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# A mindful Approach to Persistent Pain Management in Home Health

Jamie Lowy, PT, MSPT

continued<sup>®</sup>

## Learning Outcomes

After this course, participants will be able to:

- Identify at least aspects of pain science that can be used to develop patient specific goals for improving function.
- Define at least two biopsychosocial aspects of pain for use in developing an integrated interdisciplinary approach and update agency pain policies to treating chronic/persistent pain.
- Develop at least two strategies to accurately answer the Medicare OASIS questions on pain.
- Develop at least two strategies to improve functional outcomes in anticipation of Patient Driven Groupings Model (PDGM) in 2020.
- Participants will be able to develop at least three language and metaphor strategies to help patients improve their knowledge and understanding of his or her pain experience.

continued<sup>®</sup>

continued

## Chronic Pain....

- Why do we need to know more about this as physios in home health?

continued

## ICD - 11

- Chronic pain is now considered it's own 'disease' for management just like other conditions such as DM, CHF, COPD...(World Health Organization 2018)

continued

## Common Diagnosis Associated

- Osteoarthritis (OA)
- Rheumatoid Arthritis (RA)
- Neuropathy (DM, SCI)
- Fibromyalgia (It's own category under ICD-11)



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continued

## Prevalence in older adults

- CDC in 2018 estimates that 25% of the adult population in the US experienced chronic pain.
- Approximately 50 million people in US over the age of 65.
- CDC in 2016 estimated 21% older adults with chronic pain.
  - This may be higher as it is limited on an estimate of people who seek medical treatment for chronic pain.

continued

## Opioids

- Use has increased approximately 9 fold between 1996 and 2010.
- 1/3 of all adults over 50 estimated to misuse opioids in last 30 days.
- Increased rates of opioid-induced hyperalgesia
- Increased rates of opioid-induced osteoporosis

continued

continued

## Other fun stats...

- Following Total Knee Arthroplasty, 20% reports chronic pain beyond 6 months post-procedure.
- Lumbar spinal fusion has increased 28 x's as of 2010.
- Success rates (only 1 surgery performed):
  - 40% with decompression and single segment fusion
  - 56% with full fusion
  - Only 30% relief of symptoms after second surgery.

continued

## Chronic pain and Comorbidities

- High BMI = 72%
- HTN = 51%
- Dep/Anx = 40%
- DM = 25%
- Asthma = 15%
- OA = 15%
- COPD = 12%
- Heart dz = 9%

continued

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- Possible increased risk of
  - MI (Fernandez 2016)
  - Diabetes (Heuch 2018)
  - COPD (Cielen 2014)

continued

## International Association for the Study of Pain (IASP)...

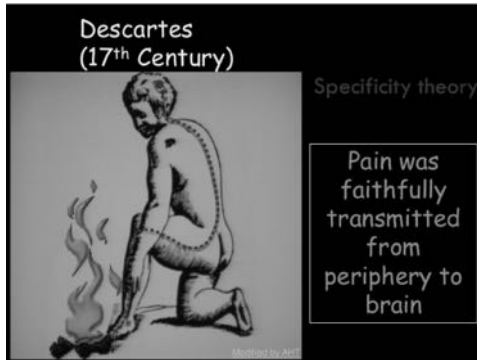
- *Defines pain “as an unpleasant **sensory** and **emotional** experience associated with actual or potential tissue damage, or described in terms of such damage” (IASP 1994)*
- Pain is the output of a highly sophisticated protective system that functions like an alarm (Melzack 2010).
- Because pain depends on perception, tissue damage does not always cause pain, and pain can be felt in the absence of tissue damage. For example, people without pain frequently show significant damage on MRI, and back pain usually cannot be linked to any specific pathology (Brinckji 2015)

continued



## What is Pain?

What We used to Think... And still many health care professionals use this direct cause and effect model to explain... but it's much more complicated.



