

Social and Community Participation among Older Adults with Arthritis

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Learning Objectives

- Define social and community participation (measurement)
- Review social and community participation prevalence estimates
- Discuss current evidence on promoting participation among older adults with arthritis
- Identify and discuss gaps in the field and next steps to move the field forward



Definition: Community, Recreational and Social Participation

- Engaging in social or community associations organized by people with common interests, such as social clubs, religious entities, professional associations
- Interpersonal relationships (intimate, family, others)
- Recreational and leisure activities



Measurement: Social, Recreational and Community Participation

- Self-report
 - Performance: “how often do you do...”; “how much time do you spend”; “as and when you want”
 - Capacity: “how limited are you...”
 - Subjective/evaluative: “satisfaction,” “desire to change participation”
 - Comparative: compared to “peer norms”



Participation Measures

- Impact on Participation and Autonomy (IPA)
- Keele Assessment of Participation (KAP)
- Participation Measure for Post-Acute Care (PM-PAC)
- Participation Objective, Participation Subjective (POPS)
- Rating of Perceived Participation (ROPP)
- The Participation Scale
- Late-Life Disability Instrument (LLDI)
- SLE-FAMILY (focus family role)

Gignac et al. Arthritis Care Res 2011; Wilkie et al. Arthritis Care Res 2011; Katz et al. Arthritis Care Res 2012



Prevalence: Social, Recreational and Community Participation





Prevalence: Social & Community Participation Restriction

- 6% adults age 50+ in National Health Interview Survey 2002 with arthritis reported “participation restriction” vs. 3.4% total sample (Theis & Furner J Aging Res 2011)
- 41% of volunteers state that arthritis limits their involvement; among non-volunteers 27% state arthritis is the main barrier to volunteering (Theis et al. Arthritis Care Res 2010)



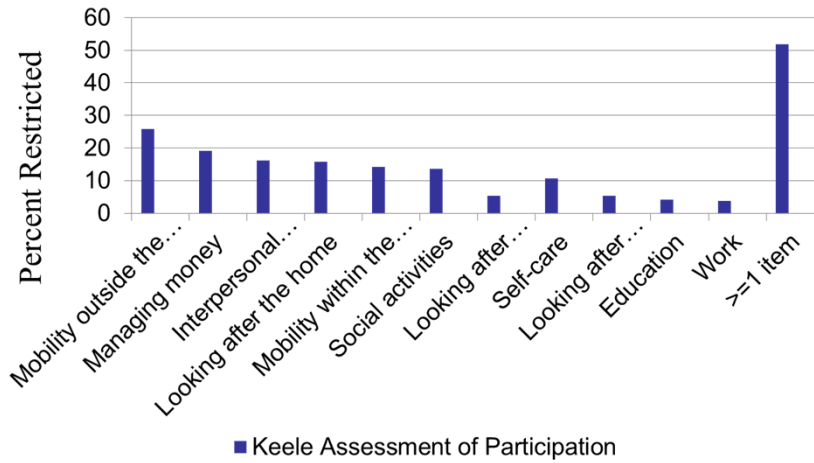
Prevalence continued

- National clinical sample of adults with rheumatoid arthritis
 - ~ 50% of subjects unable to do at least 1 valued life activity
 - 95% reported that at least on valued life activity was affected by rheumatoid arthritis
 - Activities most frequently impacted:
 - Heavy housework; minor repairs; paid work; gardening; vigorous and moderate physical activity; and hobbies

