RehabiliteringsCenter
for Muskelsvind

Maintaining good wheelchair posture throughout life

Information booklet for children with neuromuscular diseases in wheelchairs and their parents

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SEVEN PRINCIPLES OF GOOD SITTING POSTURE

1

Sitting symmetrically when seen from the front

2

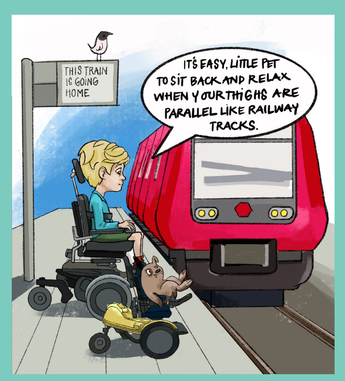
Sitting straight when seen from the side

3

Use of positioning supports

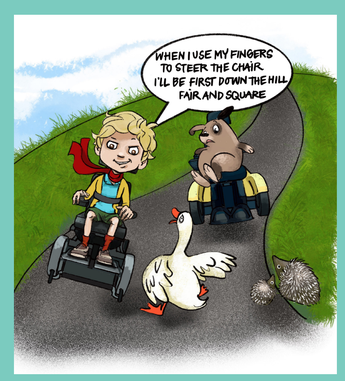
4

Use of belts



5

Placement of arms and legs



6

Placement of joystick

7

Adaptation of surroundings

Aim

To develop a booklet that introduces the most important principles of good sitting posture in a format that is easily accessible for children and adults, has catchy illustrations and rhymes for the children supplemented by background information for the adults.

The booklet can be used to engage children in motivational conversation during visits to the rehabilitation center's sitting clinic that offers guidance on sitting posture.

Background

Adult wheelchair users with neuromuscular diseases often develop postural asymmetries during their childhood that have a negative impact on their level of functionality as adults.

We wanted to prevent children in wheelchairs from having similar problems when they grow up.

Experiences from the clinical work with wheelchair adaptations is that:

- Sitting postures developed during childhood are difficult to change in adulthood.
- Preventive measures early on are key to maintaining the child's activity and participation throughout life
- Promoting good sitting posture and making children and adults understand its importance can be difficult, especially when inadequate habits have already been formed.

In 2019, the National Rehabilitation Center for Neuromuscular Diseases established a sitting clinic for children in wheelchairs aged 2-10 years.

MAINTAINING GOOD POSTURE – THROUGHOUT LIFE

Seven principles for good sitting postures for children with neuromuscular diseases and their parents

Based on clinical experience from The Danish National Rehabilitation Center for Neuromuscular Diseases

Conclusion

- The booklet teaches the most important principles of good sitting posture to children and adults in an easily comprehensible way.
- When handed out to families, the booklet helps them remember and maintain the principles in everyday life, and makes it easy for them to share their knowledge with other caregivers.
- The booklet is an important tool in our continuous work to ensure functional sitting postures in children and adults with neuromuscular diseases throughout life.

Approach

A group of experienced clinicians (3 OTs and 2 PTs) from the National Rehabilitation Center for Neuromuscular Diseases defined seven basic principles for good sitting posture (above).

An illustrator created a boy and his pet who are both wheelchair users. The boy sits correctly and the pet demonstrates bad sitting habits.

The illustrations depict a children's universe with common child activities, bright colours, humour and realistic dimensions of wheelchair and bodily positions.

The illustrations are supported by rhymes that communicate the essence of the 7 key principles. The opposite pages have explanatory text for the parents.

A panel consisting of parents of five children with neuromuscular diseases helped assess the readability of the booklet.

Results / practice implications

- Children visiting the clinic can relate to the cartoon boy in the wheelchair.
- Parents find the booklet's information about preventive measures and its message about good sitting posture important and easy to understand.
- The booklet makes it easy to convey the message about good sitting posture to children and parents in an educational manner.
- All families receive standardised information and guidance based on the the seven principles.

The applicability of the booklet will form part of the evaluation of the sitting clinic after three years.

RehabiliteringsCenter
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The National Rehabilitation Center for Neuromuscular Diseases (RCFM)

- is a national, highly specialized private outpatient hospital for people with neuromuscular diseases in Denmark
- has approximately 3500 patients with over 40 different neuromuscular diagnoses