

**Individual goal setting: a task-oriented client-centred training program to improve arm hand skilled performance in cervical spinal cord injured persons.**

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**Introduction:** Arm and hand play a major role in the rehabilitation of persons with cervical spinal cord injury (C-SCI). In general, these patients receive an extensive package of therapy including, among others, arm hand skilled performance (AHSP). The latter is mostly directed towards general goals rather than patient-specific goals. However, recent developments emphasises the importance of individual goal setting.

**Objective:** to evaluate a task-oriented client-centred modular training program aimed at improving individual goals concerning AHSP in C-SCI.

**Methods:** In this longitudinal clinical intervention study, persons with a C-SCI either during or after rehabilitation participate. The Canadian Occupational Performance Measure (COPM) was used to identify 3 individually chosen problems related to AHSP. The Goal Attainment Scale (GAS) was used to define the individual goals. A training program was tailored around the patients' personal needs, based on an individual task analyses taking into account the possibilities and constraints of the person, the task and the environment. The training program combined principles of motor learning with principles of training physiology. The 3 individual chosen tasks were trained 3 days/week, in 3 sessions of 30 minutes/day for 8 weeks. Before training (TR1) directly after training (TR2) and at follow-up (3 months post-training) (TR3) measures of the GAS and the COPM (Satisfaction and Performance) were used to evaluate outcome.

**Results:** Preliminary results of 10 persons show a clear improvement ( $p < 0.025$ ) in the individual tasks between TR1 and TR2 and between TR1 and TR3 as measured by the COPM Satisfaction (median 3.3(TR1), 7.7(TR2), 8.4(TR3)) and Performance (median 3.1(TR1), 7.8(TR2), 7.8(TR3)) and the GAS (median -2(TR1), 1.7(TR2), 1.7(TR3)). Also, general skills as measured by the Van Lieshout Test (VLT) and the FIM show a tendency to improve.

**Conclusion:** Initial results indicate that individual goal setting in a task-oriented training program does lead to substantial improvement in AHSP in C-SCI persons.

**Contribution to the practice/evidence base occupational therapy:** The present study demonstrates the advantages of individual goal setting to improve rehabilitation outcome, but emphasises even more the value of objectifying individual goals by using the GAS and the COPM to enlarge evidence based practice.