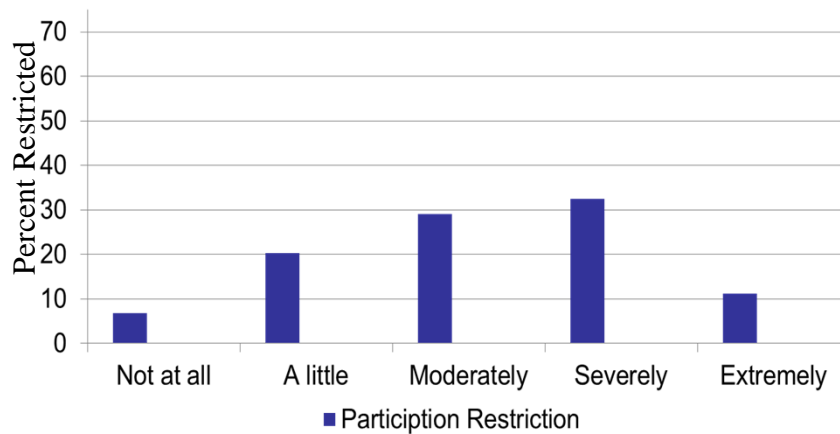
Katz et al. Ann Rheum Dis 2006



Prevalence Participation Restriction Community Dwelling Adults Age 50+ in United Kingdom(N=7,878) Wilkie et al, Quol Life Res 2006

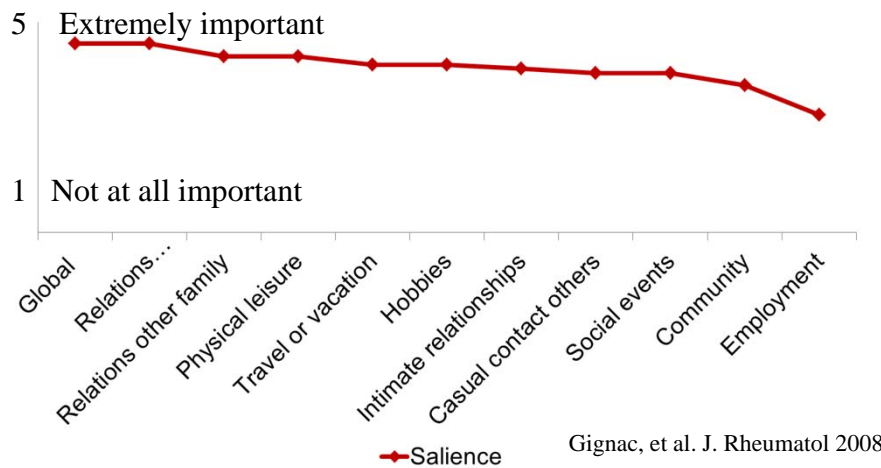


Percent Social Activities Restricted among Persons waiting for Joint Replacement (N=413) Pollard B, Johnston M, Dieppe P, BMC Musculoskel Dis 2011





Social Role Salience among Older Adults with Hip or Knee OA (N=87)



Social Role Salience & Satisfaction among Older adults with Hip and Knee OA (N=87)

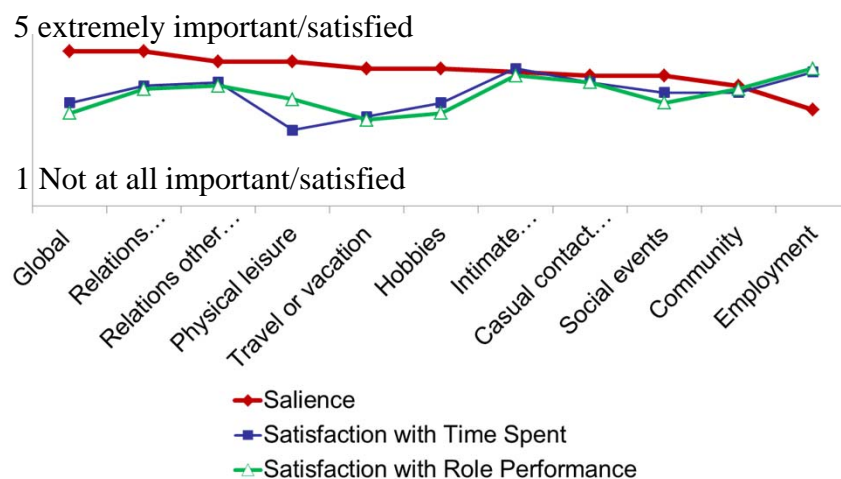
Gignac, et al. J. Rheumatol 2008





Social Role Salience & Satisfaction among Older adults with Hip and Knee OA (N=87)

