KHC Pain Symposium

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Why is chronic pain such a big deal?

- Many reasons
  - Area we focus on: Our models our outdated, flawed and too biomedical; tying the health of tissue to pain is flawed

Pain Neuroscience Education

- "teach people more about pain".
- "more about the biological and physiological processes involved in their pain experience"
- Current best-evidence provides strong support for PNE to positively influence
- Some specific issues pertaining to PNE:
  - Delivered primarily by physical therapist
  - PNE is typically delivered in 15-30-minute sessions once or twice a week for 4-6 weeks
  - The primary delivery method is verbal one-on-one education with the use of metaphors, examples, pictures and books
  - Combined with various physical and movement-based therapies including exercise
  - Current best-evidence indicate that PNE plus movement/exercise is superior to educational-alone approaches in decreasing pain and disability.
  - Numbers needed to treat for PNE and chronic low back pain:
    - To improve function 2:1
    - To improve pain 3:1
      - In comparison Gabapentin's NNT is 6:1 for pain[37]
      - SSRI's NNT for chronic pain: 7:1

Upstream PNE Efforts

- Society: Middle school children
  - PNE program developed, tests and now trialed in 9 US states:
    - Increased knowledge of pain
    - Healthier beliefs about pain
    - 3rd grade to 8th grade
    - Reduced fear of physical activity in the event of a painful experience
    - Video as affective as live presentation
    - 6-months later kids who received PNE use significantly less pain medication than kids using receiving current school education on pain (paper in preparation)

- Surgery
  - Lumbar Surgery
  - Total Knee Arthroplasty
  - Shoulder Surgery
- Telehealth: PNE Virtual Reality
  - Testing and trialing – showing similar results to non PNE VR but with the added advantage of being mobile, complete emersion, PNE+ includes breathing, mindfulness and biofeedback

Current Best-Evidence for Treating Persistent Pain

- Identify patients with “red flags”
- Educate the patient about the nature of the problem
- Provide prognostication
- Promote self-care
- Get patients active and moving as early as possible and appropriately after injury
- Decrease unnecessary fear related to movement, leisure and work activities
- Help the patient experience success
- Perform a skilled physical examination, and communicate results to the patient
- Make any treatment strategy as closely linked to evidence of the biological nature of the problem rather than syndrome or geography
- Use any measures possible to reduce pain
- Minimize the number of treatments and contacts with medical personnel
- Consider multidisciplinary management
- Manage identified and relevant physical dysfunctions
- Assess and assist recovery of general physical fitness
- Assess the effects on the patient’s creative outlets