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## Juvenile Idiopathic Arthritis: A Systematic Review of Occupational Therapy Interventions

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## **Abstract**

**Background**: The purpose of this systematic review is to describe the current role of occupational therapy (OT) in the treatment of Juvenile Idiopathic Arthritis (JIA). JIA is an umbrella term that encompasses six subtypes of the disease. JIA is one of the most common childhood chronic diseases and can be accompanied by symptoms such as pain, stiffness, and loss of function, as well as psychosocial impacts. JIA participants generally receive pharmacological treatment, but less commonly receive therapeutic interventions to help reduce symptoms. Individualized treatment plans are necessary for clients with JIA due to the diverse nature of the disease. Occupational therapists are uniquely suited to deliver interventions due to the holistic nature of the profession.

**Methods:** The OTPF-3 helped guide the systematic review as it is the definitive document that identifies the scope of occupational therapy practice. This study followed the PRISMA guidelines and searched the PubMed and CINAHL databases. Fifteen studies were identified by three researchers, based on identified inclusion and exclusion criteria.

**Results:** After analyzing the data, six main themes were identified as the most common interventions. These themes are: aquatic/pool therapy, active range of motion, passive range of motion/stretching, orthotics/splints/casting, aerobic exercise, and modalities. Of the fifteen studies, four studies reported statistically significant findings and one study reported a clinically significant finding.

Conclusions: Due to most studies having multiple interventions, it was difficult to determine which individual interventions were effective in improving outcomes. Aerobic exercise and aquatic therapy showed clinically significant changes. Modalities are also effective in helping to reduce pain and increase range of motion. Although occupational therapists did not deliver all the interventions in these studies, the profession has used most of them in practice and would be able to apply them to JIA clients. This systematic review identified interventions within the scope of occupational therapy practice that have the potential to be effective in treatment for individuals with JIA.

#### Keywords:

Systematic Review; Arthritis; Juvenile Idiopathic Arthritis; Juvenile Rheumatoid Arthritis; Children; Youth; Pediatrics; Occupational Therapy; Occupational Performance; Occupational Therapy Practice Framework: Domain & Process, 3rd edition