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How to help support and manage the challenges of living with persistent pain in every-day clinical practice

Part 1: Understanding Persistent Pain

Delive

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Putting you first

Aims

- What is persistent pain?
- Pain neurophysiology – where is the pain off switch?
- Revising the definition of pain
- The biopsychosocial model
- The persistent pain cycle
- Moving forwards to Part 2 and managing pain

What is the difference?

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Acute pain

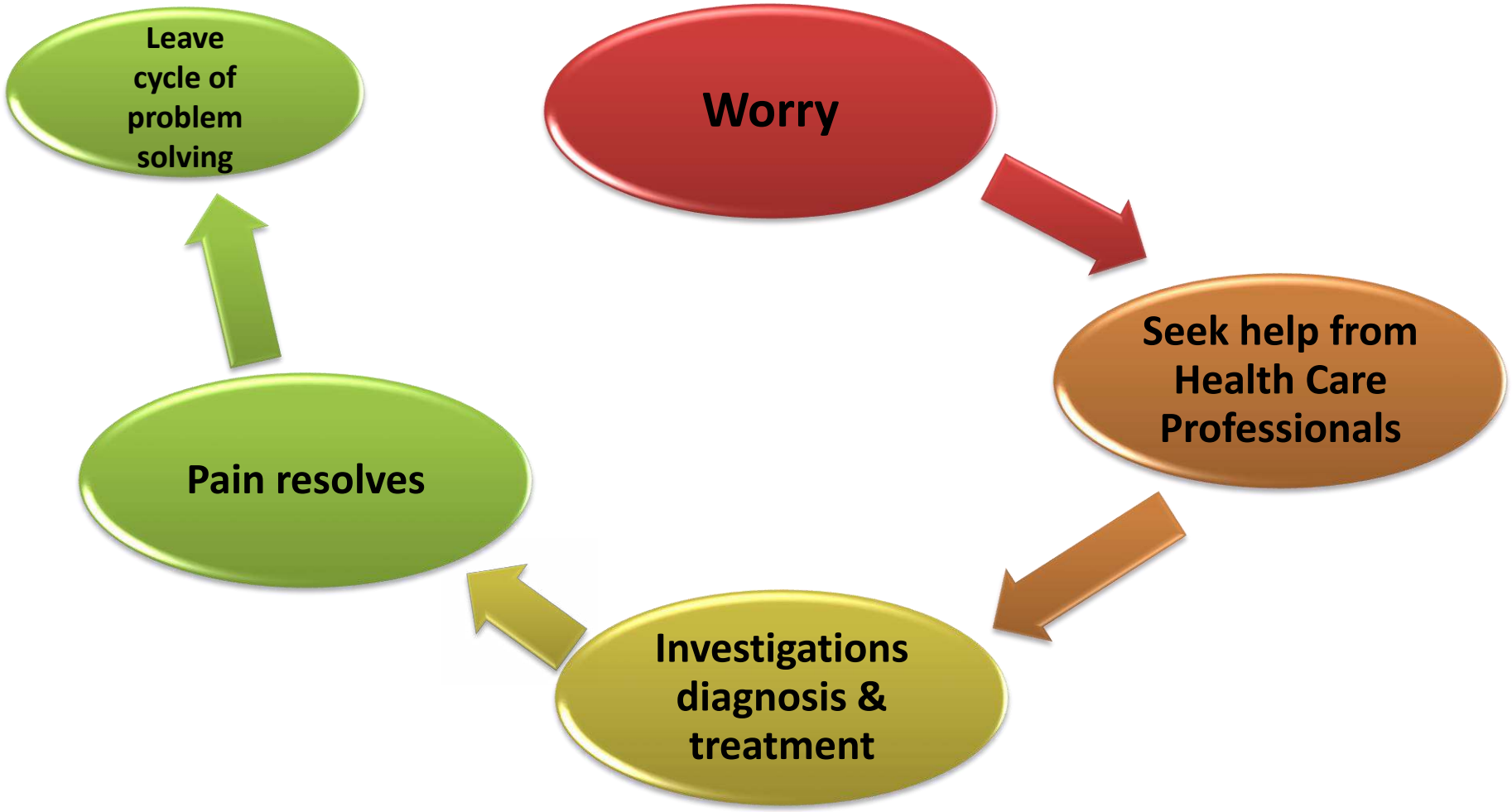
- Short term pain
  (up to 6 months)
- Generally associated with damaged tissues and structures in the body
- More easily treatable and understandable
- Has a useful purpose

Persistent pain

- Pain that persists beyond natural healing time
  (over 6months, can be life-long)
- NOT so much about tissue damage or structures in the body, more to do with sensitised nervous system… and knock-on effects to muscular system etc. etc.
- ***More complex and less easy to treat***
- Lacks useful purpose

(Palliative and End of life Pain….)

