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2022

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Tailoring In-Clinic Patient Education to Target Outcome Improvement in Acute Low Back Pain

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Background

- Low Back Pain (LBP) is one of the most common conditions patients present with, resulting in high rates of morbidity, loss of productivity, and inflated healthcare costs
- Increasing attention has been placed on psychosocial aspects of LBP and the effect of patient education
- Patient education has long been recommended for management of LBP without specific instructions on approach or focus in the clinical setting

Objective

- Produce a low-cost, time-conscious conceptual approach to addressing patient education in a clinical setting, in attempt to improve outcomes in LBP

Design

- A brief literature review was conducted targeting studies which focused on the effect of patient education on LBP outcomes
- Consensus guidelines from the North American Spine Society, Journal of Orthopedic Physical Therapy, and American College of Physicians as well as a Cochrane Review of patient education in LBP were evaluated, coalesced, and summarized
- Further recommendations for patient education approaches were developed from evidence based findings of the brief literature review

References

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- Additional recommendation sources available by request and omitted for brevity

Patient Education

- **General patient education:** common in the clinic and designed to educate patient's on their diagnosis and treatment plan
- **Therapeutic education:** often more intensive and designed to improve outcomes such as function or pain.
- **Types of therapeutic education:** patient and provider discussion, back pain courses or school, written word (booklets or handouts), or multimedia (video or audio)
- Randomized control trials (RCTs) and other evaluations of patient education in back pain are generally indeterminate due to high variability in educational methods and study design

Evidence

- Compiled from 2008 Cochrane review (24 total studies)
- Subacute pain (only evidence graded as strong)
 - One 2.5 hour oral session is more effective on short-term and long-term return-to-work than no intervention
 - Less intensive education was not more effective than no intervention
 - Strong evidence that individual education for patients with (sub)acute LBP is as effective as non-educational interventions on long-term pain and global improvement
- chronic pain (only evidence graded as strong)
 - individual education is less effective for back pain-specific function when compared to more intensive interventions
 - Comparison of different educational modalities did not show significant differences
- Additional findings
 - A three hour educational session focusing on the neurological system was more effective than a three-hour education session focusing on anatomy, posture and endurance
 - Individual education appeared to be equally effective to interventions like chiropractic manipulation and physiotherapy for patients with acute or subacute LBP

Guideline Recommendations

- Promote understanding of the anatomical/structural strength inherent to the human spine
- Provide education regarding the neuroscience involved in pain perception
- Emphasize the overall favorable prognosis of low back pain
- Advocate for early resumption of normal or vocational activities even while still experiencing pain
- Highlight improvement in activity levels, not just pain relief
- Reassure pain does not indicate damage, particularly when no red flags
- Encourage active coping strategies that decrease fear and catastrophizing
- Provide evidence-based information regarding their expected course
- Provide information about effective self-care options
- Use a shared decision-making approach to select the most appropriate treatment based on patient preferences, availability, harms, and costs

Additional Recommendations

- Reinforce radiologic findings do not equate with pain unless they correlate with subjective and objective exam findings
- Provide a sense of control as many of the predominant factors contributing to transition into chronic pain are generally modifiable, i.e. obesity, smoking, and depression/anxiety
- Become well versed in local resources available to address these factors
- Develop a systematic diagnostic and therapeutic approach and reinforce the current plan, or next steps if current plan is ineffective
- Commend improvements, and display improvements via pain logs or functional accomplishments

Conclusions

- Data is inconclusive regarding effect of patient education on LBP
- Most promising techniques appear to focus on biopsychosocial and underlying pain neuroscience
- Avoidance of the patho-anatomical model of education is important in reducing catastrophizing and fear-based behavior
- Formalized intensive education shows more promise than shorter approaches, however clinical therapeutic education is a low risk, low effort intervention with potential for outcome improvement