

Distinct profiles of chronic pain patients: associations with physical activity during and after rehabilitation

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Introduction and Aims

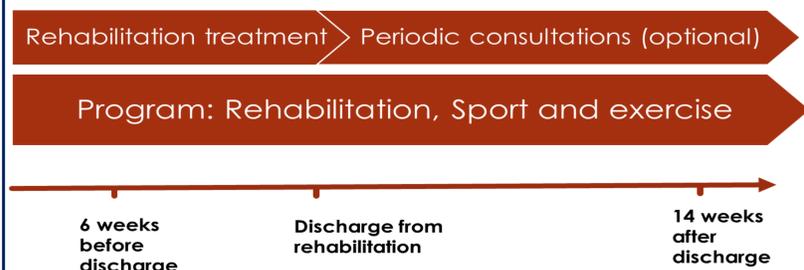
Many people suffering from chronic pain are not sufficiently physically active. To guide tailoring of physical activity interventions, insight is needed in which combinations of activity-related characteristics influence changes in physical activity. This study will focus on the period during and after rehabilitation.

Aims:

- 1) To identify profiles of activity-related characteristics in people suffering from chronic pain;
- 2) To investigate associations between the profiles and changes in physical activity during and shortly after rehabilitation

Design & Methods

- **ReSpAct study:** a longitudinal cohort study among N=197 chronic pain patients



- Figure 1: Questionnaire data were collected 3-6 weeks prior and 14 weeks after discharge from rehabilitation

- **Activity-related characteristics:** Self Efficacy (continuous), Motivation (continuous), Self-related Health (ordinal), Fatigue (continuous) and Stage of Change (ordinal) were measured with validated questionnaires

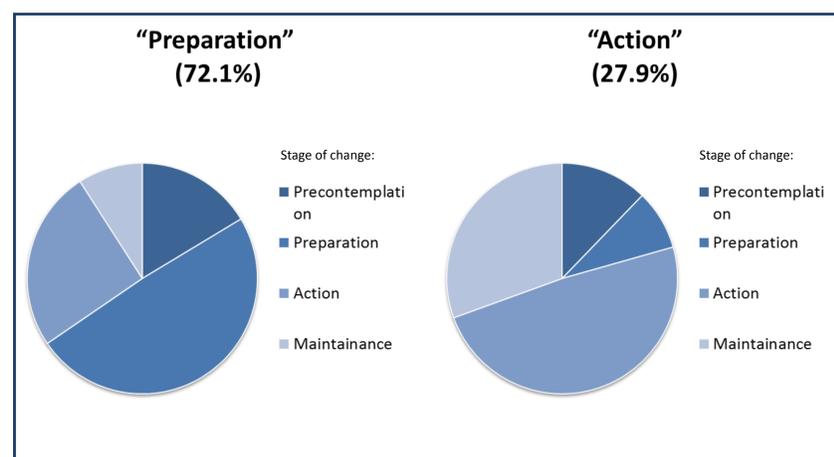
- **Physical activity:** Information on duration and intensity of physical activity was obtained by the adjusted SQUASH questionnaire.

- **Latent class analysis** for a mix of continuous and categorical activity-related indicators was conducted in Mplus 7 to obtain distinct profiles of chronic pain patients. A 1-6 solution was modeled and multiple model fit indices were assessed following common procedures. Patients were finally assigned to their most likely profile.

- **Linear regression analyses**, stratified for gender, were conducted to assess the associations between profile membership and changes in physical activity in the period during and after rehabilitation.

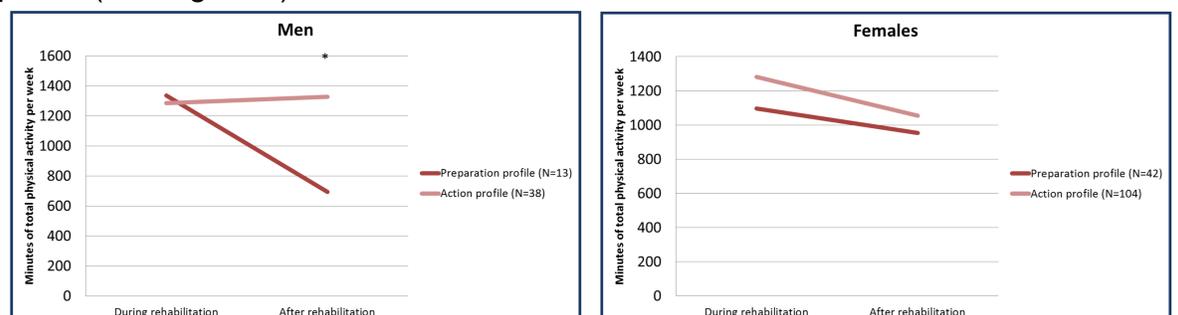
Results

Latent class analyses revealed two distinct profiles:



- Figure 2: Distribution of the stages of change for each of the obtained profiles

The two profiles differed most prominently on levels of self-efficacy and stage of change (see Figure 2). Patients in all profiles decreased their minutes of physical activity; this decrease was most prominent among men classified into the Preparation profile (see Figure 3).



- Figure 3: Changes in duration of physical activity for each profile, stratified for gender

Conclusion

Male chronic pain patients with low self efficacy and in a lower stage of change might benefit from more tailored (or different) physical activity counseling. What this counseling should or could entail, remains to be studied.

Our research group will present results of additional projects that provides more insight in the heterogeneity of physical activity counseling in rehabilitation.

The authors declare no conflicts of interest.

Take Home Question

What do you think about tailoring physical activity counseling in chronic pain patients: gender-, or profile specific?