Acute Pain and problem solving



The understanding of pain we grow up with…..

Descarte 1664

Persistent Pain and (misdirected) problem-solving

Pain neurobiology, the snake bite story….

https://www.youtube.com/watch?v=1ylbrkstYtU

Nociception system NOT pain system

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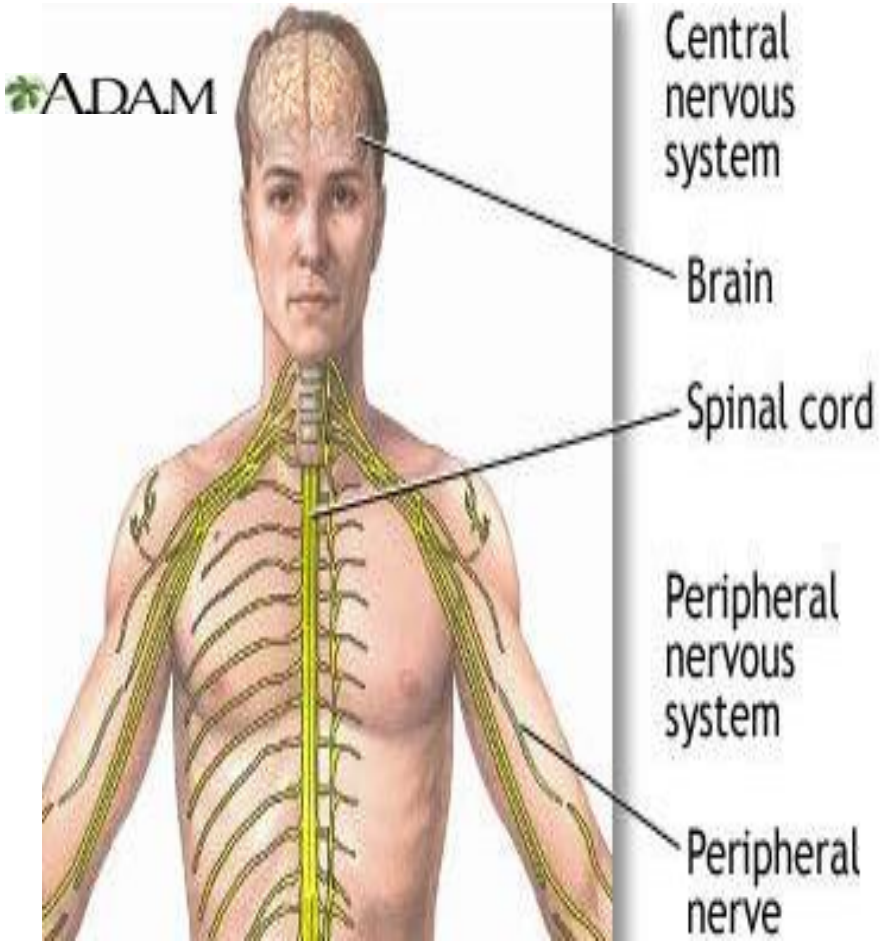
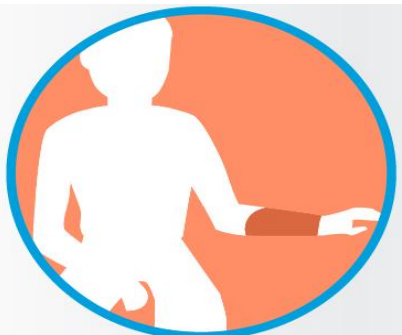
Specialised nerve cells send messages quickly:
Touch
Temperature
Pressure
Stretch
Chemicals



