Epidemiology of Chronic Pain

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Objectives

1. Describe the current state of pain in the US today with regard to approximate numbers of citizens affected and the cost of pain treatment yearly in the US

2. Describe the differences between the traditional approach to chronic pain and the concept of the interdisciplinary pain team

3. Describe significant challenges that primary care clinicians face when dealing with patients with chronic pain
Chronic Pain in the United States

• One of the major reasons adults seek medical – both urgently and in follow up

• Over 75% of ED visits – pain related (acute and chronic)

• Headache, Back Pain and Joint-related symptoms – major cause of absenteeism within American Labor Force

• Back Pain – Leading cause of disability in US

3 National Mandates for Pain Improvement in the United States

2. Department of Defense Pain Task Force, Office of Surgeon General - 2010
3. Institute of Medicine Report, “Relieving Pain in America” - 2011
Department of Defense Pain Management Task Force

PMTF Report finalized May 2010
- 109 Recommendations

Incorporated strategies for many “pain” related issues
- Polypharmacy
- Soldier Suicides
- Medication Diversion / Abuse
- Substance Abuse

Highlighted requirements for integration/collaboration with other Army and DoD initiatives
PMTF Site Visit Map

**WESTERN Region**

1. Fort Lewis (MAMC) & Puget Sound VA & Univ of Washington & Swedish Hospital
2. Fort Drum (GAHC)
3. San Antonio VA, Wilford Hall & Fort Sam Houston (BAMC)
4. Fort Carson (EACH)
5. Fort Bliss (WBAMC) & Fort Hood (CRDAMC)
6. Tampa VA & Univ of Florida
7. Balboa Naval Hospital & Travis AFB & Scripps Center

**NORTHERN Region**

8. Landstuhl (LRMC) & Baumholder AHC
10. Fort Campbell (BACH)

**SOUTHERN Region**

8. Landstuhl (LRMC) & Baumholder AHC
10. Fort Campbell (BACH)

**EUROPEAN Region**

11. Honolulu (TAMC) & Schofield Barracks
12. Fort Gordon (DDEAMC) & Fort Stewart (WACH)
13. White River Junction VA
14. Walter Reed (WRAMC)
Estimates that tens of millions of Americans are affected by chronic pain.

The cost burden is estimated at 100 and 200 Million dollars in treatment costs and lost productivity.

Headache (all types), chronic back pain and other musculoskeletal pain are the main contributors to this burden.

Institute of Medicine: Relieving Pain in America, 2011
Institute of Medicine, “Relieving Pain in America” – 2011 Report

- Fostering a cultural transformation
- Pain is a public health challenge
- Educational challenges
- Research challenges
- Blueprint for action
Undertreatment of Chronic Pain

- Public Health Crisis
- Fear of Opiate Prescribing, Diversion, Validity of Pain can lead to pseudoaddiction
- Legal Implications: NM Medical Board and NM Senate Memorial Bill
- Social Implications
- Psychiatric Implications
Why Chronic Pain ECHO in New Mexico?

- Limited Access to Chronic Pain Specialists
- Rural State, #1 prescription opioid overdoses
- No interdisciplinary Pain teams available
- Desire to shape demand, provide best practices
- Educated Primary Care providers
BEST PRACTICES IN CHRONIC PAIN RX

- INTERDISCIPLINARY MANAGEMENT
- EDUCATIONAL CHALLENGES/OPPORTUNITIES
- PSYCHIATRIC AND BEHAVIORAL COMPONENT
- INTERVENTIONAL PAIN PROCEDURES
- BALANCE in OPIOID PRESCRIBING
- MEDICATION RESEARCH
- GENETICS OF PAIN
INTERDISCIPLINARY TEAM

- Best Practices for Effective, Long-Term Management of Patients with Moderate to Severe Chronic Pain
- Neurology, Psychiatry, Physical Medicine, Interventional Pain, Psychology, Rehabilitation Services, Pharmacy

