

The general aim of this thesis was to expand the knowledge on treatment of fatigue in post-polio syndrome (PPS). It was demonstrated that fatigue is severe and persistent in this population due to both physical and psychologic factors. These factors can potentially be modified, which may provide an opportunity for treating fatigue.

The efficacy of exercise therapy (ET) and cognitive behavioral therapy (CBT) was evaluated in a randomized controlled trial. The trial did not demonstrate a beneficial effect of both interventions on reducing fatigue in PPS. Reasons for the lack of efficacy were explored. Based on a process evaluation it was hypothesized that muscle groups of patients with PPS have already adapted considerably in response to the relative higher load of performing daily life activities and that ET could thus not further improve muscle function and subsequent cardiorespiratory fitness and fatigue. For CBT it was concluded that the lack of efficacy in PPS cannot be attributed to unique cognitive characteristics of this population. Further studies should investigate whether a better selection of patients with a high priority for alleviating fatigue may result in a more effective application of CBT in this population.

Considering the negative results of these two substantially different interventions and the wide range of other interventions that were unsuccessful it seems that fatigue in PPS patients is quite resistant to therapy.