Nociceptors, free ending nerve cells "danger" receptors send messages slowly



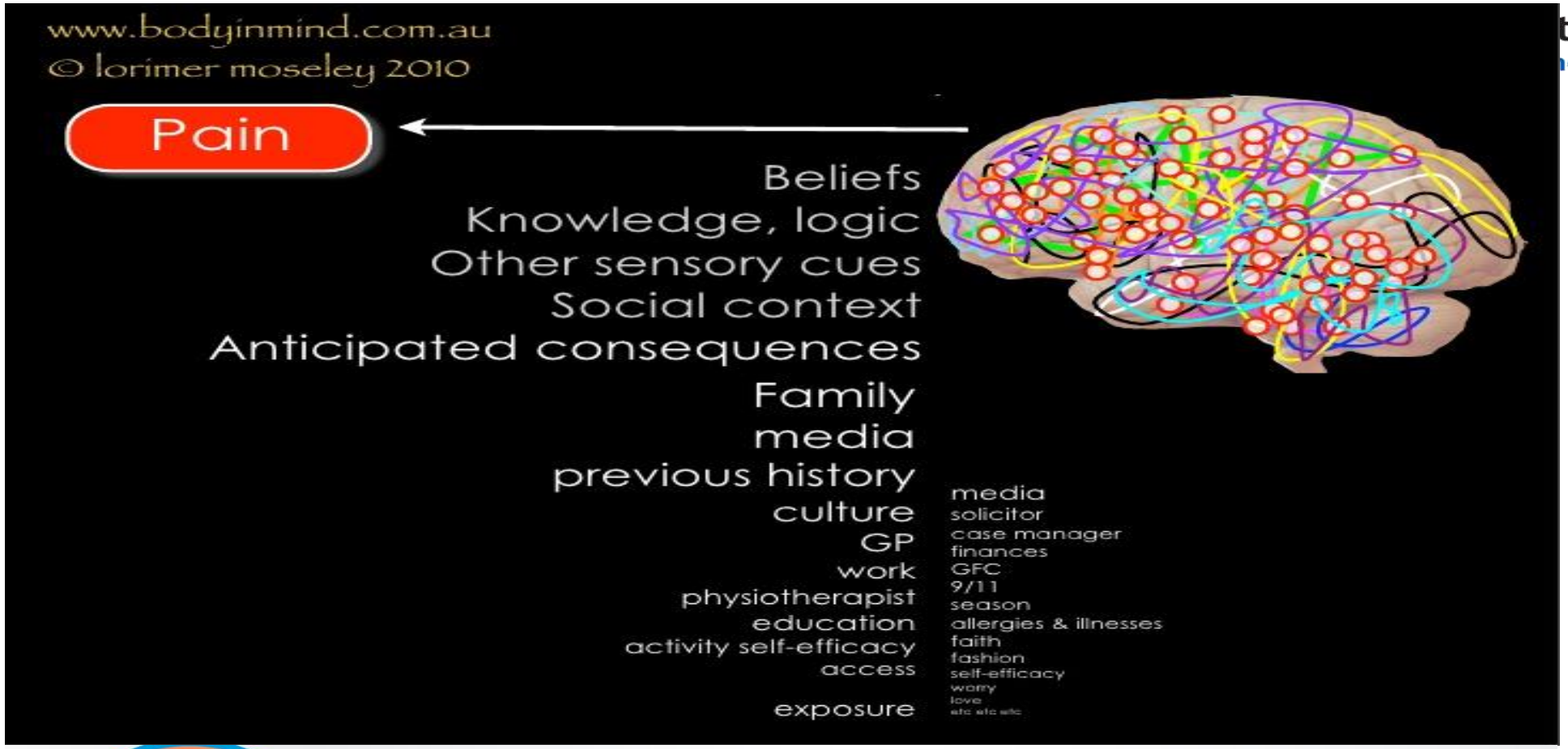
Pain and nociception are different phenomena. Pain cannot be inferred solely from activity in sensory neurons

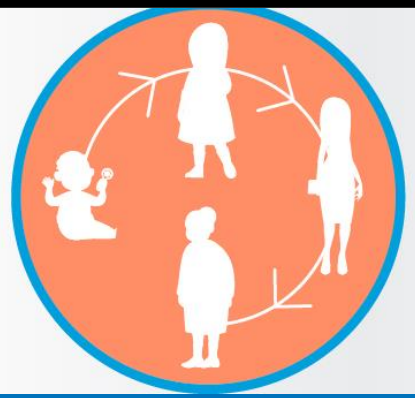
How do we experience anything in life?

https://www.youtube.com/watch?v=C8k-lrJrldw

Reality and the brain

The brain processes the messages…





Through their life experiences, individuals learn the concept of pain

If you fell in the road and sprained your ankle how much pain would you feel?

