



The Experience of Chronic Pain: An Analysis of the Physical and Psychological Treatments and Outcomes for Chronic Low Back Pain

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Introduction

Chronic Low Back Pain (CLBP): a musculoskeletal disorder centered around the lumbosacral region of the spine with symptoms lasting more than six months.

Types:

- **Nociceptive:** recognition of potentially harmful stimuli by the body's nociceptors
 - Includes pain after surgery, pain from arthritis, mechanical low back pain, or pain induced by sports injuries
- **Neuropathic:** result of significant damage to the body's peripheral nervous system caused by trauma resulting from infection, ischemia, or cancer.

Causes and Diagnosis

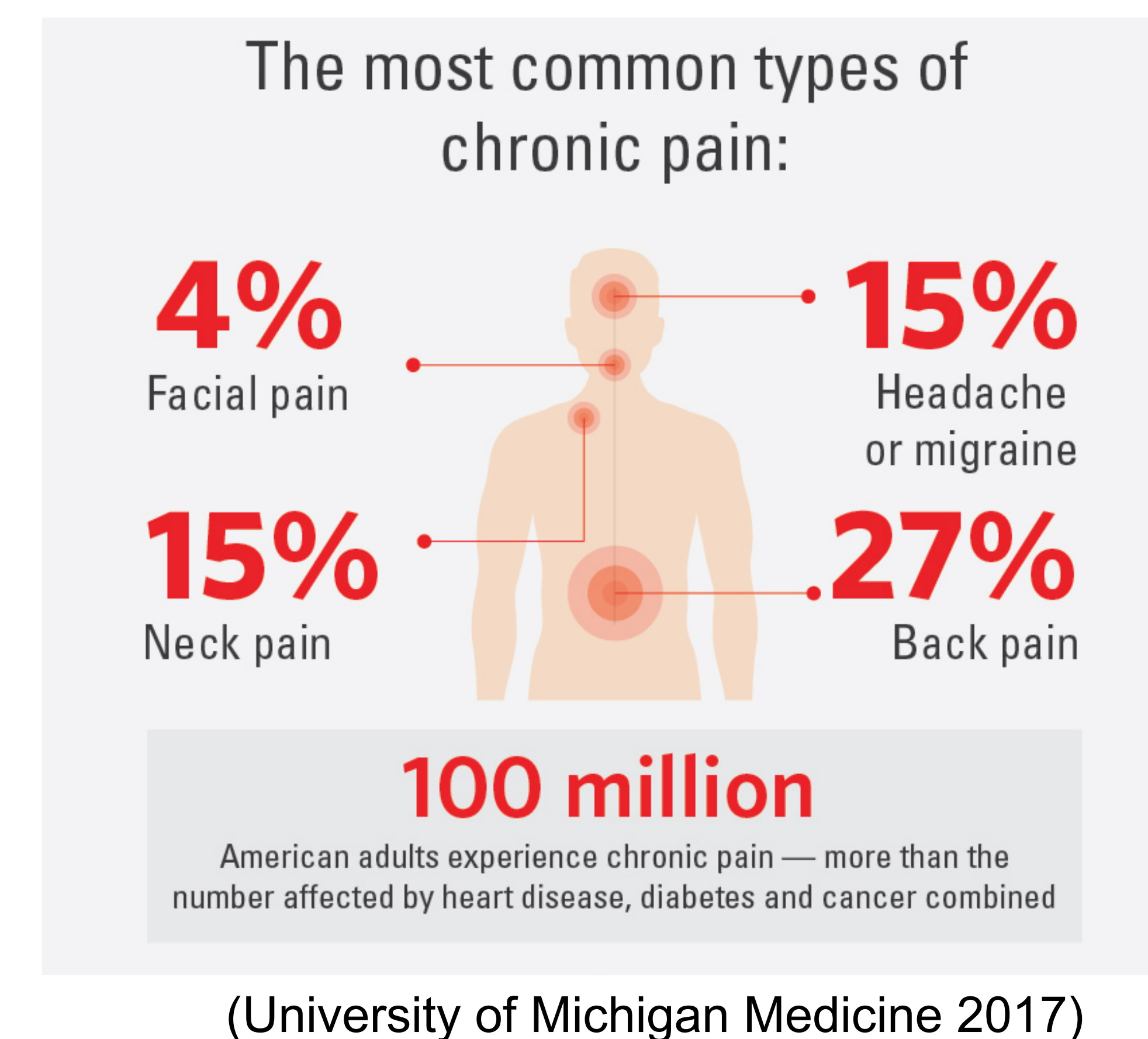
- Only **15%** of patients diagnosed with a definite cause (below)
- The other **85%** have no obvious cause that can be diagnosed
- Treatment cannot be limited to one standard practice to aid the needs of every patient and the individual symptoms

Common Diagnosable Causes

1. Tumor
2. Arthritis
3. Vertebral Disorder (Slipped Disc or Herniated Disc)
4. Infection
5. Fracture

Objective

The purpose of this research project is to analyze the role the human brain plays in the way we experience, cope with, and treat pain. The research explores the psychological and physiological processes those with chronic back pain experience and discusses the various implementations of physical and cognitive therapy treatment protocols.



Combined Approach

- Multidisciplinary Biopsychosocial Approach:** combines cognitive and physical therapy
- Decreases pain intensity
 - Reduces anxiety and depressive symptoms
 - Improves work and exercise tolerance

Treatment Options

Psychological:

- 60% of individuals receiving treatment for severe depression are experiencing a form of chronic pain
- **Cognitive Behavioral Therapy:**
 - Confronts harmful patterns of patient thoughts about themselves or their surroundings
 - Centers around patient education and improving psychological coping mechanisms through improving social skills
 - Reduces anxiety and sick leave time
- **Mindfulness (Moment to moment):**
 - Focuses on managing the equal distribution of attention over both positive and negative experiences rather than abrupt confrontation of the negative
 - Direct, negative correlation to pain catastrophizing and psychological distress
- **Physical:**
 - Independent home exercise programs (run, walk, bike, pool, stretch, weight training)
 - Prescribed physical therapy
 - Based on the functional capacity needed to perform one's daily routine

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