

Successful Management of a Patient with Chronic Lower Back Pain with a Language Barrier with No Interpreter: A Case Report

Matthew Baumeister, SPT, Bhupinder Singh, PT, PhD
Department of Physical Therapy, Midwestern University, Downers Grove, IL

Abstract

This case report examines the successful treatment of a patient with chronic lower back pain who faced a language barrier but chose not to use an interpreter.

Despite the challenges, effective communication was achieved through visual aids, simplified language, and active feedback, demonstrating that creative strategies can overcome language barriers in physical therapy.

The absence of formal interpreter services highlights the need for adaptable approaches and underscores the potential for further research into effective communication strategies and their impact on treatment outcomes.

Introduction

Language barriers can significantly affect physical therapy outcomes by limiting communication regarding interventions, diagnosis, prognosis, and adherence to treatment plans. Limited access to professional interpreters presents additional challenges.

This case report demonstrates how effective treatment strategies, including visual aids and simplified language, facilitated successful rehabilitation for a patient with chronic low back pain despite declining interpreter services.



Case Description

Patient: 53-year-old Hispanic male with limited English proficiency.
Chief Complaint: Chronic low back pain with radiating symptoms, worsened by work activities
History: Manual laborer in landscaping and tree removal, history of spondylolisthesis and Type II Diabetes
Initial Assessment: Pain: 10/10 worst, 6-7/10 best
Strength deficits: Bilateral hip flexion and extension
Positive special tests for sacroiliac dysfunction
Oswestry Disability Index: 25/50

Methodology

A 7-week treatment plan (11 sessions) focused on:

- Core & Lower Extremity Strengthening
- Soft Tissue Mobilization & Joint Mobilizations
- Stretching & Manual Therapy
- Pain Management Strategies (IFC with Cold Pack)
- Home Exercise Program (HEP) provided in Spanish with teach-back verification

Treatment Week	Interventions**
1	- Supine bridges - Prone Press-Up- Added to HEP - TrA Activation Isometrics- Added to HEP - LE Stretching- Added to HEP - Manual therapy including STM and Joint Mobilizations to Lumbar Spine - Manual Passive LE Stretching - IFC with Cold Pack
2	- Supine bridges- Added to HEP - Prone Press-Up - MET for Upward Slip of Right Innominate - Manual therapy including STM and Joint Mobilizations to Lumbar Spine - Manual Passive LE Stretching - IFC with Cold Pack
3	- Prone Press-Up - Pallot Press - Single Leg Supine Bridges - Body Mechanics/Lifting Training - Manual Passive LE Stretching - IFC with Cold Pack - STM
4	- Pallot Press - Single Leg Supine Bridges - Body Mechanics/Lifting Training - Prone Superman - Farmers Carry - Manual therapy including STM and Joint Mobilizations to Lumbar Spine - Manual Passive LE Stretching - Pallot Press
5	- Single Leg Supine Bridges - Prone Superman - Manual Passive LE Stretching - Dead bugs- Added to HEP - Quadratus Lumborum Stretch- Added to HEP - Theraband Rows on Therapy Ball - Theraband Walkouts - Dumbbell RDL - Manual therapy including STM and Joint Mobilizations to Lumbar Spine - ICF and Cold Pack
6	- Single Leg Supine Bridges- Added to HEP - D/C Supine Bridges from HEP - Pallot Press- Added to HEP - Manual Passive LE Stretching - Theraband Walkouts - Manual therapy including STM and Joint Mobilizations to Lumbar Spine - Single Leg Dumbbell RDL - Dumbbell Reverse Lunges
7	- Manual Passive LE Stretching - Manual therapy including STM and Joint Mobilizations to Lumbar Spine - Reviewed full HEP prior to D/C - Single Leg Dumbbell RDL - Dumbbell Reverse Lunges - Supine Bridge with Roll-In on Therapy Ball - Lateral Heel Taps

Table 1- Plan showing interventions for each week

Outcomes

Pain Reduction: Improved to 6/10 worst, 3/10 best
Functional Improvement: Resumed full work & family activities
Oswestry Score: Improved from 25/50 to 19/50
Strength Gains: Left hip extension 4/5, Right hip extension 4-/5Hip Internal Rotation: Mild-to-moderate improvement bilaterally

Outcome measure	Initial Assessment	Final Assessment
Oswestry Low Back Pain Score	25/50 (50% deficit)	19/50 (38% deficit)
Pain Level (Worst)	10/10	6/10
Pain Level (Best)	6/10	3/10
Left Hip Extension Strength	3/5	4/5
Right Hip Extension Strength	3/5	4-/5
Hip Internal Rotation (Flexibility)	Moderate restriction bilaterally	Minimal restriction bilaterally
Ability to Work	Limited ability	Able to resume full work duties