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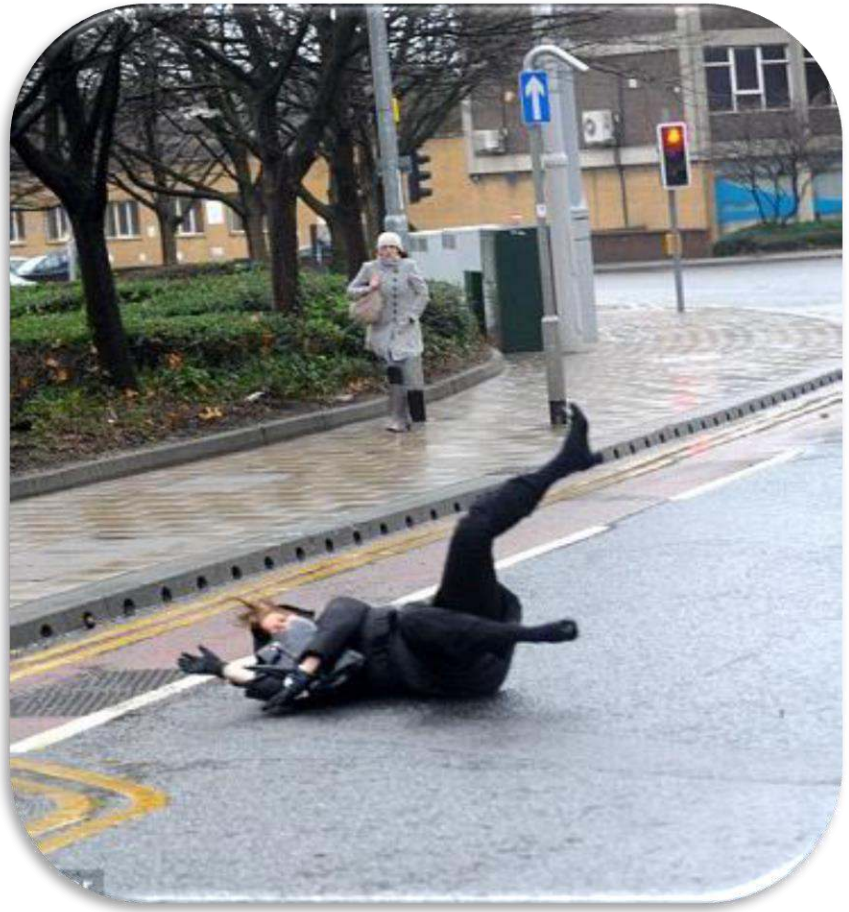

This time a bus is speeding towards you as you fall in the road, how much pain do you feel now?

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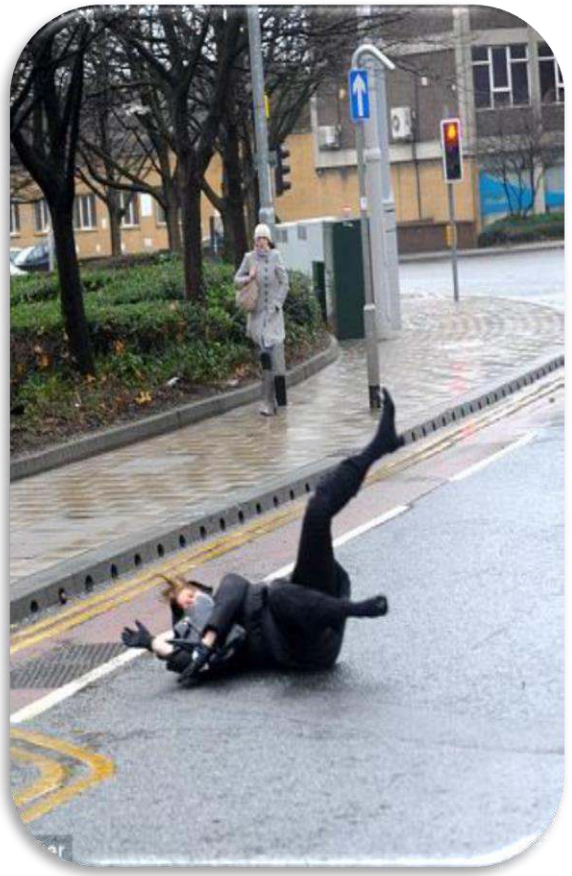
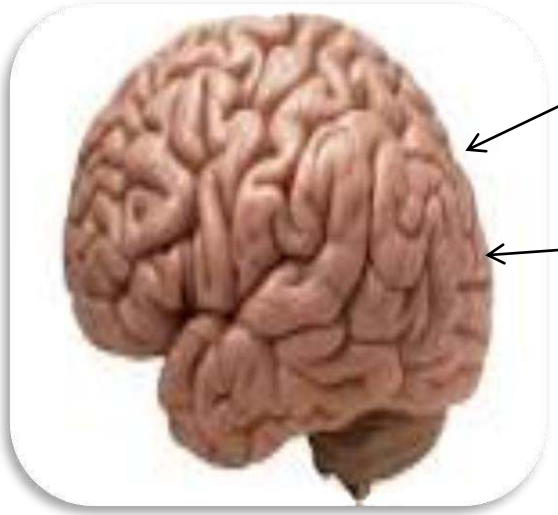


