



Educating Primary Care Providers on Evidence Based Injection Therapies for Myofascial Pain Disorder

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STATISTICS OF CHRONIC PAIN

Institutes of Medicine:

- Between 100 to 160 million Americans suffering with chronic pain
- This represents between 1/3 and 1/2 of nation's February 2014 population
- This number is greater than the next highest four co-morbidities combined: Diabetes (diagnosed/estimated undiagnosed), coronary heart disease/angina/myocardial infarctions, cancer, stroke

2013 survey:

117 U.S. & Canadian medical schools: **FOUR** provide course in pain management.

U.S. News Doctors:

Only 6,441 pain management specialists in the United States
This averages to approximately 24,000 patients per pain specialist.

MYOFASCIAL PAIN DISORDER/SYNDROME (MPS)

- Painful muscular areas, called trigger points that cause localized or referred pain
- 85-95% of patients with chronic pain have myofascial pain disorder.
- Symptoms **mimic** and are often **confused for** neuropathic pain disorder
- Causes-Mechanical pain disorder of the skeleton, injuries due to accidents & repetitive stress that over-use specific muscle groups

EVIDENCE BASED TREATMENTS

- Correction of spinal/skeletal misalignments if possible (manipulations, surgeries)
- Reduction/avoidance of repetitive stress activities/physical & occupational therapies
- Myofascial release (deep tissue massage), hot/cold/stretch therapies
- Medication management-muscle relaxants, NSAIDs, anti-convulsants, anti-depressants, etc.
- Direct injection techniques of dry needle, saline or local anesthetic (avoid steroids as myotoxic & cytotoxic)

THE PROBLEM: PRIMARY CARE PROVIDERS

- Often lack knowledge to identify MPS and begin appropriate evidence based treatment and may then treat inappropriately (i.e. narcotic analgesic)
- May refer to pain clinic which leads to delay in treatment

PURPOSE OF STUDY

- Educational plan needed to:

Reduce the delays in treatment and make the treatment by primary care providers more appropriate and evidence based guideline driven

RESEARCH QUESTION

- Can an evidence based education session given to primary care providers improve their knowledge about appropriate treatment and lead to enhanced patient outcomes?

PROGRAM DESIGN

- Evidence based education session on appropriate assessment and injection techniques given to local primary care providers in an Eastern hospital.
- Pre-test and post-test questions assessing knowledge before & after presentation
- Question asking the learner's willingness & intent to implement change
- Paired t-tests to compare pre-test & post-test scores

PARTICIPANTS

Primary Care Providers from the following:

- Advanced Practice Nurses
- Physician Assistants
- Doctors of Osteopathy
- Doctors of Medicine

RESULTS AND OUTCOME EVALUATION

- Statistically significant impact from the educational component
- Not statistically significant for intention to implement change in practice

DISCUSSION AND IMPLICATIONS

- Small sample size, so results have limitations
- Education alone not sufficient; there must be a desire to implement change

RECOMMENDATIONS FOR FUTURE RESEARCH & PRACTICE

- Larger scale educational programs for primary care providers
- Research into the effectiveness of this educational program for primary care providers on a larger scale is mandatory
- Greater involvement on the part of the primary care providers (PCPs) to participate in effective and safe treatment of chronic pain, including MPS.

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