

ABSTRACT

This bachelor thesis is focused on consequences of an inappropriate movement stereotype while driving on a mechanical wheelchair. The examined population of clients suffered from paraplegia. The analysis of propulsion mechanics is the main goal of the bachelor thesis.

The theoretical part of the thesis is focused on causes involved in the inappropriate propulsion pattern.

The main investigated causes can be consequences of spinal lesion and inappropriate choice or setting of the mechanical wheelchair components.

In case of the spinal lesion, we are focused on the height of the lesion with regard to the posture and propulsion. When speaking about the setting the wheelchair components, we are mainly interested in the appropriate components selection and components adjustment, especially the seat and backrests, which most affect the seat on the wheelchair.

Tests, that can be used to examine the presence of painful states of client, are included in the thesis. The thesis also contains the possibilities of intervention from the occupational therapist's point of view.

The theoretical knowledge of propulsion mechanics is used in the practical part, where the analysis of propulsion patterns (with use of video records) as well as the tests of painful states were performed.

The conclusion of the thesis summarizes the impact of propulsion on the presence of painful states and reeducation occupational therapist's intervention.

KEYWORDS

Consequences due to inappropriate movement stereotype, impact of spinal cord injury, inappropriate movement stereotype, intervention by an occupational therapist, mechanical wheelchair, movement on the wheelchair, painful states, propulsion, propulsion mechanics, sitting on the wheelchair, sitting posture, wheelchair components