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Effectiveness of Behavioral Graded Activity in Decreasing Functional Limitations in Older Adults with Lower Extremity **Osteoarthritis**

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DOCTOR OF PHYSICAL THERAPY PROGRAM

Effectiveness of Behavioral Graded Activity in Decreasing Functional Limitations in Older Adults with Lower Extremity Osteoarthritis

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The Messiah University Doctor of Physical Therapy program graduates ethical, compassionate, autonomous doctors of physical therapy who are competent to practice in diverse settings. Graduates are lifelong learners informed by evidence-based practice who exemplify the values of Messiah University and the physical therapy profession.

INTRODUCTION / PURPOSE

- ➤ Osteoarthritis (OA) is the most common joint disease and the leading cause of disability in older adults.¹ Physical therapy (PT) offers many benefits for patients with OA. Unfortunately, the long-term outcomes for these patients even after receiving PT treatment may be inadequate.²-7
- ➤ As a profession, we need to continue to explore treatment strategies to improved quality of life. Behavioral Graded Activity (BGA) could be a treatment strategy to utilize.

BGA Definition:

Time Contingent Management Strategy using progressively challenging activities.8

How to Use BGA:

Have patients progressively improve activity-level while monitoring symptoms.⁹

Goal of BGA:

Demonstrate consistent improvements in activity-level over long periods of time.⁸

