Patient Education on Management of Acute Back Pain

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Problem Identification

- Acute back pain
  - Back pain is the 4th most common reason for visit in developed countries[1]
  - Prevalence of lifetime back pain is as high as 84% in adults
- Back pain can affect patients' quality of life through functional limitations and concern about the severity and progression of back pain
- Certain patient beliefs towards back pain are associated with higher levels of disability and worse prognosis[2]
- This project aims to educate patients on the natural course of most cases of acute back pain as well as highlight various treatment options available
- AHEC focus area: medical practice transformation

Public Health Cost

- Back pain is the leading cause of disability worldwide
- Low back pain has shown to cost $40 billion annually to treat in the US[3]
  - due to increasing rates of unindicated imaging, high rates of surgery, and a growing aging population
- Unindicated imaging linked to greater work absence and unnecessary use of health services[4]
- Local data on back pain from state of Connecticut and Fairfield County not available

Community Perspectives

Patient perspectives from two anonymous patient interviews :

"My back pain is affecting my daily activities quite often. I notice the back pain when doing chores, cooking, and carrying my children. It has not affected my work too much, and I just sometimes have pain when working."

"My back pain is getting worse. It was manageable at first with doing some stretches but it is not at a point where I am worried."

"My job is physically demanding, and I can only sit or stand at work not able to do much right now."

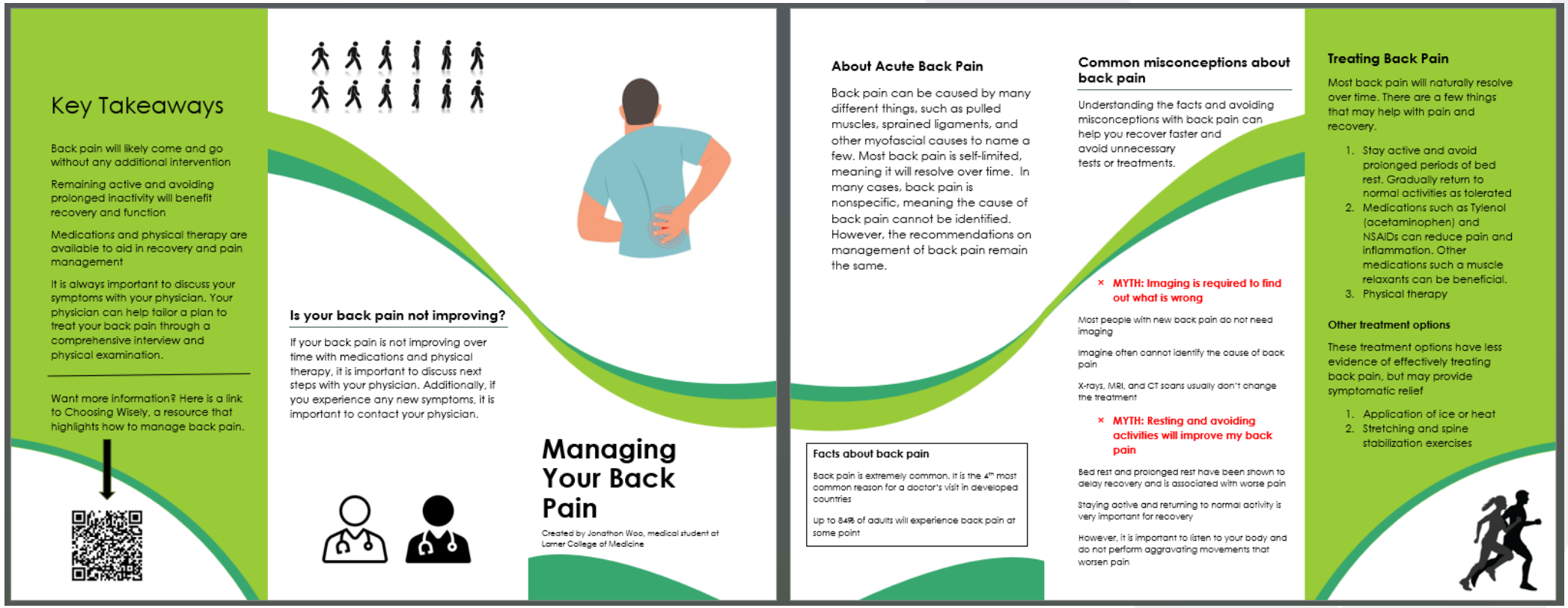
Physician perspectives from a physiatrist:

"Most people with back pain get better with or without medical intervention"

"Dangerous causes of back pain are rare. They are reliably found with a physical examination along with various tests that can be performed."

"Most people with pain, especially back pain, are afraid to move. Active exercise — weight training, aerobics, stretching, etc. can make a big difference."

Intervention and Methodology for Implementation



- Created a patient education pamphlet for patients with back pain (without the presence of red flag symptoms) to explain the self-limiting progression of back pain and to highlight evidence-based treatment options

Results and Reflection

Impact on host community

- Back pain is seen frequently in the office, and this pamphlet aims to provide reassurance regarding the progression of back pain without red flag symptoms. This project also simplifies treatment options to provides clarity on how to manage back pain.

Evaluation of project

- If there was more time, I would survey patients with acute back pain to evaluate beliefs about back pain and assess pain scale. I would follow up with patients and reassess beliefs about back pain and reassess the pain scale.

Challenges/limitations

- One challenge when implementing the intervention was seeing patients coming in for an initial visit for acute back pain. This pamphlet is not intended for patients with chronic back pain or back pain that limits function.

Future Directions

Future steps and interventions

- Determine how social determinants of health such as occupation play a role in back pain and recovery
- A separate educational pamphlet can be made for back pain with red flag symptoms, or management of chronic back pain
- Educational session for physicians targeted towards evidence-based treatments of back pain

References and Citations

1. Finley CR, Chan DS, Garrison S, Korownyk C, Kolber MR, Campbell S, Eurich DT, Lindblad AJ, Vandermeer B, Allan GM. What are the most common conditions in primary care? Systematic review. Can Fam Physician. 2018 Nov;64(11):832-840. PMID: 30429181; PMCID: PMC6234945.

2. Christe G, Pizzolato V, Meyer M, Nzamba J, Pichonnaz C. Unhelpful beliefs and attitudes about low back pain in the general population: a cross-sectional survey. *Musculoskelet Sci Pract.* 2021;52:102342. doi:10.1016/j.msksp.2021.102342

3. Chang D, Lui A, Matsoyan A, Safaee MM, Aryan H, Ames C. Comparative Review of the Socioeconomic Burden of Lower Back Pain in the United States and Globally. Neurospine. 2024 Jun;21(2):487-501. doi: 10.14245/ns.2448372.186. Epub 2024 Jun 30. PMID: 38955526; PMCID: PMC11224735.

4. Hall AM, Aubrey-Bassler K, Thorne B, Maher CG. Do not routinely offer imaging for uncomplicated low back pain. BMJ. 2021 Feb 12;372:n291. doi: 10.1136/bmj.n291. PMID: 33579691; PMCID: PMC8023332.

5. Potaczek T, Jasiewicz B. How back pain influences daily activities and quality of life: Incidence of back pain related to age. J Child Orthop. 2023 Nov 27;17(6):505-511. doi: 10.1177/18632521231215855. PMID: 38050592; PMCID: PMC10693836.