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Brain injury rehabilitation – a health technology assesment

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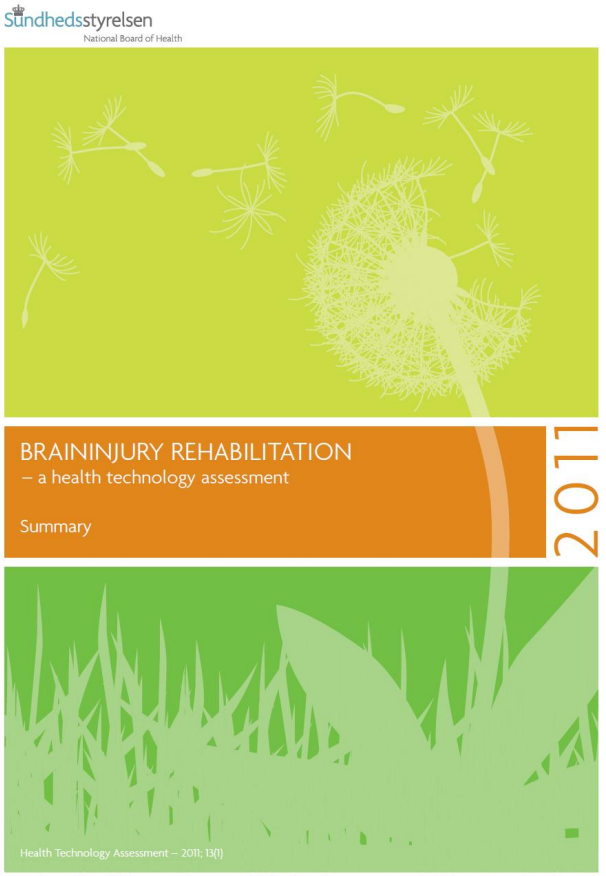
Outline

1. Objectives
2. Background
3. Five hypotheses



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Background

- The acute treatment of acquired brain injury - in focus - for many years - good results
- More people survive with, or at risk of having complex negative health effects after acquired brain injury
- Stroke and traumatic brain injury are the main reasons of acquired brain injury
  - 12.500 cases of hospitalisation from stroke in 2009
  - 9.500 cases of hospitalization from traumatic brain injury and other forms
  - 4.500 – 8.500 of these needs brain injury rehabilitation
- People with acquired brain injury are a heterogeneous group, with diverse problems and rehabilitation needs
- Brain injury rehabilitation includes programmes with numerous services targeting the disease and injury, as well as the person's life situation

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Objective

- To provide:
  - A systematic, critical and comprehensive health technology assessment
  - For professional advise on how brain injury rehabilitation in Denmark can be organised across municipalities, administrative regions and the state and across professions (multidisciplinary)
  - Such that the rehabilitation services are targeted appropriately, of uniform high quality and coherent for the people involved

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Methods

- Systematic literature search from 2000 – 2010
- Supplemented with register data and focus group interviews

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Background for the five hypoteses

- Heterogeneous needs vs. huge variety of interventions
- How can these two levels be combined?
- White Book on Physical and Rehabilitating Medicine in Europe 2006 – White book – Denmark 2004
- Principles of Physical and Rehabilitation Medicine:
  - WHO's Bio-Psycho-Social Model of Disability – International Classification of Functioning Disability and Health (ICF)
    - Client-centred
    - Learning strategies
    - Working with goals
    - Transfer of knowledge and skills
    - Multi-professional teamwork

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Methods

- All multidisciplinary interventions – effects (22)
- Qualitative literature review
- 30 development projects evaluated

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Five hypoteses - questions

- What knowledge and theoretical approaches underlie the five hypotheses on the factors the promote positive results in brain injury rehabilitation?

- How are these hypotheses described and put into practise in the multidisciplinary interventions?

