

The impact of occupational therapy on the self-management of rheumatoid arthritis: a mixed-methods systematic review

Key findings

We found 40 papers meeting the eligibility criteria, comprising 29 quantitative studies, four qualitative studies and seven mixed methods studies. All papers were published between 1979 and 2022, and aside from Turkey and India, were conducted in economically developed countries.

Self-management interventions were categorised into i) patient education; ii) behaviour change; iii) comprehensive, community occupational therapy (quantitative); iv) comprehensive, community occupational therapy (qualitative); and v) splints and other occupational therapy programmes (including exercise and workplace interventions).

The key findings from this review were:

- There is strong evidence to support patient education and behaviour change self-management strategies for pain and function in the short-term (3-12 months), particularly joint protection education and delivery of strategies in group sessions.
- Patient education can be effective in supporting adherence to self-management programmes and educating people to manage their own conditions. Yet, it has little impact on actual change in behaviour when assessed and reported objectively (i.e. not self-reported).
- Qualitative evidence and insights into the impact of occupational therapy for the self-management of rheumatoid arthritis were lacking. Four qualitative studies were found: three from home-based occupational therapy; one from an arthritis gloves trial (Prior et al 2022).
- There is not enough evidence to support the use of splints and assistive devices, whereas 'comprehensive' (targeted) occupational therapy had mixed impact on function, pain and fatigue. Limited evidence exists on the long-term impacts (>12 months) of occupational therapy for rheumatoid arthritis.

Project aims

To assess the impact of occupational therapy on the self-management of rheumatoid arthritis by:

- reviewing quantitative evidence (such as objective measures recording pain, function and fatigue).
- reviewing qualitative evidence (relating to the person's lived experience).

Background

Rheumatoid arthritis often leads to pain, tiredness, and physical difficulties when doing daily activities. Occupational therapy can help people with rheumatoid arthritis to manage their symptoms and perform meaningful activities in daily life (such as preparing food and working). Such 'self-management' is central in daily care and can empower the individual to adopt strategies to manage their symptoms, physical and psychological consequences, and lifestyle changes inherent in the long-term condition (Lorig & Holman 2003).

Occupational therapy can help people with rheumatoid arthritis at home, in leisure activities and in the workplace (Steultjens et al 2004). The last review on the effectiveness of occupational therapy was completed in 2014 (Siegel et al 2017). Further evidence has now been published.

Although educational behavioural self-management programmes, provision of joint protection information (Steultjens et al 2004) and therapeutic exercises are promising (Siegel et al 2017), there is little robust, high-quality evidence, nor qualitative insights to conclusively demonstrate the impact of occupational therapy on the self-management of rheumatoid arthritis.

Recent narrative reviews highlight the importance of self-management in raising awareness of the 'self' (i.e. lived experience in relation to self-confidence and self-efficacy) for various stages of the disease (Donnelly et al 2020). However, it is unclear how well occupational therapy can help people to self-manage their physical symptoms and experiences of living with rheumatoid arthritis.

Methodology

We conducted a mixed methods review via MEDLINE, CINAHL, AMED, PsycINFO, Web of Science databases, and grey literature up to 30 June 2022. Inclusion criteria were based on the SPIDER framework:

- **S**ample - adults diagnosed with rheumatoid arthritis
- **P**henomenon/Intervention - occupational therapy for self-management (stand-alone or multidisciplinary)
- **D**esign - qualitative and quantitative (not including systematic reviews or meta-analyses)
- **E**valuation/outcome - function, pain, fatigue and lived experience
- **R**esearch type - qualitative, quantitative or mixed methods

Three reviewers screened titles and abstracts, then two independently extracted and assessed full texts of studies using the Cochrane risk of bias (quantitative) and Critical Appraisal Skills Programme (CASP) (qualitative) tools to assess study quality. People who access services and healthcare professionals advised on the i) search strategy, and ii) interpreting the findings from a 'patient'-perspective, with two on the Project Steering Committee.

Recommendations

Based on this review of occupational therapy for self-managing rheumatoid arthritis, future work should:

- Capture the lived experiences of those receiving self-management intervention.
- Characterise the most (and least) effective components of interventions.
- Identify components that are specific to severity and/or duration of the individual's condition when developing self-management programmes.
- Measure health outcomes and lived experience over the long-term (>24 months).

Conclusion

There is good evidence that occupational therapists delivering patient education programmes on self-management strategies can offer improvements in pain and functional levels for people with rheumatoid arthritis. However, improvements do not necessarily lead to sustained behavioural changes, nor translate to long-term improvements (>24 months). There exists little evidence to support occupational therapy in managing fatigue for people with rheumatoid arthritis.

Qualitative insights regarding occupational therapy for the self-management of rheumatoid arthritis were limited to home occupational therapy and arthritis gloves for hand pain and function. The duration/stage of rheumatoid arthritis is a major influential factor, of which occupational therapists and rheumatology specialists must be aware of in care provision. Tailoring self-management interventions to meet people's conditional needs (i.e. early or established) is crucial to support the effectiveness and satisfaction in rheumatology programmes.

Publications

- Gavin JP, Rossiter L, Fenerty V, Leese J, Hammond A, Davidson E, Backman CL (2022) The role of occupational therapy for the self-management of rheumatoid arthritis: A protocol for a mixed methods systematic review. *Musculoskeletal Care*. <https://doi.org/10.1002/msc.1665>.
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