Your brain decides how much pain you feel depending on the circumstances….

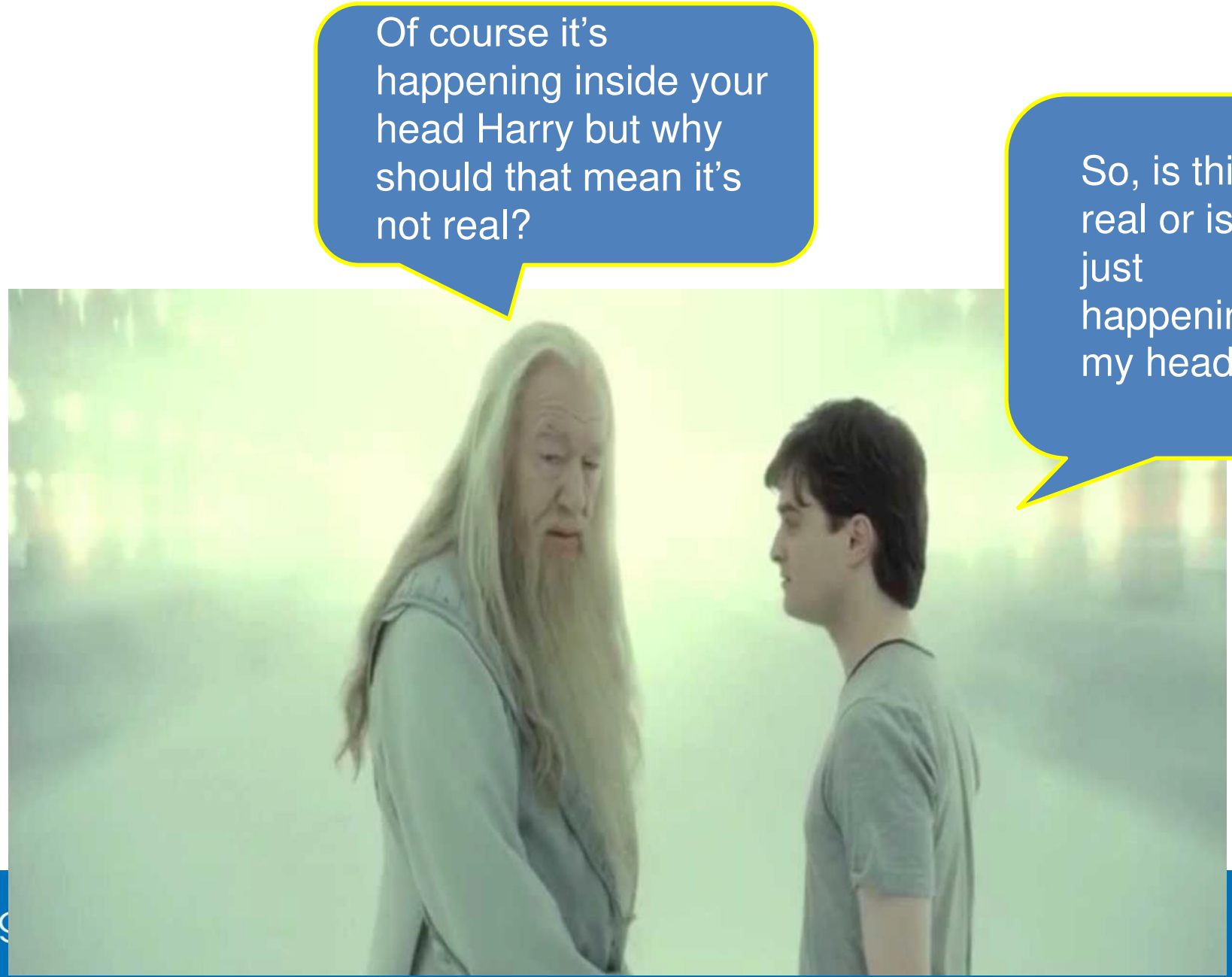
Your brain decides whether you experience pain



