

Therapists' perceptions of implementing constraint induced movement therapy: the enablers and barriers

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Background

Constraint induced movement therapy (CIMT) aims to increase function in the arm and hand following stroke and has been described as a collection of techniques that include two fundamental elements: 1. constraint or reduction of use of the ipsilesional (less affected) arm and hand; 2. intense re-training of the contralesional (more affected) arm and hand¹. Whilst evidence suggests that constraint induced movement therapy (CIMT) is effective in reducing disability¹, therapists are not implementing evidence-based CIMT protocols². The reasons for this are unclear.

Research Questions

Which evidence-based CIMT protocols do therapists perceive could be provided within a UK stroke service?
What are therapists' perceived enablers and barriers to implementing the identified CIMT protocols?

Method

Recruitment
With ethical approval, all occupational therapists and physiotherapists experienced in stroke rehabilitation from a North West England Hospital Trust were invited to participate.

Data Collection
Each participant:
-Completed a **questionnaire** recording professional background, grade and length of time working with stroke survivors.
-Participated in an audio-recorded **focus group**, underpinned by a social constructionist approach.
During the focus group:
• Evidence-based CIMT protocols for sub-acute stroke were presented
• Participants considered the needs of stroke survivors, themselves and their employing organisation in relation to implementing CIMT

Data Analyses
Recorded qualitative data was transcribed verbatim and analysed by two independent researchers using an inductive thematic analysis. Emergent themes were discussed and differences agreed through consensus. Themes were organised to answer the research questions. Reflexive documentation recorded decisions and provided an audit trail.

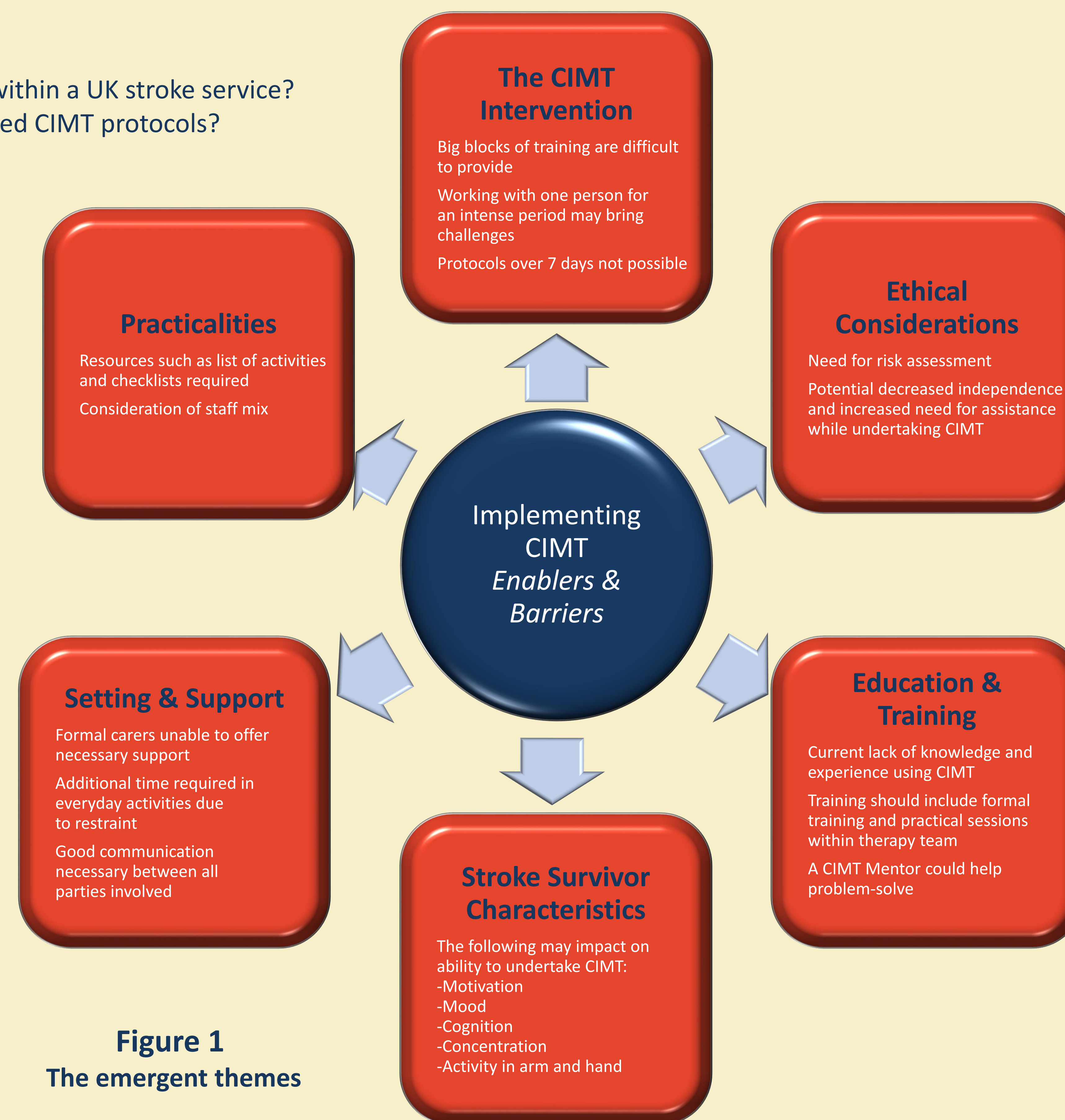


Figure 1
The emergent themes

The 6 hours would go over a whole morning and into an afternoon...[this protocol] looks the most difficult to incorporate

The 5 hours restraint might be something the patient can do themselves with supervision at home

Findings

Protocols with shorter intensity of daily training time and shorter constraint times were perceived as more feasible; overall length (duration) of the protocol was considered less important.
Analyses of the data led to the emergence of 6 themes. These are presented in Figure 1 with the key enablers and barriers.

Conclusions

Therapists made decisions about feasibility of CIMT based on their current service constraints. Evidence-based protocols that required changes to service structure or additional funding were not seen as feasible for stroke service users. If CIMT is to be implemented successfully, enablers and barriers identified in this study should be addressed.

References

1. Sirtori, V., et al. *Constraint-induced Movement Therapy for upper extremities in stroke patients*. Cochrane Database of Systematic Reviews, 2009. DOI:10.1002/14651858.CD004433.pub2.
2. Jarvis, K., et al. *Occupational Therapy stroke Arm and Hand Record (OT-STAR): Development of an upper limb treatment schedule for occupational therapists working with stroke survivors*, 2012; in preparation.

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