

THREE-WEEK INPATIENT ENERGY MANAGEMENT EDUCATION FOR PERSONS WITH MULTIPLE SCLEROSIS-RELATED FATIGUE. A RESEARCH PROJECT.

Ruth Hersche¹, Andrea Weise², Marco Barbero¹, Jan Kool², Jürg Kesselring²

¹Rehabilitation Research Laboratory 2rLab, Department of Business Economics, Health and Social Care, University of Applied Sciences and Arts of Southern Switzerland, Manno, Switzerland

²Kliniken Valens, Rehabilitationszentrum Valens, Switzerland

BACKGROUND

Fatigue is considered to be one of the main causes of impaired quality of life among persons with multiple sclerosis (pwMS) independent from depression or disability¹. The current body of evidence shows moderate to strong evidence in favor of energy management education in groups and in outpatient settings over six weeks, delivered by trained OT's^{2,3}. These courses can not be implemented in Switzerland, because they do not fit the needs of pwMS and the organization of healthcare. No program is available for treating inpatients in dynamic groups over a shorter period (three weeks) with higher frequency. A group education program with a dynamic structure that allows participants to begin and end at any day of the week is needed for the Swiss inpatient rehabilitation context.

AIM

The research project is twofold: 1) to develop a three-week inpatient energy management education for pwMS (IEME) by the adaptation of an exiting outpatient education program^{2,3}, 2) to test the feasibility of an RCT protocol including the IEME.

Figure 1

Development of IEME protocol

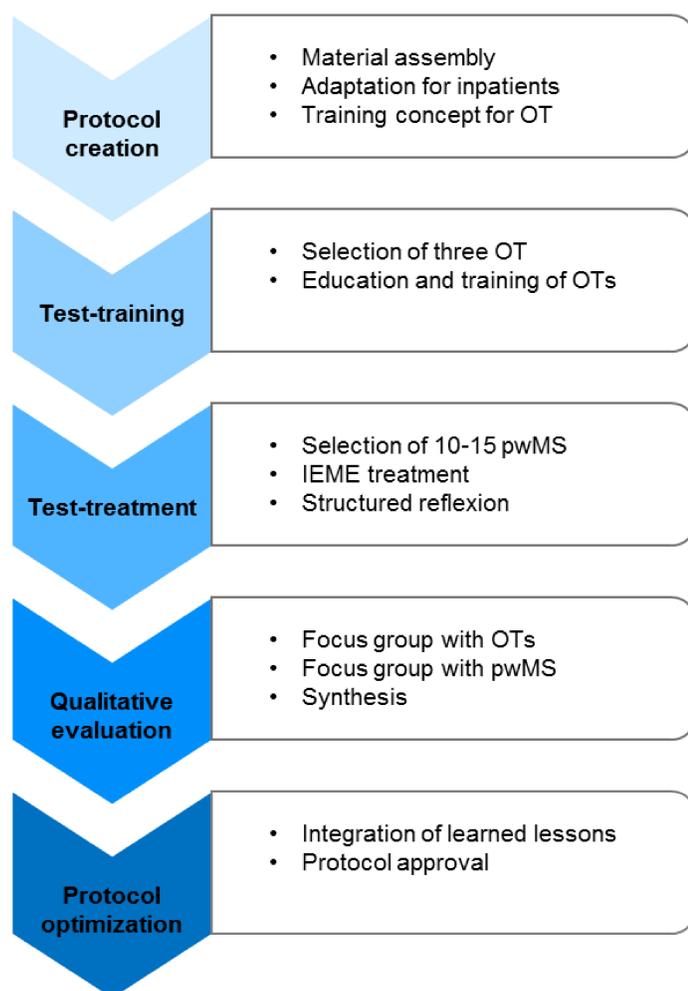
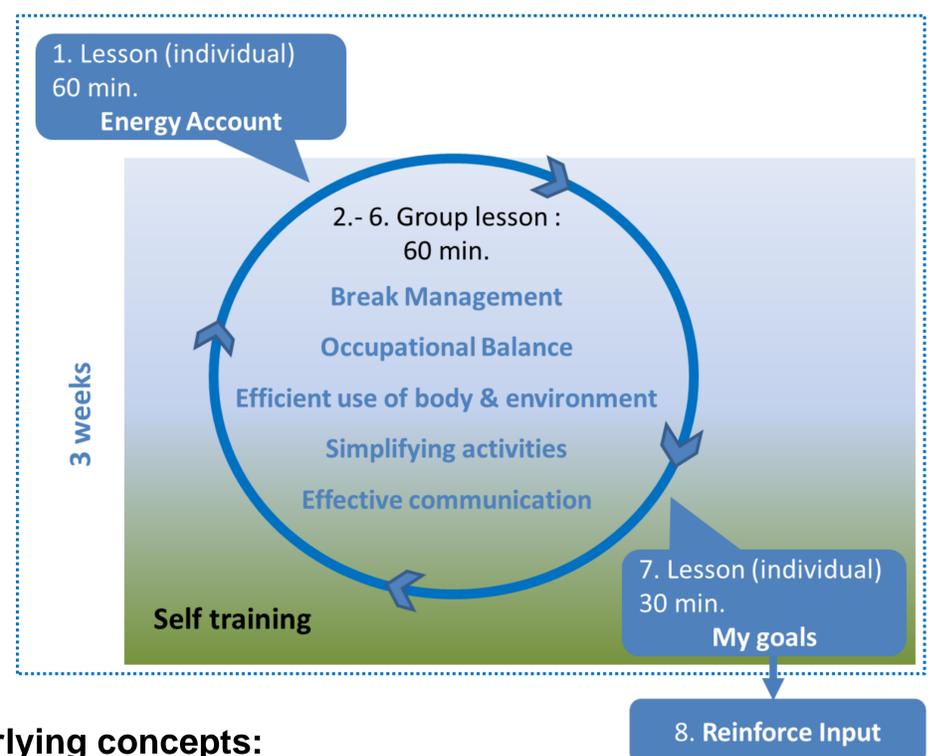


