

Trajectories of physical activity after rehabilitation: results from the longitudinal cohort study ReSpAct

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INTRODUCTION: Why does one patient maintain a physically active lifestyle after rehabilitation and the other does not? The purposes of this study were to identify trajectories of physical activity among people with a physical disability and/or chronic disease during and after rehabilitation, and to determine which personal and health-related factors are associated with trajectory membership.

METHODS: Patients (N=1719) with different kinds of disabilities and/or chronic diseases were followed at baseline (T0) and after 14 (T1), 33 (T2) and 52 (T3) weeks after discharge from rehabilitation in the longitudinal cohort study, Rehabilitation, Sports and Active lifestyle (ReSpAct). Latent class growth mixture modelling was used to determine trajectories of physical activity based on self-reported data of total minutes activity per week. Descriptive statistics were used to determine personal and health-related factors associated with trajectory membership.

RESULTS: Six trajectories were identified, whereof four small and dynamic trajectories, and two large and stable trajectories. Further analysis was based on the two large and stable trajectories: an 'active' (N=235) and a 'semi-active' (N=959) profile. Patients in the 'active' trajectory were more physically active than patients in the 'semi-active' trajectory on each measurement occasion (2768 ± 741 versus 688 ± 561 minutes per week on T3). Patients in the 'semi-active' trajectory were more often female (56.8% versus 48.5%) and older (51.8 ± 13.6 versus 46.0 ± 12.3). In addition, patients in the 'active' trajectory perceived less barriers of being physically active (e.g. due to the disability), had a higher quality of life, less pain, less fatigue complaints and were less conscious about their energy management (pacing behaviour) during the day compared to patients in the 'semi-active' trajectory.

CONCLUSIONS: This study indicated that the majority of patients obtained a relatively stable physical activity behaviour after rehabilitation. Insight in the relevant personal and health-related factors may provide us with more knowledge when optimizing patients tailored advice in developing and maintaining a physically active lifestyle after rehabilitation.