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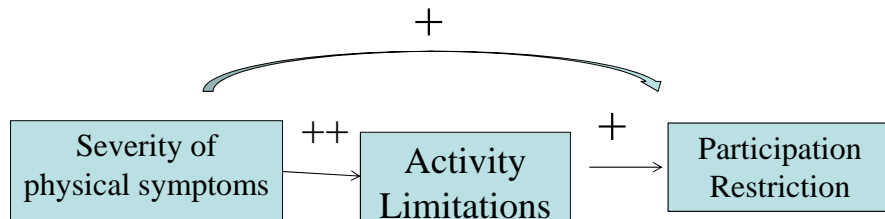


Incidence

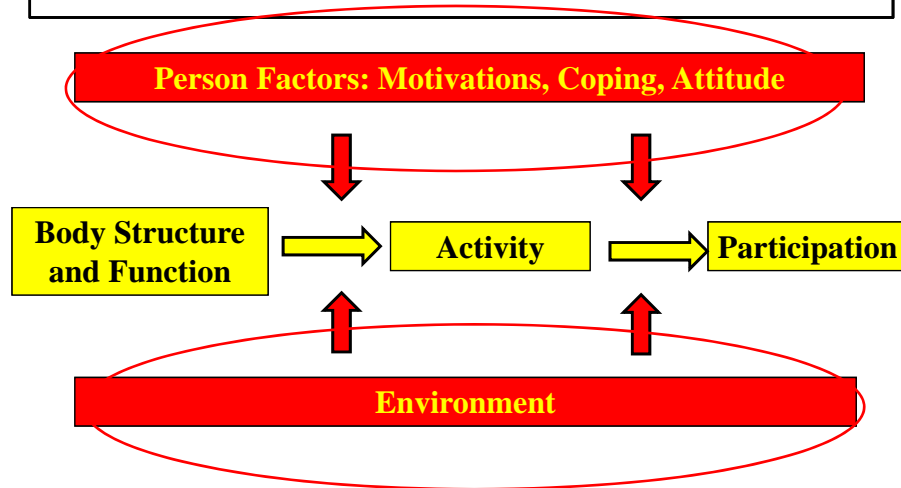
- Multicenter Osteoarthritis-Knee Pain and Disability Study
 - ~ 18% of adults age 65+ with symptomatic knee pain and functional limitations without participation restriction at baseline (N=294) developed participation restriction (Late-Life Disability Instrument) at 30-months (Keysor et al. ACR/ARHP 2010)
- Community dwelling United Kingdom adults (N=6965)
 - ~30% of sample without participation restrictions at baseline developed participation restriction in at least one item on the Keele Assessment of Participation at 3-year follow-up
 - Mobility outside the home greatest incidence



Relationships Among Body Systems, Activity and Participation



ICF Contextual Factors



Adapted from WHO ICF Model, 2001



Multicenter Osteoarthritis Study: Knee Pain and Disability (MOST-KPAD) Ancillary Study

- 443 participants age 65+ with functional limitations from the MOST Study
 - MOST: Longitudinal cohort of 3026 community-dwelling adults age 50+ with symptomatic knee osteoarthritis (OA) from Alabama and Iowa City
 - Baseline MOST data collection: demographics, knee pain, x-rays, MRI, strength, function
 - Baseline and 30-month f/u KPAD data: environment (HACE); participation (Late-Life Disability Instrument)

Keysor et al., J Gerontology Med Sci 2010



Home and Community Environment Survey (HACE)

To what extent does your local community have....

	<u>BARRIER PRESENT</u>
1. Uneven sidewalks or other walking areas	A LOT/SOME
2. Parks & walking areas used for exercise	NONE
3. Curbs with curb cuts	NONE
	<u>FACILITATOR PRESENT</u>
1. Public transportation close to home	A LOT/SOME
2. Public transportation with adaptations	A LOT/SOME.

Keysor, Jette, & Haley (2005)



Multicenter Osteoarthritis Study Knee Pain and Disability (MOST-KPAD) Cross-Sectional Associations (N=435)

	Limitation Participation	Frequency Participation
	<u>Adjusted</u> OR (95% CI)	<u>Adjusted</u> OR (95% CI)
Barriers	2.0 (1.2-3.1)	1.4(0.9-2.4)
Facilitators	0.5 (0.3-0.8)	0.8 (0.5-1.4)

* Adjusted age, gender, education, comorbidity body mass index, knee pain and functional limitation

Keysor et al. J Gerontol 2010



Self-Report Environment: Small Association

- Community dwelling older adults: availability of transportation factors associated with increased community mobility (Wilkie et al. Arth Rehum 2007)
- 4 cross-sectional clinical samples
 - Persons s/p Stroke (Rochette A. et al. 2001)
 - Persons s/p traumatic brain injury (Whiteneck GG. et al. 2004)
 - Persons s/p spinal cord injury (Whiteneck GG et al. 2001)
 - General rehabilitation population (Keysor et al., 2010)

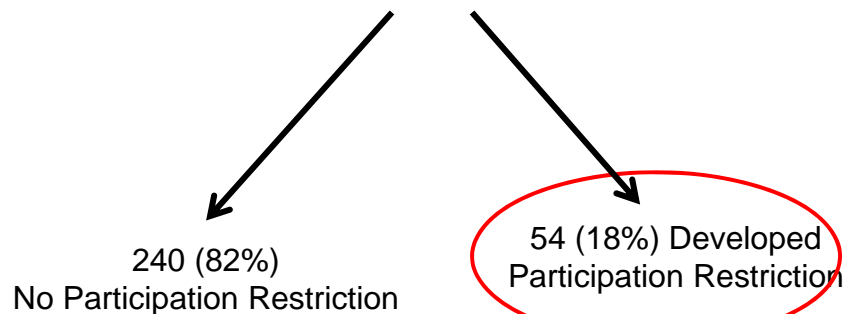


But does it predict participation?



MOST-KPAD Study Incident 30- Month Participation Restriction

294 Persons at Baseline
No/Mild Participation Restriction



Keysor et al. ACR/ARHP 2010



Odds of Developing 30-Month Participation Restriction by Community Mobility Barriers

*

	Subjects Developing Participation Restriction N (%)	Crude OR (95% CI)	Adjusted OR* (95% CI)
Low Mobility Barriers	33/215 (15)	1.0	1.0
High Mobility Barriers	21/79 (27)	1.9 (1.1-3.7)	1.6 (0.8, 3.2)

* Adjusted age, sex, race, education, body mass index, knee pain, walking speed, depressive symptoms and site

Keysor et al. ACR/ARHP 2010



Odds of Developing 30-Month Participation Restriction by Transportation Facilitators

	Subjects Developing Participation Restriction N (%)	Crude OR (95% CI)	Adjusted OR* (95% CI)
Low Transportation Facilitators	23/109 (21)	1.0	1.0
High Transportation Facilitators	31/185 (17)	0.8 (0.4-1.4)	0.8 (0.4-1.6)

* Adjusted age, sex, race, education, body mass index, knee pain, walking speed, and site



Interventions to enhance social, recreational, and community participation among community dwelling adults with arthritis...



- Interventions (exercise, self-management, pharmaceutical)
 - Participation outcomes not primary outcomes in current literature
- Will these approaches change participation?



Summary: Where are we?

- Conceptual definitions clearer; measurement advances
- Participation restrictions are present in the population
- People with arthritis at risk of incident participation restriction
- Limited evidence-based approaches to enhance social and community participation



Where do we go next?



- Continued advances in measurement
- Establish effective approaches to promote social, recreational and community participation
- Establish effective approaches to prevent social, recreational, and community participation restriction



NIDRR PR/Award #H133B100003

Thank you!

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THE NIDRR ARTHRITIS REHABILITATION RESEARCH AND TRAINING CENTER



So participation...Where are we? Where do we need to go?



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Where are we?

- Gaining conceptual clarity of participation concepts (measurement advances)
- Increasing recognition that participation is an important outcome
- Some evidence that work participation interventions are effective
- Gaining perspectives on participation at the community level



Where do we need to go?

- Continued measurement advances
- Better understanding of participation outcomes and high risk groups
- Identify effective approaches to prevent and minimize participation restrictions
 - Who delivers the intervention
 - Which people are most likely to benefit
 - When do we intervene



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