The Psycho-Physiology of Pain
Acute to Chronic & Back Again

Jay R. Skidmore, PhD
Professor Emeritus & Chair of Clinical Psychology
Former Director, Multidisciplinary Pain Centers
North Sound Mind Body, Everett, WA
1. Most people with chronic pain cope just fine; psych cases need extra help.

2. Almost all patients with chronic pain struggle with _____, _____ & ______.

3. To live effectively with chronic pain, patients can learn and practice ______, ______, ______, ______, ______ & ______.
Typical Path to Chronic Pain

- Onset of symptoms
- Recurrent episodes
- Seek medical help
- Rx: Analgesics +
- Rx: Search for dx
- Physical therapies
- Psychiatric referral
- Scan for symptoms
- Self-medication
- Increased fears
- Expect a quick fix
- Decrease activities
- Onset of depression
- Fear hurt = harm
- Anger, frustration
- Somatization
Biological Changes in Chronic Pain

- Nociceptor sensitization
- Activation of silent nociceptors
- Chronic muscle tension and TPs
- Biochemical changes in spinal cord
- Somatosensory changes in cortex
- Alters posture, movements & habits
- Rewrites brain: Central sensitization
PsychoSocial Changes in Chronic Pain

- Memory and cognitive expectancies
- Postural and behavioral adaptations
- Loss of confidence; postpone life goals
- Remaining questions, & fears about dx
- Decline in health habits & fitness levels
- Self as patient: doctor shop, seek relief
- Social isolation from family and friends
- Anxiety/somatization/depression/drugs
Psycho-Physiology of Pain
Central Sensitization

Pain in Human Brain-Body, Consciousness and Behaviour

- Current Physical State
- Behavioural Activities
- External Environment
- Sensory Motor Cortex
  - Behavioural Responses

Stimulus & Nociception
- Afferent Nerves
- Spinal Cord
  - Dorsal Horn Gate
  - Limbic Region
  - Frontal Cortex
    - Cognition & Memory

- Current Emotional State
- Personality & Attitudes
- Family & Culture
What Patients WANT

- Validation of “real” injury, pain & suffering
- Medical tests to find/prove injury and pain
- Medical diagnosis (mechanical view pain)
- Note: Psych factors imply pain isn’t “real”
- Every conceivable medical treatment …
- Eliminate pain (restore prior perfect life)
- If not above, then compensation & care
- Compassion (exceptions to rules)
What Patients NEED

- Validation of their injury, pain & suffering
- Broader explanations of medical findings
- Guidance to sensible medical treatments
- Unhook from ineffective & palliative TXs
- Come to accept some pain/SX as normal
- Focus less on SX; more on health habits
- Examine & readjust their work & life goals
- Develop effective steps for rebuilding life
A Logical Continuum for “Pain-Less” Health Care

- Get necessary DX tests, then d/c these
- Use soft DX for musculoskeletal pathology
- Short-term pain interventions (anesthetics)
- Mid-term sensible meds, then d/c these
- Refer for active physical therapy exercise
- Refer/integrate psych care with med care
- Refer to a structured pain rehab program
- LT opiates? SCS? Alt Med/Psyc? No Tx?
Clinical/Health Psychology

- Assess, Diagnose, Explain, Reassure
- TX to CHG: Emotion, Cognition, Habits
- Antidote for Stress-Related Symptoms: Biofeedback and Relaxation Therapies
- Identify Patient’s Unhelpful Thoughts; (help construct adaptive cognitions)
- Shift Focus to Health Habits (Exercise) (attend less to pain; more to health)
Larger Systemic Issues

- Family as health care provider
- Build upon social support network
- Community resources, church, gym
- Recreation as essential for recovery
- Meaningful work (volunteer, hobbies)
- Culturally relevant view of chronic pain
- Personal and spiritual meanings of pain
1. Psych cases need what others need plus TX for anx, depr, addictions, habits.

2. Most chronic pain patients struggle with questions, fears, declining fitness, ____. 

3. To live effectively with chronic pain, people can learn to reduce/accept pain, PMR, move/exercise, rewire their brain.