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Results: client-centered

- Client-centred approaches have been increasingly incorporated into brain injury rehabilitation in various ways. No agreement on how to define a client-centred approach. Different meanings are attributed
- It is not clear whether client-centred approaches refer to the genuine incorporation of user perspectives (object – subject)
- A multidisciplinary intervention produced moderate evidence indicating that multidisciplinary teamwork strongly allied with the person with acquired brain injury has several positive effects
- Qualitative research shows that client-centred approaches that incorporate the perspective of people with acquired brain injury promote positive results, increase the motivation and experience of control.

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Results: goal setting

- Described relatively thoroughly
- Two reviews (multidisciplinary intervention) found strong evidence - working with goal-setting promotes the achievement of and maintenance of goals
- For people with cognitive problems – goal setting can provide structure and maintain attention (qualitative research)

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Results: strategies for learning

- A multidisciplinary intervention showed documented positive results of using specific strategies for learning

- The review underpins that it is not arbitrary what learning strategies are used

Results: strategies for transferring knowledge and skills

- The hypotheses on the extent of knowledge and skills attained by a person in one setting such as a hospital, are useful in other settings

- This assumption is to a lesser degree assessed in the multidisciplinary intervention

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Results: Importance of multidisciplinary teamwork

- Multidisciplinary interventions have been shown to produce positive effects
  - Three identified principles:
    1. Specifying the target group
    2. Individualised
    3. In some interventions, the intervention comprises special ideas of theories, such as in holistic neuropsychological interventions

- Multidisciplinary teamwork is generally assumed to be a prerequisite for achieving positive results, but the content and nature of the teamwork are seldom defined and evaluated

  types of collaboration : working together closely or parallel

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Conclusions on the five hypotheses

- Best evidence is available for working with goal-setting, strategies for learning and client-centred approaches
- Less evidence for transferring knowledge and skills and the importance of multidisciplinary composition of rehabilitation services and teamwork
- For all these areas, guidance on how to work specifically with each area when it is implemented in practice needs to be explicitly outlined
- Challenge for brain injury rehabilitation: To collaborate between: Rehabilitations services – people with brain injury (needs) and Multidisciplinary teams

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Project group

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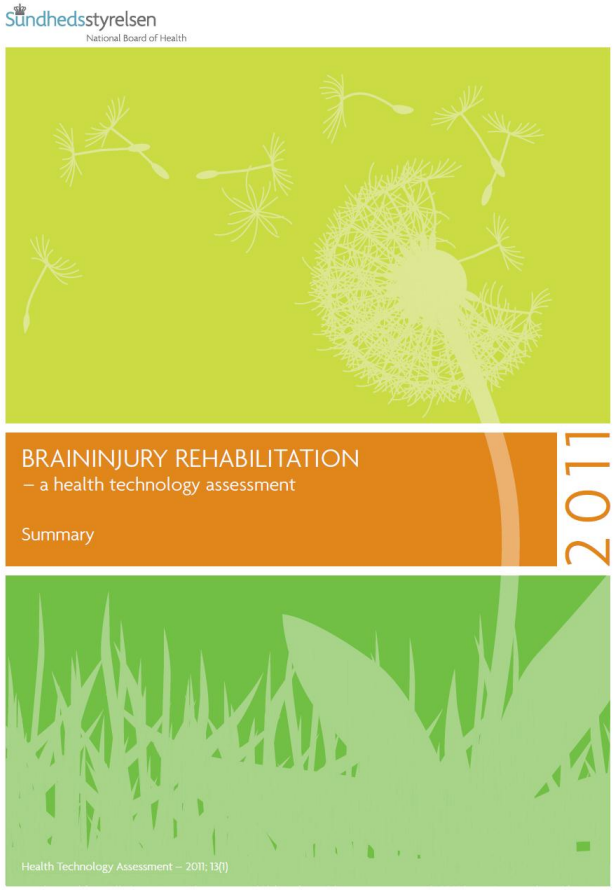
- Lisa von Huth Smith
- Britta Bjerrum Mortensen

- Part of a larger project group



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Comments

- Download the report:
- www.dacehta.dk

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