## Acute pain vs Chronic pain

- Are they the same? If so, how?
- If they are different, how do we distinguish?

continued

## Nociceptive response

- Normal might be stimulated easily when using a monofilament to test plantar surface sensation in a person with DM. The monofilament pressure is enough to stimulate nociceptors. But is the experience painful?

continued

## Inflammation

- M1 Macrophages
- M2 Macrophages
  - M2A
  - M2B
  - M2C
- When M2A are missing, inflammation continues
- M2A is increased with exercise



continued

continued

## Damage $\neq$ Pain

- Tissue damage involves the immune system and nociception.
- Pain can exist absent nociception, and likewise, nociception can occur without pain being experienced.

continued

## Remember....

- Acute pain interventions are dealing with nociception and stimulus-response; time is your friend as a clinician due to the power of natural healing.

## Time makes a difference

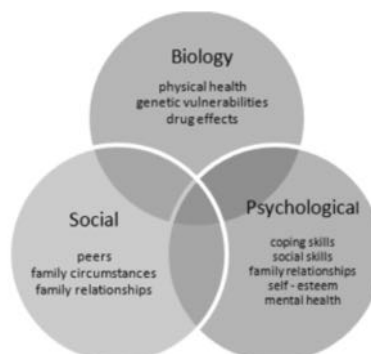
- Pain is considered chronic when it has been experienced for more than 3 months.
- This makes sense from a tissue remodeling framework.
- Would we consider that most chronic pain in older adults is due to changes in tissue healing?

- Theories about pain mechanisms:
  - Gate Theory (Melzack and Wall)
  - Mature Organ Model (Louie Gifford)
  - The Neuromatrix Model (Melzack)
  - Fear-Avoidance Model (Leouw; Butler & Mosley)
  - Predictive Coding

## “All Theories are Lies” Morten Hoegh

- A lie that is built upon sound biological principles, but is still our best guess vs an absolute.
- Evidenced Based Medicine is how we translate this information to patients.
- The words we choose to use matter.

## Biopsychosocial framework

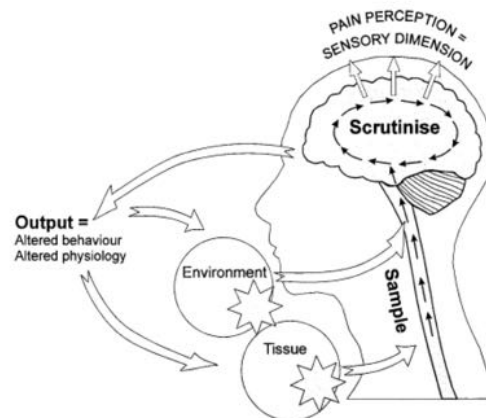


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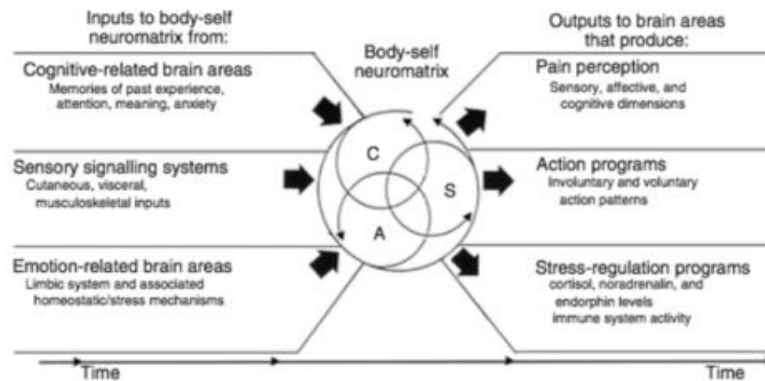
## Gate Control Theory (Melzack and Wall 1965)