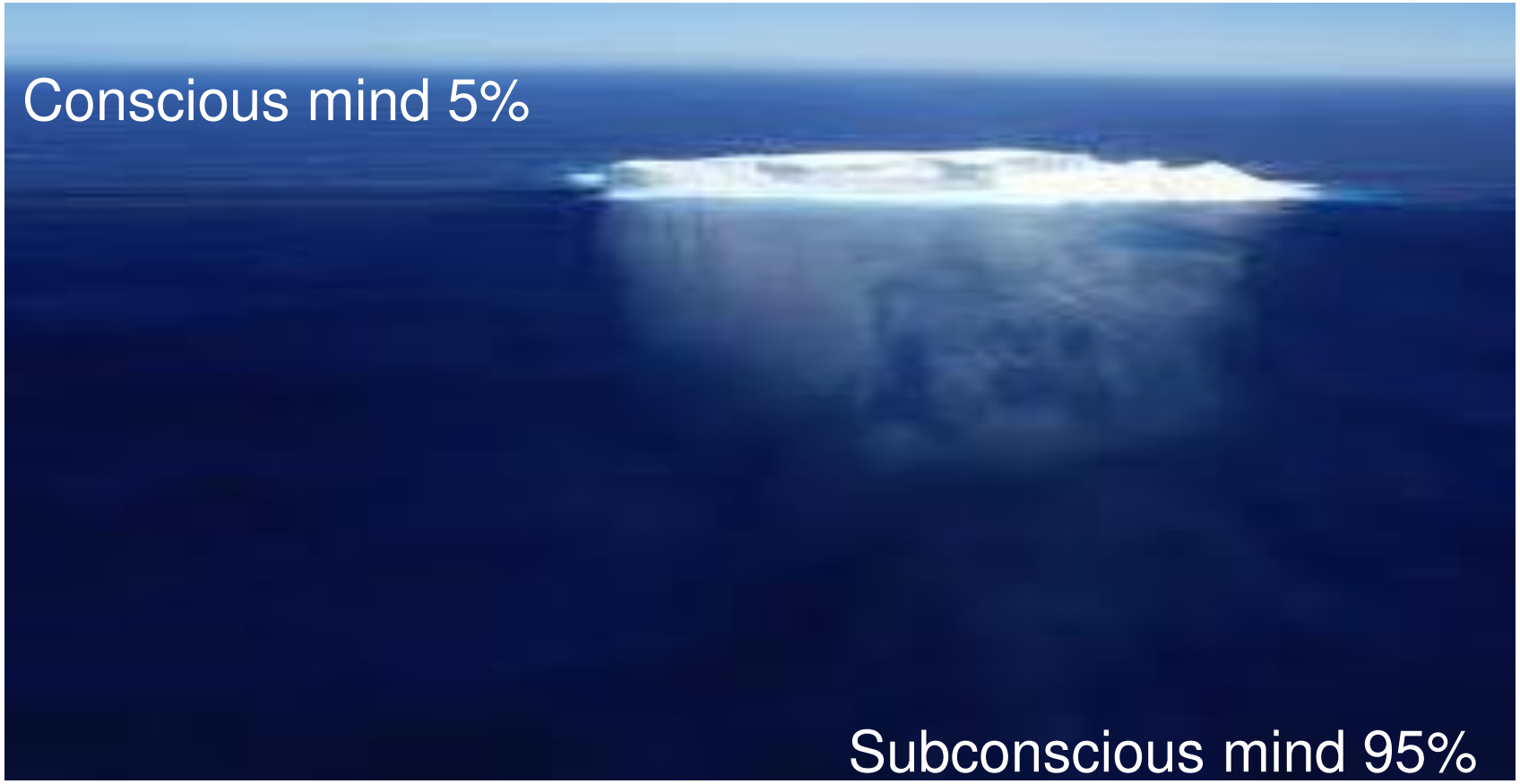
What do all the messages from the sensors mean?

Is this worth pain?

USA's Manteo Mitchell Breaks Leg During 4x400M Relay 2012 London Olympics


Of course it's happening inside your head Harry but why should that mean it's not real?
So, is this all real or is it just happening in my head?

