Let’s Ride: Improving physical activity in wheelchair using children and adolescents: wheelchair mobility skills training, wheelchair fitness training or a combination?

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON29564

Source
NTR

Brief title
Let’s Ride

Health condition

Wheelchair using children or adolescents, wheelchair mobility skills, wheelchair fitness, physical activity

Sponsors and support

Primary sponsor: HU University of Applied Sciences, Rehabilitation Center De Hoogstraat and KJ Projects, all members of Fit for the Future! consortium

Source(s) of monetary or material Support: SIA RAAK PRO 4-03 “Fit for the Future!”

Intervention

Outcome measures

Primary outcome

At the level of participation according to the ICF:

- Activ8 to assess daily physical activity (% daily active behaviour and % sedentary behavior)

Secondary outcome

At the level of body structures according to the ICF:

- Shuttle Ride Test to assess aerobic capacity (VO2peak in ml/kg/min and number of shuttles)

- Muscle Power Sprint Test to assess anaerobe capacity (Watt/kg)

- Functional muscle strength upper extremities (number of repetitions)

At the level of activities according to the ICF:

- Utrecht Pediatric Wheelchair Mobility Skills Test (UP-WMST)
At the level of personal factors according to the ICF:

- Wheelcon-Dutch version-modified for children to assess self-efficacy

- Self-perception profile for children (SPPC)

- Exercise self-efficacy Scale

Study description

Background summary

Manual wheelchair using children with a physical disability are less active compared to their non-disabled peers. A large proportion of these children use a manual wheelchair for their daily activities. In a recent study looking into factors associated with physical activity in children and adolescents with Spina Bifida, several factors were identified as barriers or facilitators towards physical activity when using a manual wheelchair. For example, a higher level of wheelchair mobility skills or wheelchair fitness could have a positive influence on physical activity. Outcome measures for manual wheelchair using children and adolescents have recently been developed to be able to assess wheelchair mobility skills, wheelchair

fitness and physical activity. It remains unclear if a wheelchair mobility skills or wheelchair fitness training program in children or adolescents can increase their levels of physical activity. Therefor the objective of this study was to assess whether wheelchair mobility skills training, wheelchair fitness training or a combination of both training programs has an effect on physical activity in wheelchair using children and adolescents.

Study objective

Wheelchair mobility skills training and wheelchair fitness training will both increase the level of physical activity in wheelchair using children and adolescents.

Wheelchair fitness training prior to wheelchair mobility skills training will show a higher increase in physical activity in wheelchair using children and adolescents compared to wheelchair mobility skills training before wheelchair fitness training.

Study design

Baseline, post training program 1, post training program 2, follow-up

Intervention

An eight week wheelchair mobility skills training program using the training protocol of ‘Fit For the Future’ and KJ-Projects: ‘veilig en vertrouwd met een rolstoel’ followed by an eight week wheelchair fitness training program using a High intensity Interval Training protocol of ‘Fit For the Future’. After the training program is completed there will be an usual care follow-up period of 16 weeks.

An eight week wheelchair fitness training program using a High intensity Interval Training protocol of ‘Fit For the Future’ followed by an eight week wheelchair mobility skills training program using the training protocol of ‘Fit For the Future’ and KJ-Projects: ‘veilig en vertrouwd met een rolstoel’. After the training program is completed there will be an usual care follow-up period of 16 weeks.

The control group will receive no treatment other than usual care for 16 weeks and will consecutively be allocated to one of the two training programs.

Contacts

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Eligibility criteria

Inclusion criteria

- Children or adolescents with a physical disability between the age of 6 and 18 years

- Children or adolescents use their manual wheelchair on a daily basis

- Children or adolescents have to understand the Dutch language

- Children or adolescents have to understand simple instructions

- Informed consent of parents and of the children above 12 years old

Exclusion criteria

- Children and adolescents using a fully powered wheelchair

- During the study (including follow-up), children are not allowed to participate in other research projects which might influence the current study results

- Children and adolescents who are not able to perform physical fitness tests

Study design

Design

Study type: Interventional

Intervention model:	Crossover
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	18-06-2015
Enrollment:	50
Type:	Anticipated

Ethics review

Positive opinion

Date:	15-04-2016
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL5656
NTR-old	NTR5791
Other	Advice: non-WMO research : METC UMCU 15-136

Study results