- Large diameter (touch) and small diameter (nociception) transmit to the Dorsal Horn
- In the Dorsal Horn are inhibitory cells (the gate).
- Transmissions from the thin fiber neurons impedes the gate and allows information to travel up the spinothalamic tract.
- Transmissions from large fibers activates the gate and prevents information like nociception from reaching the thalamus
- Signals could be bottom-up or top-down (Ascending and Descending modulation)

## Mature Organ Theory (Gifford 1998)

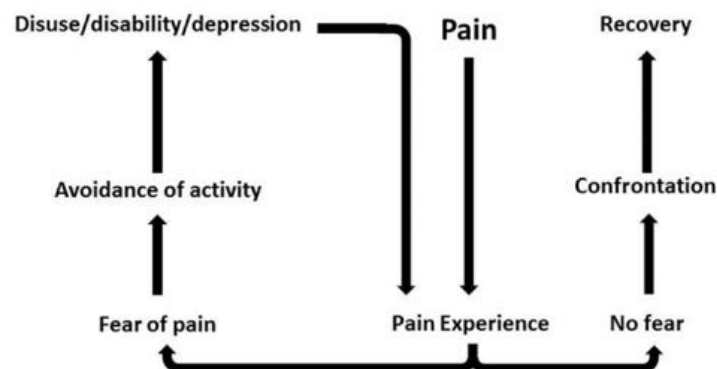


## The Neuromatrix Theory



(Melzack, 2001 Journal of Dental Education Vol 65, Issue 12 pg 1382 )

## Fear-Avoidance Model (Leeuw 2007)



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## What do we offer as PTs?

- Education
- Movement/Exercise
- Hands-on

## Predictive Coding

In an uncertain world we use previous experience and current data to predict the future.

Brain aims to reduce surprises, so our best guess (hypothesis) based on previous experiences (posterior beliefs) and greater knowledge (Priors)

Clinical implication – Create a good previous experience to influence the future!





## Summary....

- Chronic Pain models/theories are:
  - Wrong
  - Are necessary
  - Never true
  - Not predictive (best guess)
  - Measured against patient specific functional goals

How often do you attribute a causal explanation to pain?

- Ex. Patient has chronic knee or back pain due to OA?
- Can a person have severe OA and no pain?
- If you answered 'yes', how do you address the patient who's belief is that the pain is due to the OA (because the x-ray showed OA and they have pain)?
- Is that Causal or Correlational? Or neither?

continued

Let's stop at the OASIS briefly...

**M1242:** Frequency of Pain Interfering with pain or movement

- 0 - Patient has no pain
- 1 - Patient has pain that does not interfere with activity or movement
- 2 - Less often than daily
- 3 - Daily, but not constantly
- 4 - All of the time

continued

Usually has some scale added

- 0 – 10
- Wong Baker
- VAS
- You get the idea . . . .

## So how do we answer accurately?

- CMS provides some guidance in this area...
- Consider all aspects of function....
- And CMS means A-L-L, not just pain that interferes with movement like ambulation and transfers: watching TV, reading, knitting, playing video poker, sleeping, pooping, sex (it's still an ADL!).... Anything the patient tells pain prevents them from doing or limits them from doing at their PLOF.

## But...but... the pain scale....

- Joint Commissions in 2001 initiated the "Pain is a vital sign" mentality when attempting to address aspects of pain that were not well controlled. This in turn prompted agencies to adopt policies to address based on the available measures
- Do the pain scales used in the majority of HH notes have any value in associating how pain effects your patient's life?
- Does a 5/10 mean they can't sleep or eat breakfast?
- And how do we use this to establish a patient-centered goal?

continued

## Is pain really a vital sign?

- Clinical measurements that indicate the state of a patient's bodily functions
- What bodily function is indicated based on a 0 – 10 pain scale?
- This is not to say we don't assess to rule out 'red flags' when a person is complaining of 10/10 pain, but does the score itself indicate a situation that requires immediate medical attention compared to an abnormal BP (215/110 mmHg)?

