2015

Lewiston Community Health Improvement Project

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2. PROBLEM IDENTIFICATION

- Back pain is the fifth most common complaint in Primary Care Physicians’ offices
  - Lifetime prevalence of low back pain is 60-85% in the United States
  - Leading cause of disability for people younger than age 45
    - Median age of people in Maine is 42
    - Median age of people in Lewiston is 37
- Back pain is the most common pain condition, after headaches, resulting in loss of productivity in the US workforce
- In Central Maine, the frequency of ER admissions due to back pain is similar to the national average of 80 visits per 100 population
  - In a recent study, over a 12-month period nearly 1,400 patients were admitted to the emergency department of Maine General Hospital with acute exacerbations of chronic back pain
- Anecdotally Low back pain has been identified as one of the major complaints seen in the Central Maine Medical Center Family Medicine Residency clinic
3. PUBLIC HEALTH COST

• Low back pain healthcare costs are estimated to be $100 billion annually in the United States
  • Approximately $26 billion of that amount is directly attributable for treatment of LBP

• In Central Maine, over a 12-month period nearly $600,000 was spent on Emergency department visits alone for treatment of acute exacerbations of chronic back pain
  • ED visits for back pain at Maine General Hospital ranged from $399 to $1,943 per visit

• Patients with back pain have approximately 60% higher healthcare charges compared to patients without back pain, and have ED visits that consistently cost 1.7x more than non-back pain related visits
4. COMMUNITY PERSPECTIVE

What is one of the most common chief complaints seen in the FM Residency clinic?

- 3rd year Resident in the Family Medicine Residency at CMMC
  - “One of the most common complaints in the clinic is back pain and it is one of the hardest to address”

How has back pain been effectively treated in your experience?

- LCSW at Life Ideals
  - “Blending mental wellness, self-compassion yoga, and mindfulness meditation has been very successful in my practice, not only for treatment of back pain, but for all chronic pain problems.”

- Attending physician in the Family Medicine Residency at CMMC
  - “Creating an individualized treatment plan for each patient has been successful, along with utilizing osteopathic manipulation treatments”
Properly treating back pain requires a multi-faceted approach to treatment which can be time consuming and requires training in additional integrative medicine treatment plans.

Research:
- A variety of diverse treatment options for back pain management
- Interviewed several community members and providers about local access to integrative treatment options

Intervention:
- Create and distribute a pamphlet for patients to educate and encourage them to use integrative alternatives to treat their back pain.
- Create and distribute an informational paper about the current AAFP and ACP guidelines of diagnosis and treatment of back pain for CMMC Family Medicine Physicians
6. RESULTS

• A patient pamphlet about acute back pain was created and will be distributed
  • This pamphlet is targeted towards patients presenting with back pain as well as any patient presenting to the CMMC Family Medicine Residency

• A hand-out for physicians was also created.
  • This hand-out outlines current imaging guidelines for low back pain as well as treatment guidelines.

• Initial reactions to both the pamphlet and hand-out were very positive:
  • “The wording of this pamphlet is very clear.” – Dr. Aliya Rahemtulla, 3rd Year Resident
  • “These guidelines are well organized and helpful.” – Dr. Aaron Hoffman, 3rd Year Resident
  • “This looks great!” in reference to the patient pamphlet. – Dr. Kara Callahan, 2nd Year Resident
PHYSICIAN HAND-OUT

Low Back Pain Imaging and Treatment Guidelines

Physicians should keep in mind that low back pain can last anywhere from 6 weeks to 3 months. Pain in the back is not always caused by an injury to the back or spine. Treatment options include lifestyle changes, medications, physical therapy, and surgery.

- **Lifestyle Changes**: Consider changes to your daily activities, such as getting more exercise, maintaining good posture, and avoiding prolonged sitting or standing.
- **Medications**: Pain relievers like acetaminophen or nonsteroidal anti-inflammatory drugs (NSAIDs) can help reduce pain and inflammation.
- **Physical Therapy**: This may help improve your mobility and strength.
- **Surgery**: This is usually a last resort for severe pain that doesn't improve with other treatments.

**Key Points**

1. **Pain in the Low Back**: Pain in the low back is a common problem affecting millions of people. It can be acute (lasting a short time) or chronic (lasting for months or years).
2. **Pain in the Lumbar Spine**: Pain in the lumbar spine (lower back) can be caused by a variety of factors, including muscle strain, herniated disc, or osteoarthritis.
3. **Pain in the Sacroiliac Joint**: Pain in the sacroiliac joint is a common cause of low back pain, especially in women.
4. **Pain in the Sciatic Nerve**: Pain in the sciatic nerve can cause significant pain and discomfort.
5. **Pain in the Lower Extremity**: Pain in the leg can be caused by conditions like sciatica, herniated disc, or nerve compression.

**Diagnosis**

- **MRI**: MRI (magnetic resonance imaging) is the gold standard for imaging the spine and can help identify lesions or abnormal structures.
- **CT Scan**: CT (computed tomography) can provide more detail about the bone structure.
- **X-Ray**: X-ray can be used to assess bone density and identify fractures or abnormalities.

**Treatment**

- **Conservative Treatment**: This includes medication, physical therapy, and lifestyle changes.
- **Surgical Treatment**: Surgery may be necessary for severe cases or when conservative treatments fail.

