

Co-designing a home-based mental practice protocol for chronic stroke neurorehabilitation



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Background

- Stroke rehabilitation is a time consuming and lifelong process.
- Carers are burdened by care-giving responsibilities.
- The activation of motor and motor-related cortical areas in the brain during action observation (AO) + motor Imagery (MI) is greater than AO or MI.
- Combined AO+MI is potentially an effective method to increase the amount of therapy during rehabilitation in a safe way with relatively low costs.

Specific S

Aim

- To explore co-design AO+MI training materials that are wellsuited to carer and stroke survivor characteristics using appropriate language and terminology.
- Determine best modes of delivery for the training (online and in person).

Method

Participants:

- 10 stroke survivors with no expressive aphasia, significant cognitive impairment.
- 13 carers who care for a stroke survivor.

Data collection:

- 18 Semi-structured interviews (11 with carers, 7 with stroke survivors).
- 2 mini–focus groups (one with 2 carers and 1 stroke survivor, another one with 1 carer and 1 stroke survivor).



Audio-recorded & transcribed.
 Analysis: Thematic analysis

Results: Themes with illustrative quotes from transcripts



'It would be good in a group situation because everybody would set there, have same problems. So, they could say

Conclusion

Both stroke survivors and carers found AO easy to understand and engage.

more time practicing (stroke PA).

- The concept of MI was overly complicated and difficult to understand. However, most participants can understand what MI is when taught correctly. Therefore, it is important to ensure that the concept of MI is correctly taught and understood by the participants.
- Most of our target users have limited digital skills as they are mostly from the elderly population. Thus, it is necessary to develop a webapp that
 is easy to use and operate for our target users.
- All participants expressed that the prototype interface is text heavy and complicated, and they preferred a graphical user interface.
- Although online delivery is suitable, adding face-to-face delivery will enhance motivation of the participants.

References

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