

4-20-2016

Effectiveness of Occupational Therapy Interventions for Adults with Rheumatoid Arthritis: An Evidence-Based Review

Beverly Apodaca

Melissa Watson

Janet Poole

Patricia Siegel

Follow this and additional works at: <https://digitalrepository.unm.edu/ot>

Recommended Citation

Apodaca, Beverly; Melissa Watson; Janet Poole; and Patricia Siegel. "Effectiveness of Occupational Therapy Interventions for Adults with Rheumatoid Arthritis: An Evidence-Based Review." (2016). <https://digitalrepository.unm.edu/ot/9>

This Poster is brought to you for free and open access by the Health Sciences Center Student Scholarship at UNM Digital Repository. It has been accepted for inclusion in Occupational Therapy by an authorized administrator of UNM Digital Repository. For more information, please contact disc@unm.edu.

Effectiveness of Occupational Therapy Interventions for Adults with Rheumatoid

Arthritis: An Evidence-Based Review



Beverly Apodaca, MOTS & Melissa Watson, MOTS

Advisors: Janet Poole, PhD, OTR/L, FAOTA & Patricia Siegel, OTD, OTR/L, CHT

BACKGROUND/PURPOSE

Rheumatoid arthritis (RA) is an autoimmune condition that affects the synovial membrane of the joints and is often associated with pain, fatigue, deformity, and significant limitations in meaningful occupations.

The only systematic reviews on occupational therapy interventions for persons with RA are outdated (Steultjens et al., 2004) or limited to systematic reviews (Ekelman et al., 2014)

RESEARCH QUESTION

What is the effectiveness of interventions within the scope of occupational therapy practice on occupational performance (function), pain, fatigue, and depression in persons with rheumatoid arthritis?

METHODS

Articles were found by searching Medline, PsycINFO, CINAHL, OTseeker, and Ergonomics Abstracts databases. Bibliographies from included articles and relevant journals were also hand searched.

Inclusion criteria: Interventions within the scope of occupational therapy, published in English, studies including adults with RA, peer-reviewed scientific literature (Levels I, II, and III evidence), and published between 2000-2014.

Exclusion criteria: The use of only surgical or pharmaceutical interventions or those focusing solely on the upper or lower extremities were not included. Remaining studies were divided by intervention theme, reviewed by teams, and rated on bias.

The final analysis included 64 studies (25 physical activity and 39 psychoeducational).

RESULTS

Theme	Results
Home Exercise & Coaching (4 Level I)	↑ in strength, mobility, self-efficacy and ↓ stiffness and pain
Dynamic Exercise (6 Level I)	Mixed results comparing dynamic exercise to non-dynamic Aerobic and strength training: ↑ Function, fatigue, and ↓ depression, pain Strength & Endurance: ↑ function, general health and ↓ pain
Aquatic Exercise (1 Level I)	Short term positive effects in QOL, function, but not different than land based exercises
Aerobic Exercise (2 Level I)	↑ QOL, aerobic capacity to increase function, ↓ pain
Strength Training (3 Level I)	↑ muscle strength to improve function and in muscle mass, ↓ in pain and adipose tissue
Tai Chi & Yoga (3 Level I; 1 Level II; 5 Level III)	Yoga: ↑ mood, function, and self-efficacy. ↓ depression, pain, disability Tai Chi: no changes in clinically relevant changes, but patients reported they preferred use of Tai Chi compared to other interventions in two studies
Patient Education and Self-Management (7 Level I; 1 Level II; 3 Level III)	↑ in knowledge, coping skills, self-efficacy, depression, pain management skills ↓ fatigue, pain, depression and disability
Cognitive-Behavioral Therapy (12 Level I)	↑ QOL, coping skills, and self-efficacy ↓ depression, pain, anxiety
Multidisciplinary Approaches (3 Level I; 2 Level II; 1 Level III)	↑ in knowledge, function ↓ in pain, negative emotions, fatigue
Joint Protection (5 Level I)	↑ grip strength, knowledge, self-efficacy, ↓ stiffness Less negative impact of disease processes compared to control groups
Assistive Devices (1 Level I)	↑ usability of adapted device
Emotional Disclosure (3 Level I)	Mixed results were seen, but a combination of written and spoken emotional disclosure may contribute to a reduction of pain
Comprehensive Occupational Therapy (1 Level I)	↑ in coping, function, work productivity ↓ pain and tender joint count

Key: Blue = strong evidence, Green = moderate evidence, Yellow = little evidence

CONCLUSIONS

Strong evidence to support home exercise/coaching, aquatic exercise, aerobic exercise, strength training, cognitive-behavioral therapy, and joint protection.

Moderate evidence to support dynamic exercise, yoga, Tai Chi, patient education and self-management, a multidisciplinary approach, and emotional disclosure.

Little evidence to support assistive devices or comprehensive occupational therapy

Evidence supports interventions within the scope of occupational therapy practice though few interventions were occupation based. Only one study on assistive devices and one study on occupational therapy were included.

IMPLICATIONS FOR PRACTICE

- Occupational therapists may use components from Tai Chi, yoga, and dynamic exercise programs to improve fatigue, depression and mental health vitality or refer clients out to community based programs.
- Practitioners can utilize a variety of psychoeducational interventions to improve function, pain, fatigue, depression, and self-efficacy.
- Self-efficacy is a powerful outcome with RA. Even though measures of disease activity may not appear to change, the positive effects of physical activity and psychoeducational interventions on self-efficacy and overall well-being can empower those living with a chronic illness.

REFERENCES

Full reference list available on handout

ACKOWLEGEMENTS

Marian Arbesman, PhD, OTR/L; Deborah Lieberman, MHSA, OTR; and the American Occupational Therapy Association