British Geriatrics Society conference, Birmingham, 22nd-24th November 2023

POSTER 1897:

Perception of older adults with stroke and rehabilitation therapists on barriers and facilitators of home-based resistance exercises for upper limbs

Khalid Ali 1, Mohsen Shafizadeh2, Nasrin Nasr2, Tom Balchin3, John Hart2, John Kelley2

1- BSMS, 2- Sheffield-Hallam University, 3-ARNI Institute

Introduction: Optimal upper limb recoveries after stroke depend significantly on participating in individualised task-specific exercise programmes. However, older adults with stroke often find it challenging to maintain an ideal level of physical activity due to personal and environmental factors. The aim of this study was to explore the perceptions of patients and stroke therapists on home-based resistance exercises for upper limbs.

Methods: A qualitative study of semi-structured virtual and in-person interviews was conducted between January and March 2023 in England. Participants were 11 older adults (>65 years) with chronic stroke (>1 year after a stroke and moderate to severe disabilities) and rehabilitation therapists (n=20). The group at ARNI Institute were asked about perceived personal and environmental barriers and facilitators as well as expectations around resistance exercises in relation to their neuro-rehabilitation programmes. Interview sessions were audio recorded for transcription and thematic data analysis. The study was approved by the ethics committee at Sheffield Hallam University.

Results: Both groups mentioned that the main barrier to doing upper limb exercise is weakness in the paretic arm, because primary manual functions such as reaching for, grasping and releasing items are so affected. Inability was highlighted to impact strongly on motivation and adherence to exercise at home. Patients also reported safety concerns and being dependent on a carer to undertake regular exercise. Stroke survivors preferred programmes that activate the paretic arm and is relevant to their daily activities. They asked for simple exercise instructions and demonstrations through visual aids and video materials. Patients added that they need regular feedback for adjusting exercise doses, monitoring progress over time and ongoing encouragement.

Conclusions: Our study showed that designing upper limb home-based resistance exercises for older stroke survivors should be individualised, functionally orientated and motivational.