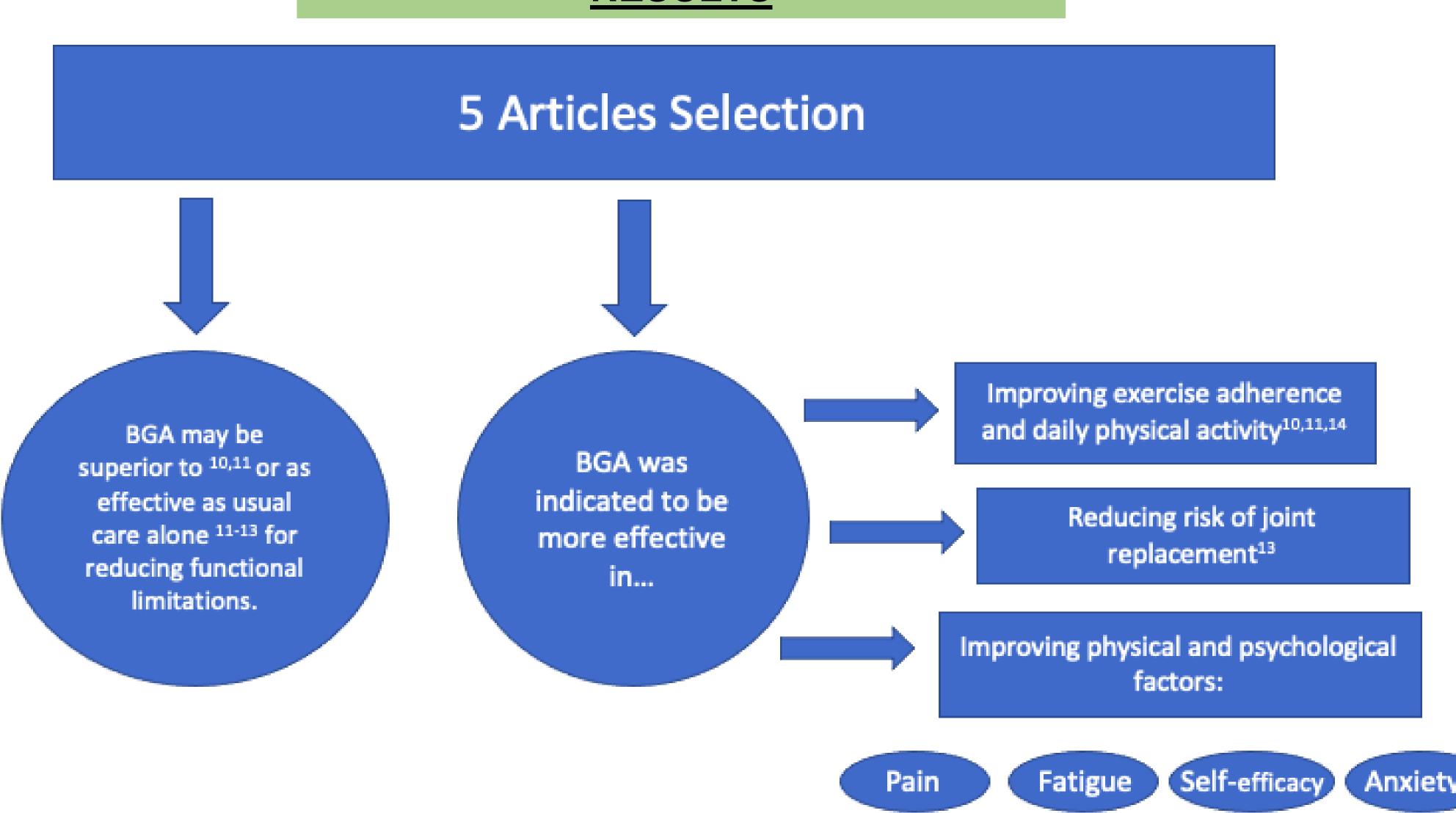
CONCLUSION

- ➤ There were clinically significant improvements in functional outcomes in both the UC groups and BGA groups consistently across all five studies, indicating BGA is a viable treatment method for lower extremity (LE) OA.¹¹¹-¹⁴ BGA groups also showed greater improvement than UC groups in perceived pain, fatigue, anxiety, self-efficacy and exercise adherence .¹¹¹-¹³
- ➤ There is insufficient evidence to support BGA as a stand alone treatment. However, the current evidence supports the use of BGA as an adjunct treatment strategy. 11-13 Although there is nothing to suggest excluding BGA would be a disservice to the patient, it is still a method worth considering, especially for patients with low activity levels due to pain catastrophization and/or avoidance.

METHODS Pedro CINAHL Number of Number of Number of Number of records records records records identified: n=4 identified: n=16 Number of excluded Total records records: n=3 found: n=61 Number of 9 duplicate records: n=52 **Exclusion Criteria** Inclusion Criteria 1. Previous joint replacements hip 1. Hip and/or knee OA mild or moderate and/or knee (stage 2 or 3) graded by x-ray Corticosteroid or other Human subjects ONLY medications/injections on joint being Article in English tested in past 6 months Date: published between 2006 and Non-human subjects 5. Full text Search Terms: Behavioral graded Included activity (BGA) and hip osteoarthritis Studies included in research: 2. Behavioral graded activity (BGA) and hip n=5 osteoarthritis and usual care Behavioral graded activity (BGA) and knee osteoarthritis 4. Behavioral graded activity (BGA) and knee

RESULTS

osteoarthritis and usual care



CLINICAL RELEVANCE

- ➤ The level of evidence for all four RCTs used in this CAT was IB, signifying a narrow confidence interval. Moreover, the strength of the study designs ranged from good to excellent on the PEDro scale.
- ➤ Common outcomes included improvements shown in both the UC control group and BGA group, increases in home exercise adherence in the BGA group, and reductions in hip and knee replacements in the BGA group. 11-14 The results were consistent amongst all studies.
- ➤ Key findings showed BGA to be as effective as UC in addressing pain, disability, quality of life, global perceived effect, return to work, and physical activity levels. 10,11 However, there is not enough evidence to support the use of BGA as a stand alone treatment.
- ➤ BGA was found to be more beneficial than UC for patients starting at a lower functional level than those at a higher level, especially when low levels of activity and function are associated with pain catastrophizing and/or avoidance.¹⁴

Adding BGA strategies could improve long term patient care by:

- ➤ Improving functional and symptomatic outcomes for sedentary patients who catastrophize pain. 11-16
- ➤ Increasing home exercise program adherence. 11,12,14
- ➤ Reducing plateauing due to non-compliance or loss of motivation. 10,11,17,18
- ➤ Reducing incidences of total hip and knee arthroplasty. 13

REFERENCES

