A treatment schedule of interventions used in current occupational therapy to treat upper limb after stroke: a consensus development study

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Background

Therapists employ a number of complex interventions and techniques to retrain upper limb (UL) function following stroke. One of the key criticisms of the current evidence-base is the lack of clarity in describing both the interventions under investigation and the comparison intervention[1].

A therapy **treatment schedule** is a document that enables a therapist to record the details of the interventions undertaken in a given therapy session.

A physiotherapy schedule for UL interventions has been produced[2], but is not transferable to occupational therapy practice.

Aim

To develop and pilot a comprehensive occupational therapy treatment schedule of UL interventions for stroke so that these interventions may be recorded more systematically in clinical practice and future research.

Method

A three-phased qualitative consensus development methodology utilised a modified nominal group technique[2,3,4].

Therapy Managers of 6 Trusts in the North West of England approached all occupational therapists (OTs) who were Health Professions Council registered, Band 6 or above and had worked in stroke rehabilitation for at least 1 year. Purposive sampling was used to ensure a range of experience across the participants.

Phase 1
Semi-structured interviews with 8 OTs

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Thematic content analysis and generation of themes

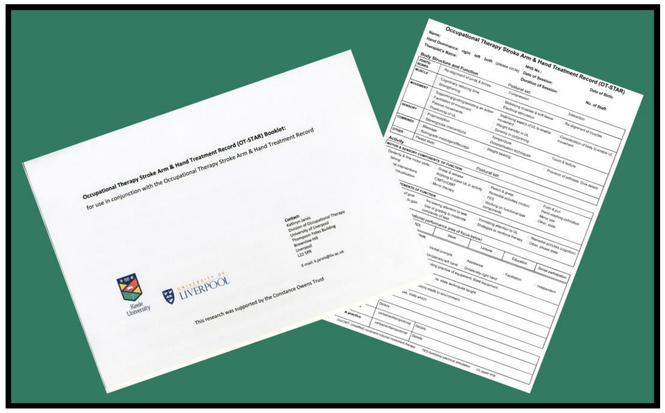
Phase 2 ↓

Group meeting with 4 OTs to develop draft treatment schedule and guidance booklet

Phase 3 ↓

Pilot of the draft treatment schedule by 8 participants in clinical practice

Results



A total of 8 interviews were completed between 18th October 2010 and 31st January 2011. The participants had between 2 and 25 years experience in stroke rehabilitation and comprised:

4 OTs at Band 6
3 OTs at Band 7
1 OT at Band 8

Open coding resulted in **80** initial UL intervention codes. Further analysis led to **6** themes:

1. Interventions that addressed **preparation for activity**
2. Interventions that addressed **components of function**
3. Interventions that address **function**
4. **Advice** and **Education**
5. **Practice** outside formal therapy sessions
6. **Psychosocial interventions**

The International Classification of Function, Disability and Health (ICF)[5] provided a structure for the treatment schedule.

The treatment schedule, named the Occupational Therapy Stroke Arm and Hand Treatment Record (OT-STAR), was piloted by 8 OTs over a total of 28 treatment sessions. It was found to be:

- quick to complete
- methodical and comprehensive
- helpful in goal setting

I think a Band 5 with no experience could even follow it.

I think it's what makes us…what makes neuro OTs quite different from a lot of OTs. And I have always found it quite difficult to explain…what we do to achieve function. And I read this and I thought wow, you know, it really, really easily describes exactly what we do….this is what we do to achieve function, isn't it?

Discussion

During the interviews and group meetings, the participants clearly reported that meaningful activities and occupations were the main focus of UL interventions used by OTs. The OT-STAR reflects this with a clear emphasis on function. Whilst function features on the physiotherapy treatment schedules[2,3,4], the OT-STAR differs from the physiotherapy treatment schedules with function underpinning each section of the document.

The use of the ICF[5] clarified how interventions addressing body structure and function are a foundation to everyday occupations.

Conclusion

A modified nominal group technique was used successfully to develop and pilot the OT-STAR, a comprehensive occupational therapy treatment schedule of UL interventions. It was deemed to be easy to use and of benefit in clinical practice and research. In conjunction with the physiotherapy treatment schedules the OT-STAR will document more accurately the content of 'conventional therapy' in research.

The Future

To test the generalisability of the treatment schedule for OT practice outside the North-West of England.

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