V Petrik, B A Bell, M C Papadopoulos

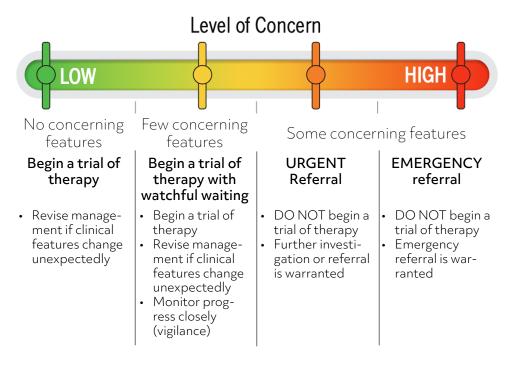
Methods: Adult patients undergoing LMD for radiculopathy caused by a prolapsed intervertebral disc were randomized into one of two groups, termed experimental and control. Patients in the experimental group were given their removed disc fragments whereas patients in the control group were not. Patients were unaware of the trial hypothesis and investigators were blinded to patient group allocation. Outcome was assessed between 3 and 6 months after LMD. Primary outcome measures were the degree of improvement in sciatica and back pain reported by the patients. Secondary outcome measures were the degree of improvement in leg weakness, paresthesia, numbness, walking distance and use of analgesia reported by the patients.

Results: Data from 38 patients in the experimental group and 36 patients in the control group were analyzed. The two groups were matched for age, sex and preoperative symptoms. More patients in the experimental compared with the control group reported improvements in leg pain (91.5 vs 80.4%; p<0.05), back pain (86.1 vs 75.0%; p<0.05), limb weakness (90.5 vs 56.3%; p<0.02), paresthesia (88 vs 61.9%; p<0.05) and reduced analgesic use (92.1 vs 69.4%; p<0.02) than preoperatively.



CLINICAL PEARL

Medical screening and the first level of triage around whether the patient in front of us belongs in our clinic, is an imperative and often overlooked part of our subjective examination process. A standard medical screening process that we ask each patient (don't just rely on the form) can catch pathology and help direct care for our patients. Have a standard list of questions that you ask explicitly and specifically each time. Example: don't have changes in bowel or bladder is not as effective of a question as "do you have any difficulty initiating the flow of urine?" These are not the same question and again asking items specifically can help us catch red flags. Case example: patient with a personal history of cancer (melanoma) who does see dermatology every 6 months was referred to me for right shoulder pain. During medical screening he endorses recent 22 pound weight loss over 2.5 weeks. Primary care saw him prior to our visit and had a note of his weight loss but not time period of weight loss. I asked MD to do a work up and patient did have renal carcinoma, caught early fortunately!! Specificity matters. -Seugnet DeBauche



Finucane LM, Downie A, Mercer C, Greenhalgh SM, Boissonnault WG, Pool-Goudzwaard AL, Beneciuk JM, Leech RL, Selfe J. International Framework for Red Flags for Potential Serious Spinal Pathologies. J Orthop Sports Phys Ther. 2020 Jul;50(7):350-372. doi: 10.2519/jospt.2020.9971. Epub 2020 May 21. PMID: 32438853.

"In the future, the use of big data and artificial intelligence will improve our ability to identify unique pain phenotypes for which we can provide a personalized management approach to optimize care." -Chad Cook PT, PhD, MBA, FAPTA, FAAOMPT