

# Elements of a Virtual Functional Integrative Restoration (FINER) Program: Qualitative Outcomes

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# Disclosures

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This presentation does not contain off-label or investigational use of drugs or products.



# Learning Objectives

- Explain the need for developing a virtual interdisciplinary pain management program.
- Be familiar with the structure of the **Functional INtEgrative Restoration (FINER)** program.
- Recognize the qualitative themes identified through patient comments and interviews post-FINER program.



# References

1. Marin TJ, Van Eerd D, Irvin E, et al. Multidisciplinary biopsychosocial rehabilitation for subacute low back pain. *Cochrane Database of Systematic Reviews*. 2017
2. Hruschak V, Flowers KM, Azizoddin DR, Jamison RN, Edwards RR, Schreiber KL. Cross-sectional study of psychosocial and pain-related variables among patients with chronic pain during a time of social distancing imposed by the coronavirus disease 2019 pandemic. *Pain*. 2021
2. Sharpe L, Jones E, Ashton-James CE, Nicholas MK, Refshauge K. Necessary components of psychological treatment in pain management programs: A Delphi study. *European Journal of Pain*. 2020





# Chronic Pain

- 1 in 5 adults in the US experience chronic pain
- Significant impact of chronic pain
  - Function- Activities of Daily Living
  - Mood
  - Quality of Life
  - Healthcare costs
- Estimated annual cost to society- \$560 billion to \$635 billion per year (2010)



Yong, R. Jason<sup>a,\*</sup>; Mullins, Peter M.<sup>b</sup>; Bhattacharyya, Neil<sup>c</sup> Prevalence of chronic pain among adults in the United States, PAIN: February 2022 - Volume 163 - Issue 2 - p e328-e332



Gaskin DJ, Richard P. The Economic Costs of Pain in the United States. In: Institute of Medicine (US) Committee on Advancing Pain Research, Care, and Education. Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research. Washington (DC): National Academies Press (US); 2011. Appendix C.

# Chronic Pain

- Conventional treatment options
  - Physical therapy
  - Medications
  - Interventional procedures
- Most have shown some efficacy, but alone, may lack holistic view of the patient and coordination of care.
- Increased isolation during COVID-19 pandemic



# Functional Integrative Restoration (FINER) Program



# FINER Program

## Structure

- 8-week program
- Twice weekly group Zoom sessions
- Facilitated by:
  - Interdisciplinary team of physiatrists specializing in pain and spine care
  - Pain psychologists
  - Physical therapists

## Directors

- Clinical: Jennifer Kurz, MD
- Research: Danielle Sarno, MD



Jennifer Kurz, MD

MGH Physical Medicine and Rehabilitation  
Service



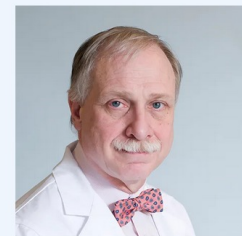
Danielle Sarno, MD

BWH Physical Medicine and Rehabilitation  
Service



Zacharia Isaac, MD

MGH Physical Medicine and Rehabilitation  
Service



Ronald Kulich, PhD

MGH Clinical Psychology and Pain  
Medicine



# Functional Integrative Restoration (FINER) Program Structure

**1<sup>st</sup> weekly session (1-2 hours):** free educational workshop (pain neuroscience, lifestyle medicine, pain psychology principles, integrative therapies, etc.)

**2<sup>nd</sup> weekly session (1 hour):** smaller group for participant engagement to practice the learned concepts in a supportive group environment



# FINER Virtual Workshops for the Community

Accessible FRIDAYS 12 PM 3/5/21 to 4/30/21 via Zoom

Workshop Details include a Zoom Link, Registration Information and Introductory Guidelines

Most recordings of presentations may be available to FINER registrants.

- [Introduction to F.I.N.E.R. & Pain Science](#)

Introduction to F.I.N.E.R. by Dr. Jennifer Kurz, Program Director Pain Science Introductory Lecture: Dr. Zacharia Isaac An evidence-based talk and group discussion about what really causes pain...

March 5 @ 12:00 pm – 1:00 pm

- [Lifestyle Medicine for Chronic Pain/ Mindful Eating and Nutrition Workshop](#)

Mindful eating and Nutrition help manage pain and enhances wellbeing. Dr. Danielle Sarno, Director of Interventional Pain Management in the Department of Neurosurgery at BWH and Instructor of Ph...

