

**Hand exercise for women with Rheumatoid Arthritis and decreased ADL ability: an exploratory randomized controlled trial**

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**Introduction:** Clients with hand-related RA experience ADL problems. Compensatory strategies to improve ADL ability have shown effect. Similarly, hand-exercise programmes show effect on pain and grip strength. A combination has shown positive effects on hand function. Evidence to support these approaches are based on self-report, but self-report and observation provide distinct but complementary information.

**Objectives:** To examine whether hand-exercise as add on to compensatory intervention (CIP) will improve observed ADL ability in clients with RA.

**Methods:** Women (n=55) with hand-related RA were randomized to CIP<sub>EXERCISE</sub> (intervention; IG) or CIP only (control; CG). CIP focused on joint protection, assistive devices and alternative methods of doing, whereas the hand-exercise program addressed range of motion and strength, supervised by a physiotherapist.

Primary outcome was change in observed ADL motor ability as measured by the AMPS. Baseline measures were repeated after eight weeks and responder analysis was performed.

**Results:** Improvements in ADL motor ability in the IG (ADL motor mean change = 0.24 logits; 95% CI = 0.09-0.39) and CG (ADL motor mean change = 0.20 logits; 95% CI = 0.054-0.35) were statistically significant, with no differences between groups (ADL motor mean difference = 0.04 logits; 95% CI = -0.17-0.25). Sixty three percent in the IG and 40% in the CG obtained clinically relevant improvements ( $\geq 0.30$ ) in ADL motor ability, however, difference was not significant ( $z = 1.61$ ;  $p = 0.10$ ).

**Conclusion:** Both CIP and CIP<sub>EXERCISE</sub> improved ADL motor ability significantly with a tendency towards a higher number of responders in the IG.