Flor, Fydrich, and Turk, Pain, 1992
Chelminski, Ives, et al, BMC Health Services Research, 2005
EDUCATIONAL CHALLENGES in CHRONIC PAIN

- No **single** medicine specialty “owns” chronic pain
  - Headaches: Primary Care, Neurology
  - Back Pain: Primary Care, Physical Medicine, Orthopaedics, Neurosurgery, Interventional Pain
  - Fibromyalgia: Primary Care, Rheumatology, Neurology

- No residency training dedicated to chronic pain (yet)---ABPM (requires primary residency)

- Variable residency requirements for chronic pain education
Education Required for Effective Chronic Pain Treatment

- Documentation
- Address Biases of Providers related to “drug-seeking” and “real pain”
- Enhance Comfort with use of opioids
- Decrease opiophobia and pseudoaddiction
- Educate regarding over-prescribing and medication overuse

Bennet, and Carr, J. Palliative Care, 2002, 16:105-109
PSYCHIATRIC AND BEHAVIORAL OVERLAP WITH CHRONIC PAIN

- Greatest Challenge with Chronic Pain Treatment—strong psycho-social connection

- 5th Vital Sign/ TJC Mandate—“difficult to quantify/ even more challenging to treat”

- Blessing= More experts can help patient: (Psychiatry, Psychology, CBT, Biofeedback, MBSR)

- Curse= Anxiety and Depression negatively impact Chronic Pain Management
Diagnostic and Treatment Challenges of Major Depressive Disorder with Chronic Pain

- Patients with Major Depressive Disorder (MDD) 4 times more likely to complain of Chronic Pain
- 2-fold Increase in Work Missed in Patients with co-morbid MDD and Painful Somatic Symptoms
- Pain predicts time to remission in recurrent depression
- Painful somatic symptoms decreases chance of recovery in MDD

Bair, Arch Int. Med, 2003, 163, 20, 2433
Anxiety and Migraines

“Disproportionate number of migrainers suffer from one or more co-morbid anxiety disorders, which are associated with migraine intractability and progression”.

PTSD and Migraine

- Prospective Study----60 Adult Patients
  - 60 Adult patients
  - 53% Episodic Migraine (EM)
  - 47% Chronic Migraine (CM)

- Results:
  - Relative Frequency of PTSD reported on PTSD check-list:
    • Chronic Migraine-43%
    • Episodic Migraine-9%
    • P=.0059

- Adjusted for Depression

Anxiety and Behavioral Dependence on Headache Medication

- Cross-sectional
- 247 patients with MOH
- Majority (> 83%) had previous diagnosis of Episodic Migraine
- Opioids- 43%, Triptans- 46%, OTC- 28%
- Sedatives and Anxiolytics- Less Common

Management of Fibromyalgia and Comorbid Psychiatric Disorders

- Lifetime Prevalence of:
  - MDD with FM=62% vs. with RA=28%
  - All Anxiety D/O with FM=60% vs. with RA=25%
  - PTSD with FM=23% vs. with RA=5%
  - Social Phobia with FM=21% vs. with RA=5%

Addiction

**Fishbain Review - Risk of Opioid Addiction with Chronic Opioid Therapy?**

**Addiction Rates**

- **3.27%** - rate of opioid abuse/addiction developed among 2,507 chronic pain patients
- **0.19%** - rate of abuse/addiction among pre-selected patients with no history of abuse/addiction
- <2% with opioid risk screening tools and careful psychosocial history

- Iatrogenic Opiate Addiction - Poorly Defined
- Addiction Rates - Quite low with monitored program
- Multidisciplinary team
  - careful patient selection
  - opiate contract
  - regular office visits
  - document improvement in function
  - use of adjunctive meds

*Fishbain et al. Pain Medicine 2008*
In 2007, the number of deaths involving opioid analgesics was 1.93 times the number involving cocaine and 5.38 times the number involving heroin.

Figure 2: Unintentional drug overdose deaths by major type of drug, United States, 1999–2007

Source: National Vital Statistics System