

# The Impact of Arthritis on Older Adults' Social and Leisure Participation

Emma Haan Ospina, OT/s

Mentor: Elizabeth E. Marfeo, PhD, MPH, OTR





## Introduction

**Prevalence:** 49.6% of people 65+ have arthritis (Barbour et al., 2017), resulting in:

- Participation restrictions in meaningful occupations
- ↓ quality of life and ↑ caregiver burden

Social participation: activities involving social interaction with others (AOTA, 2020)

- ↑ participation = ↑ successful aging (Payne, Mowen, & Montoro-Rodriguez, 2006)
- Individuals with arthritis report ↑ restriction (Theis, Hootman, & Wilkie, 2013) and ↓ satisfaction (Gignac et al., 2008)

Leisure engagement: non-obligatory, intrinsically motivated, and engaged in during discretionary time (AOTA, 2020)

- † leisure = † arthritis-based health (Payne et al., 2006; Son & Janke et al. 2015)
- Individuals with arthritis report symptom-related impacts (Leino et al., 2015)

## Research gaps:

- Comprehensive definitions of leisure and social participation
- Nationally representative sample and control group

**Design**: Retrospective, cross-sectional analysis of community-dwelling elders (65+) Data: National Health and Aging Trends Study (NHATS), Round 9 (2019)

- Aim 1: Compare the social/leisure participation of older adults by arthritis status
- Aim 2: Explore what factors predict the likelihood of social/leisure restriction
- Aim 3: Characterize how individuals with arthritis engage with and respond to rehab

## Method Literature Review Gap Identification Research Question Development Database (NHATS) Review Inclusion Criteria (Community-Dwelling) Variable Selection & OTPF-4 Mapping Data Cleaning & Treatment Recode Variables Apply Survey Weights Data Analysis Descriptive & Bivariate Statistics Develop & Test Predictive Model Interpretation **Future Directions** Contextualize Findings **Review Interventions**

**Total Sample:** 4,043  $\rightarrow$  70% (2,969) with arthritis, 30% (1,070) without

• Characteristics: 55% female, 86% 65-84 years, 80% white, 55% married/partnered

Social/leisure activities included in the analysis (reference period = last month):



