**Understanding the Relationship between Engagement in Upper Limb Activity and Expectation of Motor Recovery.**

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Over 75% of people post stroke are left with some degree of upper limb (UL) impairment. Regular UL activity can help to promote neuroplasticity and motor recovery. Clinical guidelines suggest that people with stroke should receive a minimum of 45 minutes of rehabilitation, 5 days a week, although the dose and intensity of activity are person-dependent. However, there is a lack of engagement with UL activity, despite expectation for improved function.

**Research objective:** To shed light on this disconnect, the current research investigates the relationship between UL activity engagement and expectations for UL motor recovery in stroke.

**Data collection:** Ten chronic stroke participants and four carers were recruited for a series of individual interviews to explore perceptions of UL stroke rehabilitation. Semi-structured interviews were conducted at the University of Southampton by an experienced researcher.

**Data analysis:** Data were analysed from two sets of interviews using mixed methods. Data from interview 1 showed that people with chronic stroke want to regain more function in their UL, and this motivates them to undertake UL activities. Participants were confident that they could undertake their own UL physical activity plan every day (M= 8.18/10) and persevere to make progress from their stroke (M= 8.45/10). However, despite this, only 2/10 participants engaged in more than 4 hours a week of UL activity. Thus, people with stroke are not engaging in enough UL physical activity. Thematic analysis revealed that reasons cited for not undertaking UL activity were physical (e.g. lack of UL function, spasticity, difficulty fitting external devices); and psychosocial (e.g. mood, motivation, frustration). Interview 2 (underway) will present data exploring their understanding of motor learning and the role of UL activity.

**Quality and validity of data and analysis:** Themes were generated through discussion by two researchers and reached saturation.

**Theoretical and empirical context**: The current findings are consistent with previous research into facilitators and barriers of stroke rehabilitation.

**Conclusion:** This research will provide further understanding into factors affecting engagement in UL activity following stroke, and may provide insight into how engagement in UL activity can be increased.