

## Patient reported symptoms associated with activities of daily living in upper limb impairment for people with multiple sclerosis

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Multiple Sclerosis (MS) upper limb sensorimotor impairment is experienced by 66% of people with MS.(1,2) Upper limb impairment has a large impact on the ability to perform activities of daily living such as eating and dressing. Interventions for impairment in the upper limb are lacking in the literature. The current pilot study sought to gain a greater understanding of the symptoms that people with MS experience as having the most impact on activities of daily living.

**Methodology:** A convenience sample of 21 people with MS (EDSS level 4.5-8) completed the activities of daily life self-questionnaire (ADL-SQ) and then identified which MS related symptoms caused them difficulty in completing the items on the ADL-SQ. Symptoms included pain, dexterity, stiffness/spasticity, tremor, weakness, muscle fatigue and abnormal sensations. Participants were also questioned on the frequency and intensity of these symptoms. They were further questioned on specific tasks they would like to achieve or maintain with treatment. Participants completed the questionnaire independently or with support due to MS related symptoms.

**Results:** Dexterity (95%) was the most frequently self-reported associated problem with activities of daily living followed by weakness (86%). Nearly half of participants experienced problems with dexterity and weakness all the time (48%), closely followed by experiencing abnormal sensations all the time. The most frequently identified goal involved maintaining or developing better dexterity (42%).

**Conclusions:** The preliminary findings from this small pilot questionnaire suggests the two most common MS related symptoms to be dexterity and weakness. Further development of the questionnaire may be useful in targeting future interventions for the upper limb in people with MS. The questionnaire could also potentially be developed as a clinical tool alongside other assessments to identify which symptoms to target, changes as a result of intervention and clinically meaningful changes.

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