March 12 @ 12:00 pm – 1:00 pm

- [Exercise Medicine as Pain Treatment with Dr. Edward Phillips](#)

Edward Phillips, MD, will discuss how exercise interventions can be safely used for the healing of chronic spine and musculoskeletal pain conditions. Dr. Edward Phillips is Director of the Insti...

March 19 @ 12:00 pm – 1:00 pm

- [Cognitive Behavioral Therapy \(CBT\) for Chronic Pain: Dr. Ronald Kulich, PhD](#)

Dr. Ronald Kulich, PhD, eminent author, researcher, and pain psychologist, is a veteran and leader in the field of chronic pain and opioid tapering, affiliated with MGH and Tufts Interdisciplinary&hel...

March 26 @ 12:00 pm – 1:00 pm

- [Empowered Relief with Marissa Lizotte, PT](#)

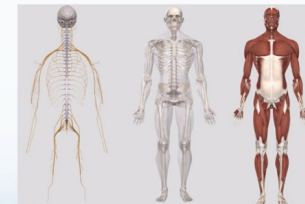
A senior physical therapist in the Foxboro/BWH system delivers a very well-received, engaging, evidence-based comprehensive pain workshop from Stanford University (Beth Darnall) incorporating CBT pain...

## Explain My Pain : How Pain Works and What We Can Do About It

Zacharia Isaac MD

Division Chief, Spine and Pain Department of Rehabilitation Medicine, Spaulding Rehab Hospital  
Assistant Professor, Harvard Medical School  
Associate Chairman, Department of PMR, Brigham and Women's Hospital

## Pain is a Global experience



**Meaning** behind the pain -  
it cancer? Will it get worse?  
Am I falling apart? What will  
I be like in 10 years?

**Context and Impact** - Will I  
lose my job? Will I be able to  
play my sport? Will I be able  
to provide for my family

**Emotions** - the above add to  
the emotional panic, anxiety  
or depression occurring

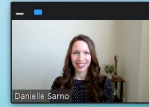




# Lifestyle Medicine

## Nutrition and Mindful Eating for Chronic Pain

Danielle L. Sarno, MD  
Instructor of Physical Medicine and Rehabilitation  
Harvard Medical School  
Director of Interventional Pain Management,  
Dept. of Neurosurgery  
Brigham and Women's Hospital



REC

### Mindfulness for insomnia

- 5 RCTs
- 520 patients
- 279 MBI, 241 control
- Pittsburgh Sleep Quality Index improved in MBI group ( $p < 0.00001$ )

Wang et al. Behavioral sleep medicine, 2020-01-02, Vol.18 (1), p.1-9

## And MORE Lifestyle Medicine



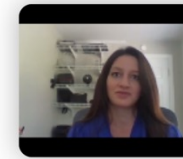
eat plants  
keep moving  
sleep well  
be present  
stay calm  
love people



# Empowered Relief



**Empowered Relief™**  
*Train your brain away from pain*



**Empowered Relief™** was similar to 8-session CBT for improving

- Pain intensity
- Pain interference
- Pain catastrophizing

Study Details:

- Chronic low back pain study (N=263)
- Half had 2+ chronic pain conditions
- **Results at 3 months post-treatment**

Secondary outcomes:

- Pain self-efficacy
- Pain bothersomeness
- Sleep disturbance
- Depression
- Anxiety
- Fatigue

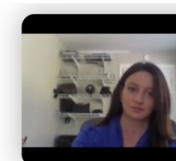


Darnall BD et al. JAMA Network Open. 2021;4(8):e2113401.



Marissa Lizotte Alexandra PT, DPT  
Brigham and Women's Rehab Foxboro  
[mlizotte@bwh.harvard.edu](mailto:mlizotte@bwh.harvard.edu)  
Certified Instructor

## SUMMARY



- Your natural reactions to pain set you up for more pain
- Unhelpful pain mindset literally grows pain in your brain but **you now know how to put down the gasoline can!**
- Train your brain away from pain by using your skills DAILY
- Frequent practice of the relaxation response trains your mind and body away from pain and towards comfort and control

**THIS is Empowered Relief!**





# Tuesday Small Group Sessions

Participant engagement to practice the learned concepts in a supportive group environment

- 10 min - group discussion, sharing of thoughts regarding topic of the week (20-25 people)
- 20 min - smaller group breakout sessions (4-6 people) facilitated
- 20 min - physical therapy guidance led by physical therapist (link to home exercises provided)
- 10 min - closing thoughts, group meditation



# Qualitative Data

- Comments and feedback collected at the conclusion of each 8-week FINER program
  - Outcome measures including:
    - PROMIS-29 (physical function and pain interference)
    - Pain Catastrophizing Scale
    - Tampa Scale for Kinesiophobia
- Three total cycles of FINER qualitative comments and feedback collected
  - 51 participants
- Comments were categorized into 6 recurring major themes



# Qualitative Feedback...

## By Categorization

### 1

Validation of the  
pain experience

Acceptance and  
acknowledgement  
of pain as an  
ongoing experience

**“I found that sometimes I dug a lot deeper than I wanted, but it helped me find some of the roots of my pain, and it does have a lot to do with my previous trauma.”**



“FINER sessions helped me cope with triggers. I can’t always push them all away, but as Dr. Kurz says, I can understand them.”