continued

## There are definitely better scales...

- Functional Pain Scale (FPS)
- Patient Specific Functional Scale (PSFS)

continued

# FPS (Gloth 2001)

## Pain Assessment Tool Guidelines for use: Functional Pain Scale

### Functional Pain Scale (FPS)

(0)	(2)	(4)	(6)	(8)	(10)
No Pain	Tolerable activities not prevented	Tolerable prevents some active activities	Intolerable prevents many active, (not passive) activities	Intolerable prevents all active and many passive activities	Intolerable incapacitated, unable to do anything or speak due to pain

Active activities : usual activities or those requiring effort (turning, walking, etc)  
 Passive activities: talking on phone, watching TV, reading



## PSFS (Stratford 1995)

### The Patient-Specific Functional Scale

This useful questionnaire can be used to quantify activity limitation and measure functional outcome for patients with any orthopedic condition.

**Directions to read and fill in below:** Complete at the end of the history and prior to physical examination.

#### Initial Assessment:

I am going to ask you to identify up to three important activities that you are unable to do or are having difficulty with as a result of your \_\_\_\_\_ problem(s). Further, are there any activities that you are unable to do or having difficulty with because of your \_\_\_\_\_ problem(s)? (Check one scale to patient and have the patient rate each activity).

#### Follow-up Assessments:

When I assessed you on (state previous assessment date), you told me that you had difficulty with (read all activities from list at a time). Today, do you still have difficulty with (read and have patient score each item in due list)?

#### Patient-specific activity scoring scheme (Point to one number):

0 1 2 3 4 5 6 7 8 9 10  
Unable to perform activity      Able to perform activity at the same level as before upon no problem

(Date and Score)

Activity	Initial									
1										
2										
3										
4										
5										
Additional										
Additional										

Total score = sum of the activity scores/number of activities  
Minimum detectable change (MDC) for average score = 2 points  
Minimum detectable change (MDC) for single activity score = 3 points  
PSFS developed by: Stratford, P., Gill, C., Wessner, M., & Binkley, J. (1995). Assessing disability and change on individual patients: a report of a patient-specific measure. *Chiropractic Canada*, 42, 258-261.  
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## OASIS outcomes and PDGM

- A potential decrease in therapy volume means...
  - Patients must be actively involved in their goals
  - PTs need to emphasize self-management
  - Exercise and movement should relate to function
  - PTs need to engage RNs, OTs, and MSWs

## How to 'sell' to your agencies

- Most agencies have very basic pain policies
- PTs can actively engage in developing better policies that are based on best practice.
- Multi-disciplinary approach means better resource management under the payment models for PDGM.
- Improving outcome scores on M1242 and reduction of hospital re-admissions for issues related to poorly managed pain.

“Our only job as Physical Therapists is to help people do what they want to do. That’s it. We go to work every day to help people do the impossible – walk after a spinal cord injury, return to work after a stroke, regain independence after catastrophic medical or traumatic events. If you don’t believe in the resilience and strength people have, and you don’t think people can get better, why on Earth are you in this profession?” Dr. Sarah Haag, DPT

## Words matter

- Chronic pain is about pain management, not pain fixing.
- Patients need to tell you their story and have their experience validated.
- Our initial job is to find out how pain is affecting their life, not tell them why they have pain (we're really just guessing because 'all theories are wrong').