Visit

friends/family



Attend organized

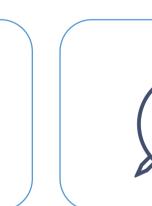
activities

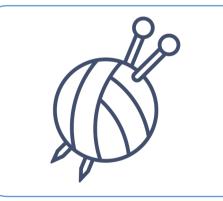


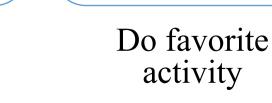


Go out for

enjoyment









## Social/leisure restriction measure:

Meaningful activity



Impacted by health

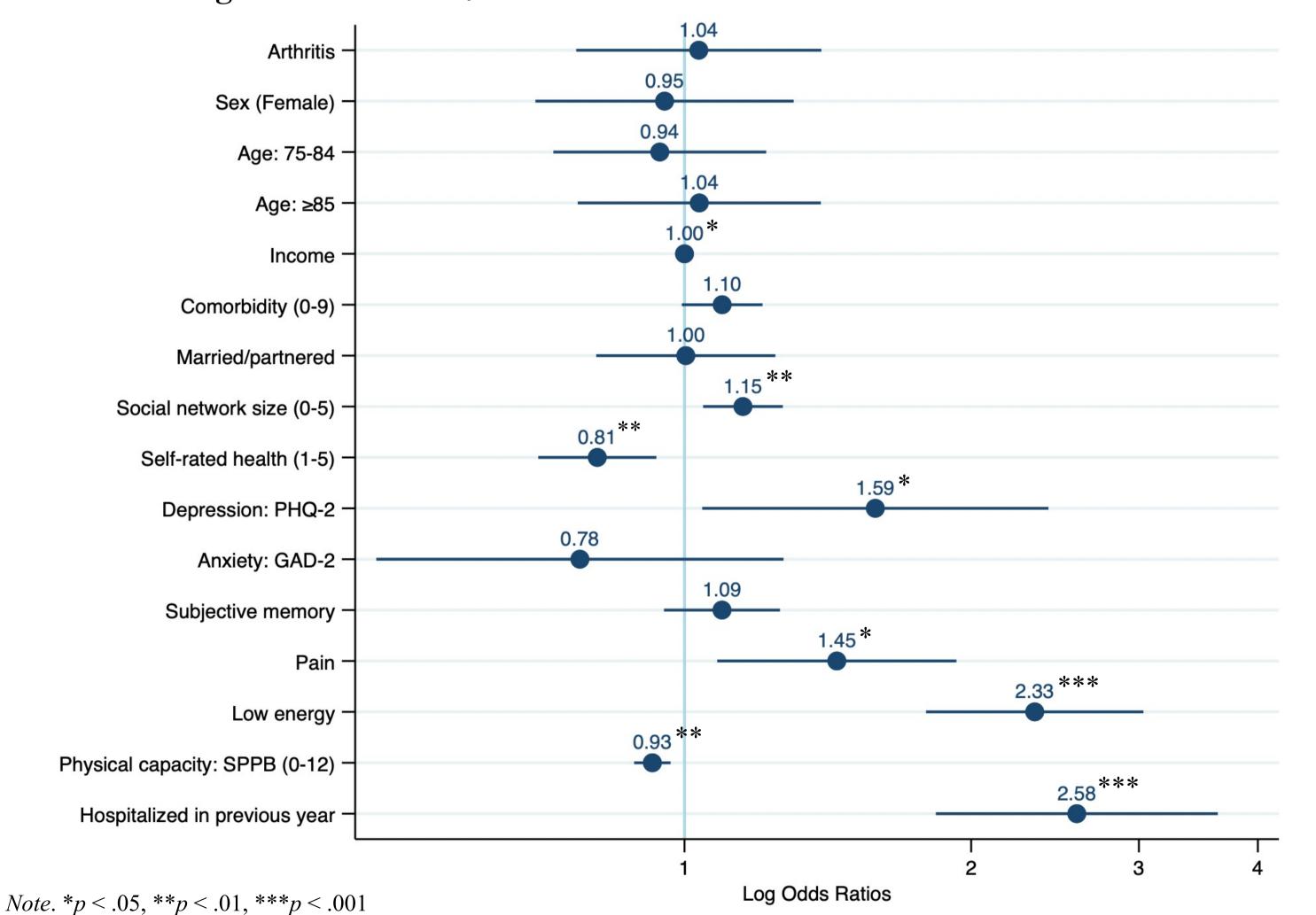


## Results

# Favorite Activity Restriction by Arthritis Status Social/Leisure Restriction by Arthritis Status ■ Arthritis ■ No Arthritis ■ Arthritis ■ No Arthritis

#### Multivariate Regression of Social/Leisure Restriction

**Activity** 



### **Rehabilitation Factors**

• <1 month (18%)

• 2-3 months (63%)

• 4-5 months (10%)

• >6 months (9%)

Duration

• 26% of participants with arthritis received rehab services in the last year

ed			
ed			
	ed		

# Goals

- Pain level (49%)
- Strength (60%) • Range of motion (64%)
- Participation (18%)

## Functioning

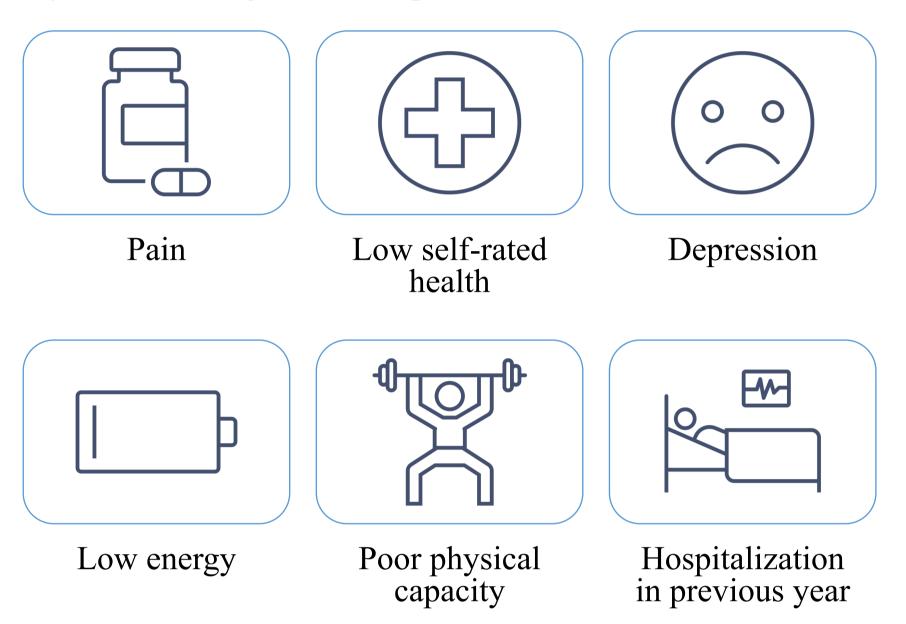
- (During rehab, post-rehab)
- Improved (72%, 44%)
- No change (26%, 50%) • Declined (2%, 6%)

Occupation

## Discussion

Older adults with arthritis experience greater social/leisure restriction than those without the condition.

- However, arthritis is **not** an independent predictor of social/leisure restriction when specific sociodemographic variables and health markers are controlled.
- Specifically, the following constructs predict an increased likelihood of restriction:



- Higher income and a larger social network was also positively correlated with restriction. Why?
  - ✓ Possible **endogeneity**: resources may provide individuals with greater opportunity to participate in these activities, resulting an increased likelihood of finding them meaningful.

Service gap: only 26% of those with arthritis received rehab services in the past year; however, 31% reported social and leisure activity restriction within the last month.

## Occupational therapy interventions:

- Occupations & activities: social participation & leisure
- Interventions to support occupations: orthotics, environmental modifications
- Education & training: joint protection, pain management, emotional regulation
- Advocacy: chronic illness self-management programs
- *Group*: community-based
- Virtual: electronic gaming

#### Limitations

- Cross-sectional analysis
- Sample homogeneity
- Self-report recall bias
- Seasonality of activity participation
- Lack of activity intensity measures

## Future Directions

- Longitudinal analysis
- Disease severity
- Participation frequency

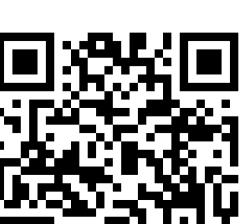
## • Explore activity adaptations

## Implications

. Regularly screen for social/leisure participation restriction when working with the community-dwelling older adult population.

2. Consider prioritizing arthritis symptomatology rather than the presence or absence of a clinical diagnosis of the condition in assessing restriction likelihood.

3. Employ evidence-based interventions to target mutable factors that can increase social/leisure restriction.



References: