Work Participation: Arthritis and Rheumatological Conditions

Rawan AlHeresh MS OTR
Julie Keysor PT PhD

Participation in the Workplace
Participation Restriction in the Workplace

Learning Objectives

- Discuss employment outcomes
- Discuss the prevalence of work disability
- Discuss best practice approaches for enhancing employment outcomes among adults with arthritis
- Discuss important gaps/next steps in the field
Definitions: Work Disability

- **Work loss**: “Premature work cessation due to a health condition”

- **Work productivity**:
  - **Absenteeism**: “Time missed from work due to health reasons”
  - **Presenteeism**: “Time of impaired performance while at work due to health reasons resulting in productivity loss”

Measurement

- Work Loss
- Absenteeism
- Presenteeism
Measurement: Work disability

- Work Loss/Employment status:
  - Full time employment
  - Part time employment
  - Unemployment, long term disability leave

Measurement: Work disability

- Absenteeism:
  - Time lost from work
  - Short term leave
Measurement: Work Disability

- Presenteeism
  - Numerous work outcome measures referred to in rheumatology (over 21)
  - No gold standard to date on presenteeism despite strong interest in the field

Measurement: Work Disability

- Presenteeism: OMERACT efforts (www.omeract.org)
  - Work Limitations Questionnaire (WLQ)
  - Workplace Activity Limitations Scale (WALS)
  - Work Instability Scale for Rheumatoid Arthritis (RA-WIS)
  - Work Productivity Survey (WPS-RA)
  - Work Productivity and Activity Impairment Questionnaire (WPAI)

Impact of arthritis on work participation

23%-45% of people with arthritis are unemployed within 10 years of diagnosis

- Rheumatoid arthritis (Sullivan et al. 2010)
- Psoriatic arthritis (Tillett et al. 2012)
- Ankylosing spondylitis (Backland et al. 2011, Ariza-Ariza et al. 2009)
- Lupus (AlDhanhani et al. 2009)
Impact: Productivity

- 2001-2002 National Health Interview Survey (NHIS) (Theis et al. 2007)
  - 5% of the US employment aged population reported limitations in work due to arthritis
  - 31%—8.3 million people—with arthritis reported a work limitation related, at least in part, to a musculoskeletal condition

Impact: Productivity

- Financial impact on the individual and the society
Impact:
Work loss and productivity loss are substantial

The Rheumatological Population

- 50% of people with arthritis are employment age
- Disease onset common in working age
  - Onset in older working age particularly problematic
- Limited resources for employment retention
- Disclosure of disease is a common concern
How can we foster employment retention?

Evidence:

1. Vocational rehabilitation
2. Ergonomics and job accommodation
3. Comprehensive clinical care
Evidence: Vocational Rehabilitation


2. Effect of job maintenance training program for employees with chronic disease - a randomized controlled trial on self-efficacy, job satisfaction, and fatigue. (Varekamp et al. 2011)

Evidence:

1. Vocational Rehabilitation

- RTC 242 U.S. employed adults with rheumatological condition (Allaire SA et al. 2003)
  - 4-year follow-up: Intervention group less work loss (OR 0.58, p=.03)
  - Intervention: job accommodation, vocational counseling, education and self-advocacy
Evidence:
1. Vocational Rehabilitation

- RCT 122 Dutch employed adults with chronic conditions 2 year follow-up (Varekamp et al. 2011)
- Job satisfaction increased in intervention group but not statistically different than control; employment retention rates similar between groups
- Limitations: sample size, length of follow-up

Evidence
2. Ergonomic and job accommodation

- RCT 89 US employed adults with rheumatoid arthritis and osteoarthritis followed for 2 years (Baldwin et al. 2012)
- 2 X 2.5 hour work place sessions conducted by an occupational therapist
- 24 months: AIMS2 work score: 1.49 (I) - 2.16(C) p<0.03
- Limitations: Small sample
Evidence
2. Ergonomic and job accommodation

- 85 Italian employed adults with RA followed for 8 months (Masiero et al. 2007)
- 4 X 3 hour group meetings
- AIMS2 work subscale showed no significant results
- Limitations: Sample size and follow up period

Evidence
2. Ergonomic and job accommodation

- RTC 32 British employed adults with rheumatoid arthritis (Macedo et al. 2007)
- Comprehensive occupational therapy Vs. usual care
- Results: Intervention group less productivity loss (COPM p>0.001)
- Limitations: Not clear if the intervention was standard OT clinical care; No attention control
Evidence:
3. Comprehensive Clinical Care

- 140 employed adults with arthritis (de Buck et al. 2005)
- Comprehensive multidisciplinary clinical care
  - individualized assessment, case conference, and individualized plan of care
- Usual care
- Results: No difference in job loss; positive trend for job satisfaction

Summary

- Some evidence that a vocational rehabilitation approach minimizes work loss: 1 large, well conducted study with long-term follow-up (Allaire et al. 2003) and smaller, shorter follow-up study with trends
- Some evidence that ergonomic and job accommodations approach may minimize work productivity loss
Where are we going?

- Several ongoing clinical trials

- Current approaches: Delivery of employment retention educational programs at the community level:
  - Health professionals
  - Technology resources to leverage scarce vocational rehabilitation resources
Community-Based Health Professionals

- **Ongoing RCT:** Can an educational approach consisting of work barrier identification and problem-solving (job accommodations, behavior and environment change) delivered by physical or occupational therapists minimize work disability?

  - Keysor JJ, Allaire SA, Boston University, USA

- **Ongoing Pilot RCT:** Can an offsite ergonomic educational program delivered by occupational therapists minimize presenteeism and work loss?

  - Alison Hammond: University of Salford, United Kingdom
Technology: Linking Scarce VR Services with Occupational Therapy

- **Ongoing RCT**: Can online web-teleconferencing technologies supporting group educational program and online VR services in conjunction with ergonomic in-person evaluation minimize presenteeism and work loss?
  - Diane Lacaille, MD. Arthritis Research Center, Vancouver, Canada

Next Steps: Critical Issues for the Field

- Measurement
  - Still no gold standard to measure work *participation*
  - Inconsistency of measures across studies
- Interventions:
  - When to intervene?
  - Who is to conduct the intervention?
  - How should the intervention be conducted?
  - Mechanisms of what works
- Limited research looking at the work environment
Thank you!