## The power of the metaphor

To explain something complex or abstract to 'outsiders' – but complexity does not disappear when concepts or principles are made clear.



continued

- Smoke alarms
- Tequila-vaccine (Morten Hoegh)
- Sensitized nerves (Princess and the pea)
- 'Pain is like a baby'

continued

- Baker and chronic low back pain
  - Back pain would flare up every time he smelled baking bread.
  - How on earth would a physio address this problem???
  - Graded Exposure

continued

- Don't complicate the explanation, too hard to walk back.

continued

## Patient-centered goals

- Self-management
- Self-efficacy
- Long-term vs short term gains

continued

## Self-management

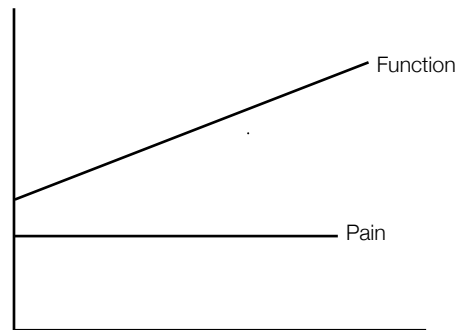
- A person has to be willing to accept ownership over their chronic pain.
- Goal-setting should focus on improving engagement in healthy activities not expressly reducing pain intensity.
- Accepting that a person can choose to do nothing as one management strategy.

## Self-efficacy (infographic by Ben Cormack)



continued

## Long term vs Short term gains (not goals)



continued

- 'What does better look like?'
- 'How will you know when you get there?'

continued

continued

- We cannot 'cure' chronic pain...
- We have to manage it...
- This does not mean some interventions we use are worthless, like manual therapy, but they do not teach self-management...
- We have to be comfortable with 'hands-off'

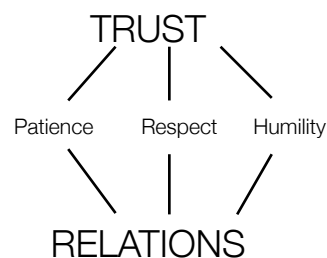
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## But first a word of caution...

- We are not trained psychologists or social workers through our PT education...
- We can better understand the social and psychological impact a person is experiencing in order to refer...

## Wait... What? A Nocebo?

- We've all heard of a "placebo" (a whole course in itself)
- Examples of nocebic language:
  - "You have the spine of a 80-year old"
  - That's the worst knee I've ever seen
  - Degenerative joint/disc disease



## Active Listening....

- Don't interrupt
- Eye Contact (Keep tablets, laptops, phones away)
- Change facial expressions
- Summaries
- Take short notes
- DON'T INTERRUPT!

- Open Questions (credit to Ben Cormack)
  - How do you think I might help you?
  - What do you think is causing your problem?
  - What's your biggest fear
  - What's the most important question I can answer for you?
  - What kind of questions do you have for me?

Too many closed questions can kill the engagement process..

## The importance of exercise

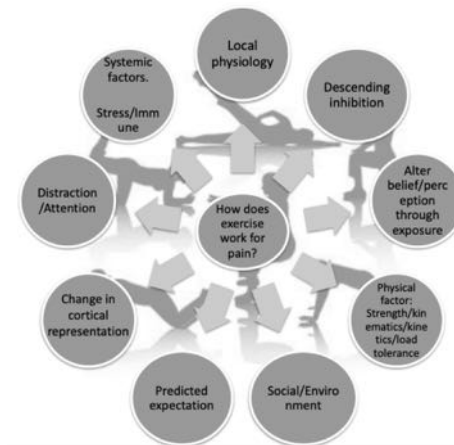
- Evidence suggests no specific exercise is better for managing chronic pain
- General exercise - something the patient enjoys doing and will keep doing
- Can be done in small portions or large (exercise 'snacks' vs a 'full meal')
- Graded Exposure for movements a person has been fearful of performing

## The Exercise Iceberg (Ben Cormack)





CONTINUED



CONTINUED

Pain  
Education

*"I don't believe we CAN explain another's pain. We can help them make sense of their experience, we can help them reconceptualise their experience so they can feel more hopeful and less isolated"*

Bronnie Lennox Thompson

CONTINUED

*"The patient that learned from their pain explaining therapist that their pain didn't really mean anything, who suddenly got out of the chair, went home and went riding their bike for the first time in 5 years...just doesn't really exist!"* Louis Gifford



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