**Precautions**

- Avoid heavy lifting or sudden movements.
- Maintain good posture when sitting or standing.
- Use proper lifting techniques when necessary.
- Practice good body mechanics.

**Resources**

- **American Academy of Orthopaedic Surgeons**: Provides information on low back pain and management strategies.
- **National Institute of Arthritis and Musculoskeletal and Skin Diseases**: Offers resources and information on back pain.

**References**

- **American College of Rheumatology**: Guidelines for the management of low back pain.
- **American Academy of Orthopaedic Surgeons**: Guidelines for the management of low back pain.

**Further Reading**

- **Low Back Pain**: A comprehensive guide to the causes, symptoms, and treatment options for low back pain.
- **Sciatica**: A detailed explanation of sciatica, its causes, and treatment options.
- **Osteoarthritis**: Information on osteoarthritis, its causes, and management strategies.
PATIENT INFORMATIONAL PAMPHLET

Local Lewiston Practitioners

Sara Goodrich
- Body, therapeutic massage
- Sarah Goodrich 224 Main Street
  Lewiston, ME 04240

CMMC Family Medicine Residency
- Allergists, OMT, counseling services
- Family Medicine Residency
  76 High Street
  Lewiston, ME 04240

Dempsey Center
- Feldenkrais to massage, meditation, yoga services, counseling services and acupuncture
- Five County Building
  15 Water St
  Lewiston, ME 04240

Life Ideas
- Mindfulness meditation, yoga services, counseling services and acupuncture

Back Pain

Integrative Treatment plans in the Lewiston-Auburn Community

Back Pain
- Back pain is a common problem that can be caused by many different things
- Back pain is easily preventable by improving your posture and your lifting technique

Back Pain by the Numbers
- 50-50% of Americans will experience non-specific low back pain in their lifetime
- Approximately 60% of low back pain episodes will resolve within 6 weeks

How do you know if your Low Back Pain is serious?
- The pain goes down your leg
- Your pain is so mild you can’t move
- You have a fever or nausea, vomiting, abdominal pain, weakness or swelling
- Your pain was caused by an injury
- You have loss of control of your bowel movements or bladder
- Your pain hasn’t gotten better in the past 3-4 weeks

Conventional Treatment of Back Pain
- Medication Treatment
  - Use non-inflammator over the counter pain medications like acetaminophen or ibuprofen
  - Muscle relaxants
  - Continue to be active
  - Apply superficial heat or ice
  - Physical Therapy

Integrative Approaches to Back Pain Treatment
- Osteopathic Manipulative Treatment
  - OMT is hands on care that is used to diagnose, treat, and prevent illness and injury
  - A Doctor of Osteopathic Medicine can use OMT to move your joints and muscles using different techniques like gentle pressure, stretching, and massage

- Acupuncture
- A Traditional Chinese Medicine
  - Technique of needle insertion is used to treat musculoskeletal conditions by creating balances in the energy flow of the body
  - Yoga
  - Yoga is a physical, mental and spiritual practice that integrates breathing and postures to achieve a goal.

- Mind-Body Relaxation
- Mind-body relaxation is the practice of paying attention, on purpose, moment to moment, in a way that is non-judgmental and non-reactive.

Contact Us
CMMC Family Medicine Residency
P.O. Box 1527
Lewiston, ME 04240
Visit us at: www.cmmc.org
7. EVALUATION OF EFFECTIVENESS AND LIMITATIONS

Effectiveness
• Increases awareness and knowledge about alternative non-conventional treatment options available in the local community.
• Allows patients to have autonomy over their treatment plans and goals.
• Helps physicians to maintain current guidelines in their practice.
• Overall effectiveness could be measured by a provider and patient survey.

Limitations
• Pamphlets are only distributed within the CMMC Family Medicine Residency clinic to current patients who can read English.
• Some integrative treatments are not covered by insurance and are too expensive for some patients.
• Patients need to be open to integrative techniques which may take time and additional education other than the pamphlet.
8. RECOMMENDATIONS FOR FUTURE INTERVENTIONS

Clinical Trial: Self-compassion Yoga classes and Cognitive Behavioral Therapy for treatment of low back pain.
- Goal sites: Lewiston, Maine; Portland, Maine; Burlington, Vermont; Colchester and Milton, Vermont
  - Similar economic areas, population, and environmental factors
  - Outcome measures: Pre- and Post-treatment functional rating index scores, patient-rated pain, frequency of symptoms, low back pain disability, general health status, work-loss, medication use, and long-term effects

Free Weekly Self-Compassion Yoga classes at CMMC Family Medicine Residency
- Goal: Maintain active class participation within the local community, prevent chronic back pain in the local community

Clinical Trial: Smart Phone Application (FitBack) Use and Training in LBP patients
- Goal sites: Lewiston, Maine; Portland, Maine; Burlington, Vermont; Colchester and Milton, Vermont
  - Similar economic areas, population, and environmental factors
  - Use FitBack, an application that has already successfully been implemented in Oregon in the local population to allow for self-management of low back pain.
  - Outcome measures: Pre- and Post-treatment functional rating index scores, patient-rated pain, frequency of symptoms, low back pain disability, general health status, work-loss, medication use, and long-term effects
9. REFERENCES