CONSTRAINT- INDUCED LANGUAGE THERAPY IN SUB-ACUTE NEUROREHABILITATION: Meeting the Challenges

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Background

Previous research indicates that Constraint-induced language therapy (CILT) can lead to substantial and lasting improvements in language functions in chronic aphasia. The applicability of CILT is challenged by the conditions of rehabilitation in a sub-acute, inpatient, multidisciplinary setting.

CILT

An intensive, short-term speech and language therapy founded on the principles of massed practise, avoidance of learned non-use, behavioural relevance, and shaping.

- Three hours a day over 10 weekdays
- Group treatment with 2–4 participants and 1-2 speech and language therapists (SLTs)
- Communication game ("Go fish") prompting verbal acts of ecological validity

Aim

The aim of the current study was to describe experiences with the applicability of CILT in sub-acute, inpatient, multidisciplinary neurorehabilitation.

Method

In 2013, sixteen stroke patients with sub-acute aphasia accepted to participate in CILT full-time. Experiences with the applicability were continually gathered by the SLTs conducting CILT. The groups were composed of 2-4 full-time participants. In several groups other patients participated part-time.

Results

Completion

Twelve participants completed CILT without any modifications. One patient (case A) was eliminated. Three patients (cases B-D) had their amount of CILT-hours reduced.

Fatigue

Fatigue is often a key player in stroke and may prevent participation in CILT. In most cases assessment of stamina was possible before starting out. But in one case (case A) the patient had to be excluded and in other cases (B –D) the amount of daily hours had to be reduced during the cause.

Prioritisation

CILT, being a highly intensive method, requires prioritisation of rehabilitation needs. Prioritising intensive language therapy in a sub-acute setting necessitates the support of the entire multidisciplinary team. Especially in the case of patients with severe hemiplegia it is essential to make a joint prioritisation with regard to the resources, needs, and desires of the patients. In case B adjusting the amount of CILT hours was necessary to keep this patient in CILT.

Medication

Treatment with drugs is a major factor in hospital-based neurorehabilitation. In some cases side effects of a drug may reduce the functional level of the patient. In other cases drugs improve the qualifications of the patient for participating in CILT, e.g. in the case of a central stimulating drug.

Logistic

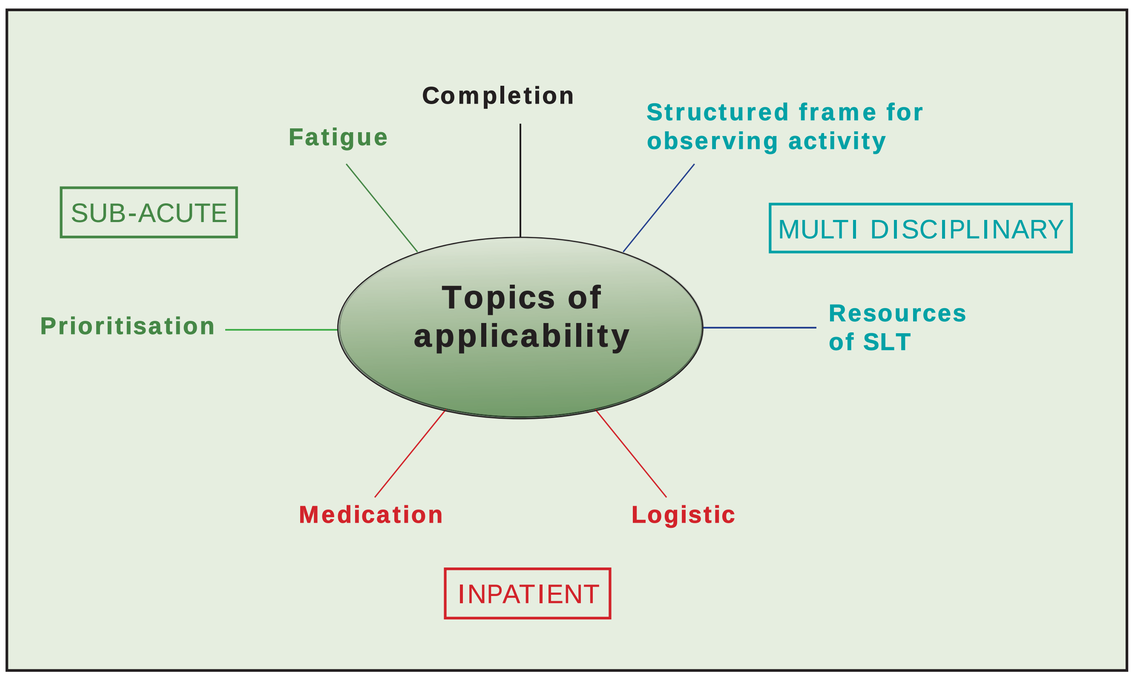
Inpatient, sub-acute group training can be a challenge solely because of the short-term hospitalization. Moreover CILT requires that 2-3 patients simultaneously can meet the criteria for inclusion. This calls for massive cross-section coordination by the responsible SLT.

Resources of speech and language therapists

The intensity of CILT places demands on the resources of the SLT. CILT is at the same time a time-saving and time-consuming method, and there is a need of possibility to coordinate and throttle down other work tasks.

Structured frame for observing activity

The frame of CILT is very structured. In some cases this condition can reveal some resources; e.g. the patient's ability to communicate in a structured context. In many cases other cognitive deficits become more apparent in this structured activity. Members of the multidisciplinary team and the significant others of the patient have been invited to observe CILT. It has been evident that the frame of CILT is very suitable as a frame of demonstrating strategies of communication.



Conclusion

Despite the challenges of applying CILT it is a rewarding method allowing evidence based language therapy in sub-acute, inpatient multidisciplinary neurorehabilitation.

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