Don’t forget, this is mainly happening in our subconscious!



Some examples to think about….

- And then there’s neuroplasticity…
  https://www.youtube.com/watch?v=ELpfYCZa87g

- Tame The Beast (video for patients)

https://www.youtube.com/watch?v=ikUzvSph7Z4

So, it is complicated!

- There are around 100 billion neurones….
- With up to 100,000 connections each…
- This would equate to about 200,000 miles of cabling….
- And it has the ability to change and adapt like plasticine…

So, where is the pain off switch?

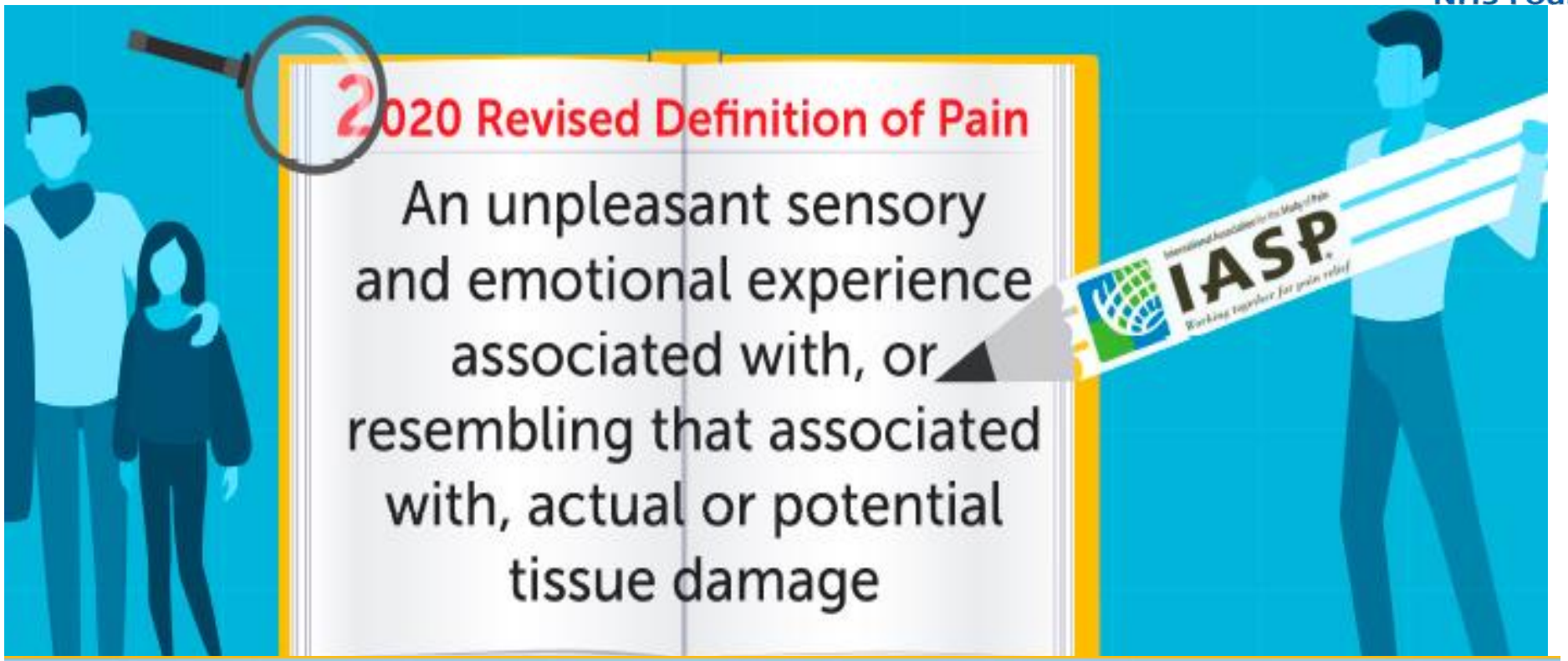
If only it was that easy!

(And this is just the nervous system bit!)