Table 2- Outcome measures for initial and final assessments

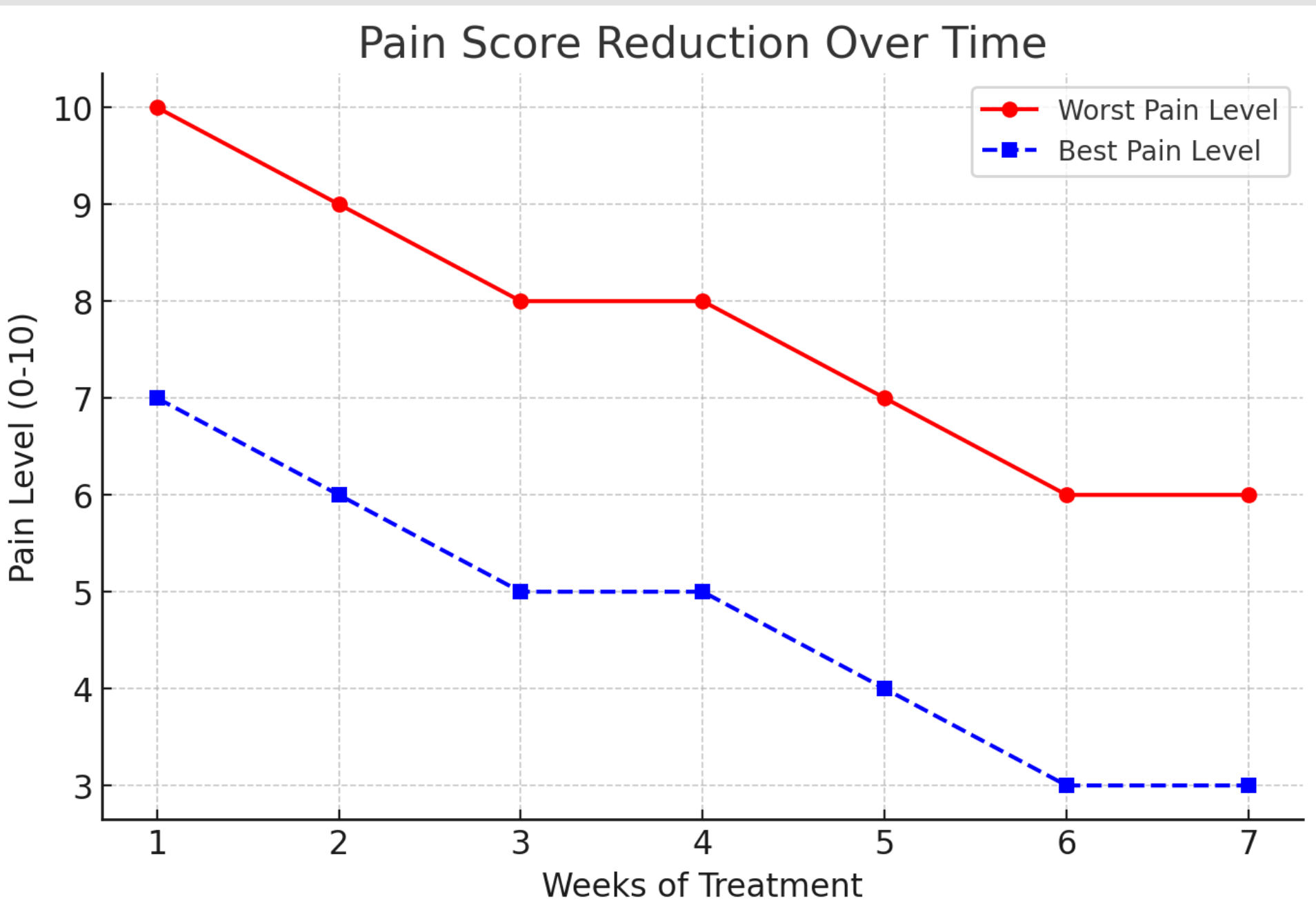


Figure 1- Pain reduction over time on a scale of 1-10.

Discussion and Conclusion

Despite a language barrier, effective communication strategies including visual demonstrations, simplified language, and active feedback enabled successful rehabilitation.

The case underscores the need for further research into optimizing physical therapy outcomes for non-English-speaking patients without interpreter services.

Future studies should evaluate the impact of different communication methods on patient outcomes.

References

- 1.Mirza M, Harrison EA, Roman M, Miller KA, Jacobs EA. Walking the talk: understanding how language barriers affect the delivery of rehabilitation services. Disability and Rehabilitation. 2022/01/16 2022;44(2):301-314. doi:10.1080/09638288.2020.1767219
- 2.Al Shamsi H, Almutairi AG, Al Mashrafi S, Al Kalbani T. Implications of Language Barriers for Healthcare: A Systematic Review. Oman Med J. Mar 2020;35(2):e122. doi:10.5001/omj.2020.40
- 3.Wiles I, Tariq A, Karasneh G, Summerville D, Tovar DE, Woltenberg LN. The effects of interpreter utilization on patient outcomes: A contemporary literature review. Education in the Health Professions. 2023;6(2):49-60. doi:10.4103/ehp.ehp_4_23
- 4.Schwei RJ, Guerrero N, Small AL, Jacobs EA. Physician perceptions of the types of roles interpreters play in limited English proficient pediatric encounters and how they evaluate the quality of interpretation. Prim Health Care Res Dev. Mar 20 2019;20:e25. doi:10.1017/s1463423618000890
- 5.Squires A. Strategies for overcoming language barriers in healthcare. Nurs Manage. Apr 2018;49(4):20-27. doi:10.1097/01.numa.0000531166.24481.15

Acknowledgements

2025 Midwestern University DPT Program Faculty, Staff and Students