

#### Ellen Christin Arntzen

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#### Title:

Innovative physiotherapy and continuity of care in people with multiple sclerosis: a randomized controlled trial and a qualitative study.

# Description of PHD-trajectory:

This PHD project is a mixed methods study examining effect (Randomized Controlled Trial) of a six weeks long GroupCoreDIST-intervention compared to standard care on trunk control, balance, walking, activity and quality of life; and exploring how individuals experience (Qualitative Research Interviews) participation in GroupCoreDIST and standard care. GroupCoreDIST is a new group-based core stability and balance intervention for individuals with MS. The training highlights underlying aspects of balance, is performed in groups of three and led by a physiotherapist. 80 individuals with multiple sclerosis participated in the Randomized Controlled Trial, 40 were randomly allocated to the GroupCoreDIST-intervention and 40 followed standard care. The GroupCoreDIST trainings were conducted in six municipalities in Norway for 60 minutes, three times per week for six weeks. Assessments measuring trunk control, balance, walking, quality of life and activity were undertaken at baseline, weeks 7, 18 and 30. The qualitative research interviews were conducted at weeks 7 and 30. A strategic sample of 13 individuals from the GroupCoreDIST group, and 13 individuals from the standard care group were interviewed twice with open ended questions guided by a semi-structured interview guide. The whole study was completed in 2016. Some of the results have been analysed, one paper is in review and one will be submitted soon.

## Future plans:

The plan is to submit the last paper within the summer of 2018 and to submit the thesis during spring 2019. The GroupCoreDIST intervention is being further developed and I would like to both do further research (Postdoc hopefully) and to contribute in implementing the intervention in to clinical practice.

#### **Publications:**

Normann, B., Zanaboni, P., Arntzen E.C, Øberg, G.K. Innovative physiotherapy and continuity of care in people with multiple sclerosis: a randomized controlled trial and a qualitative study (GroupCoreSIT). Journal of Clinical Trials. 2016; 6:282. doi: 10.4172/2167-0870.1000282.

Normann, B., Salvesen, R., Arntzen, E. C. Group-based individualized core stability and balance training in ambulant people with multiple sclerosis: a pilot feasibility test–retest study. European Journal of Physiotherapy; 2016, 18(3): 173–178

### **Collaborations:**

Britt Normann Assosiate Professor PT, PHD, The Arctic University of Norway/The University of Tromsø and Nordland Hospital Trust, Bodø. Project leader and PHD supervisor

Gunn Kristin Øberg, Assosiate Professor PT, PHD, The Arctic University of Norway/The University of Tromsø. PHD supervisor

Bjørn Straume, Assosiate Professor Dr.med., PHD The Arctic University of Norway/The University of Tromsø 🔛 PHD supervisor

Rolf Salvesen, Professor Dr.med. PHD, Department of Neurology Nordland Hospital Trust, Bodø and The Arctic University of Norway/The University of Tromsø. Project group 🔛

Paolo Zanaboni, Ph.D., Senior Scientist National sentre for e-health research. University Hospital of Northern Norway, Tromsø. Project group

Peter Feys, Professor, PT, PHD University of Hasselt, Belgium. Project group

Shaun Gallagher, Professor of philosophy and cognitive sciences, University of Memphis, USA. Project group

Tone Elvevoll and Marianne Elvik, Bodø, from The Norwegian MS Federation. Project group