“The relationship between pain response/stress response was an eye opener.”



# Qualitative Feedback...

## By Categorization

# 2

Physical  
integration via  
group therapies

Use of meditation,  
yoga, tai-chi, etc.  
with concurrent  
therapy

**“For the first time, I could stand up with less pain. I’m getting stronger from the PT exercises.”**

“The night before last, I was having some severe nerve pain and every time I put my right foot down it increased. I kept thinking about how it was going to get worse and then I relaxed and sat for a few minutes. I was afraid to put my right foot down and I did it and it didn’t get worse.”

“She practices tai chi twice a week... Standing for 90 minutes concentrated, precise movement. Comes home and feels like “I ran a marathon”. Surprised that the pain does not bother her during the sessions saying that she feels tired, but no sharp pain.”

“I have used the diaphragm breathing and it has helped; I have also put mindfulness meditation on the schedule at work for the teenage girls that I work with. I plan to do tai chi and/or yoga.”



# Qualitative Feedback...

## By Categorization

### 3

Altered perception  
and framing of pain

Fundamentally  
altering  
preconceptions via  
cognitive therapy

**“In my case, changing my thought pattern seems to be the key to changing my habits. I think these concepts on how to change my response to the stresses is the precursor to more consistent habit change”**



**“The pain has become the background. I’m living my life and the pain is present, but I’m not focusing on that anymore. I think it was my focus of attention. And now, it’s there, but now I have things I can do.”**



# Qualitative Feedback...

## By Categorization

### 4

Support from a  
chronic pain  
community

Building networks  
for people with  
chronic pain

**“I don’t feel as alone.”**

“I think this program lets us see a different side of you as providers. How you, the providers, actually understand how we, the patients feel. We don’t always see that in 15 minutes in the office”

“All the lectures I loved but it was amazing to know I am not alone and to be part of a group who is dealing with the same thing.”



# Qualitative Feedback...

## By Categorization

### 5

Improved  
knowledge about  
pain condition and  
therapy options

Increased  
education about  
definitions and  
mechanisms of pain

**“Each session was very informative, and I found I wanted to read more information on each lecture. Most impactful ones for me: mindful eating, pain science, and ACT.”**

“I now have more tools in my toolbox.”

“I really believe in this virtual session with alternative approaches to pain... the Western system doesn’t give much attention to the same approach and alternative care such as yoga and acupuncture...”



# Qualitative Feedback...

## By Categorization

### 6

**Empowerment to  
implement lifestyle  
changes**

Setting goals and  
helping with  
accountability

“I was in a lot of pain, but when I felt better, I went walking around my neighborhood... I felt ok. I was like ‘maybe I can do this every day.’ It was a little scary at first but then I thought, ‘yeah, I can do it’”

**“The idea that willpower generalizes, it carries over into other aspects of my life.”**



“I enjoyed this very much and found it to be more of a “self-incentive” than going to PT or a form of rehab.”





# Qualitative Feedback...

## To Summarize

### Psychological

- Empowerment of the individual
- Altering pain preconceptions
- Stress management
- Education re: psychological principles for chronic pain
- Group support
- Practice during group sessions

### Physical

- Incorporation of daily activity
- Lifestyle medicine emphasis
- Goal setting
- Diaphragmatic breathing exercises
- Group exercises

### Integrative

- Introduction to acupuncture, Tai Chi, yoga, hypnosis
- Active workshops for engagement
- Connection to integrative specialists and resources



# In closing

- Initial pilot sessions of the virtual FINER program generated positive qualitative feedback.
- Ongoing collection of quantitative data, including digital phenotyping
  - statistically significant improvements in pain interference, pain catastrophizing, and kinesiophobia.
- Empowering patients by providing pain education, resources, community, and support.
- Implementing a virtual chronic pain group program is feasible.



# Thank you.



[www.finerprogram.org](http://www.finerprogram.org)



@DanielleSarnoMD





**Mass General Brigham**