Figure 2

- Manual for occupational therapist
- Workbook for participants



Underlying concepts:

- Patient education & empowerment
- Energy conservation strategy
- Cognitive behaviour therapy
- Self-efficacy
- Stage of change

METHODS

The development of the IEME protocol will be conducted according a predefined process (Figure 1). The structure and the content of the IEME are illustrated in figure 2. Afterward, a feasibility RCT will be conducted to evaluate the process, resources, management and estimate the required sample size for a larger-scale RCT. Potential participants will be recruited at Rehabilitation Centre Valens. All participants will follow the rehabilitation program as usual and are randomly allocated to the IEME sessions or to seven progressive muscle relaxation group sessions (control intervention). The following outcomes measurement will be used: Modified fatigue impact scale, SF 36, Occupational Self Assessment, Self-efficacy Scale MS Version, Assessment of Self-Efficacy for Performing Energy Conservation. Results are expected for May 2018.

REFERENCES:

- Krupp L. Fatigue is intrinsic to multiple sclerosis (MS) and is the most commonly reported symptom of the disease. *Mult Scler.* 2006, 12(4), 367-368.
- Blikman LJ., Huisstede BM., Kooijmans H., Stam HJ., Bussmann, JB., van Meeteren J. (2013). Effectiveness of Energy Conservation Treatment in Reducing Fatigue in Multiple Sclerosis: A Systematic Review and Meta-Analysis. *Archives of Physical Medicine and Rehabilitation*, 94(7), 1360–1376.
- Asano M., Finlayson ML. Meta-analysis of three different types of fatigue management interventions for people with multiple sclerosis: exercise, education, and medication. *Mult Scler Int.* 2014.1-12.