So, the experience of pain is the result of:

A person's report of an experience as pain should be respected

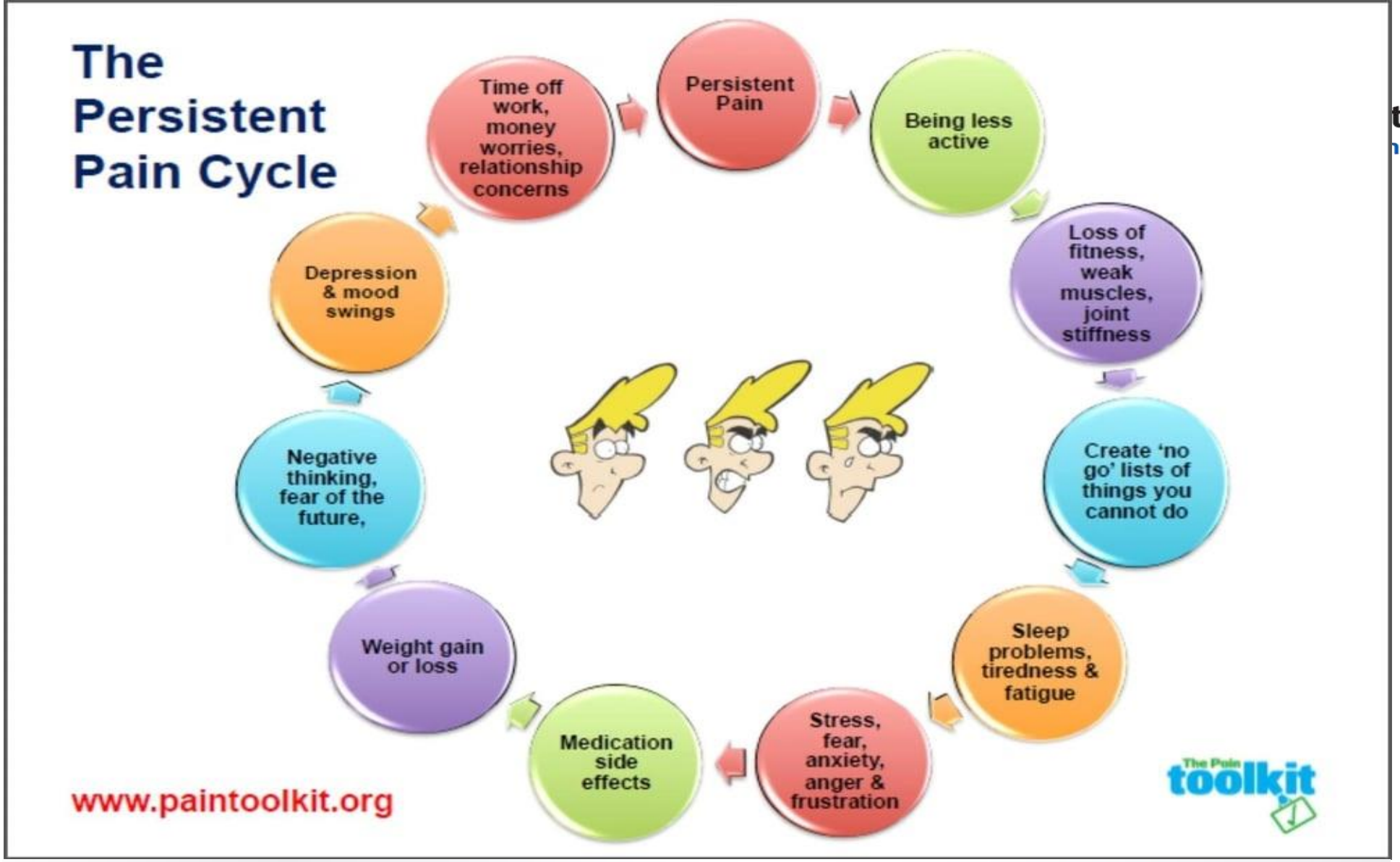
International Association for the Study of Pain (IASP) 2020 revised definition of pain…



2020 Revised Definition of Pain Notes

- Pain is always a personal experience that is influenced to varying degrees by biological, psychological, and social factors
- Pain and nociception are different phenomena. Pain cannot be inferred solely from activity in sensory neurons
- Through their life experiences, individuals learn the concept of pain
- A person's report of an experience as pain should be respected
- Although pain usually serves an adaptive role, it may have adverse effects on function and social and psychological well-being
- Verbal description is only one of several behaviors to express pain; inability to communicate does not negate the possibility that a human or a nonhuman animal experiences pain

The Persistent Pain Cycle



www.paintoolkit.org

Although pain usually serves an adaptive role, it may have adverse effects on function and social and psychological well-being

We need to approach the assessment and management of pain using the biopsychosocial model, because

Pain is always a personal experience that is influenced to varying degrees by biological, psychological, and social factors