

Understanding the prescribing and uptake of self-directed arm and hand exercise after stroke: a realist investigation.

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Background: Current stroke rehabilitation in the UK often falls short of the recommended intensity for arm and hand therapy in in-patient settings (Clark et al. 2023; Newton et al. 2023) . Enhancing exercise prescription and uptake outside of face-to-face therapy may help bridge this gap and improve recovery outcomes (Intercollegiate Stroke Working Party 2023).

Aims: This study aimed to develop a programme theory to understand the processes behind prescribing and performing self-directed arm and hand exercises. This theory then served as the foundation for evidence-based interventions.

Methods: A realist approach was used to tackle this complex issue (Pawson and Tilley 1997). First, a realist review was conducted to develop an initial programme theory, outlining the key contexts for successful self-directed rehabilitation. This theory was refined through qualitative data gathered from therapist and stroke survivor interviews and observations. Finally, a co-production workshop with stakeholders was held to create resources supporting better prescription and uptake of self-directed exercises.

Results: The programme theory highlighted the importance of tailored exercise provision and motivational support in fostering engagement with self-directed exercises. Busy therapists, often working within time constraints, were more likely to prescribe exercises to survivors who displayed clear signs of readiness. It is theorized that in this context, therapists develop a sense of accountability and expectation of positive outcomes, which influences their decision-making on who receives prescribed exercises. To address this, a conversation guide was co-created to facilitate collaborative, individualized rehabilitation planning, ensuring that all survivors, regardless of how they demonstrate readiness, can identify their needs for successful exercise engagement. Additionally, a quality improvement framework was developed to help therapists assess and enhance their exercise prescription practices.

Conclusion: This study offers a deeper understanding of the factors influencing the successful prescription and uptake of self-directed exercises, paving the way for interventions that support stroke survivors in managing their rehabilitation effectively

References:

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