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Institutionen för Neurobiologi, Vårdvetenskap och Samhälle

Promoting physical activity in rheumatoid arthritis-aspects of coaching in physical therapy

AKADEMISK AVHANDLING

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ABSTRACT

Background and Aim: Rheumatoid arthritis (RA) is a chronic, autoimmune, inflammatory, systemic disease mainly affecting the joints, often leading to impairments as well as activity limitations and participation restrictions in daily life. Physical activity including exercise is recommended in clinical practice guidelines for patients with RA, and physical therapists (PTs) have an important role in its promotion. However, more knowledge is needed on strategies to promote physical activity. The overall aim of the present work was to explore aspects of coaching in physical therapy that might be of importance for the adoption and maintenance of physical activity behavior.

Patients and Methods: In *Study I*, 18 patients with RA, 14 women and 4 men, aged 34-83 years, median age 60 years, were strategically chosen to participate in semi-structured interviews. In *Studies II and III*, 228 patients with early RA were recruited, 94 (68 women, 26 men, median age 54 years) to an intervention group (IG) and 134 (101 women, 33 men, median age 57 years) to a control group (CG), to a multicentre, randomized controlled intervention. The intervention aimed at promoting the adoption of healthy physical activity and was compared to ordinary treatment. Demographics, assessments of disease activity, body function, activity limitation, personal factors, physical activity and perceived health were collected. In *Study IV*, 25 physical therapists, 24 women and 1 man, aged 28-66 years, median age 44 years, were strategically chosen to participate in semi-structured interviews.

Results: In *Study I*, five qualitatively different ways of understanding exercise maintenance were identified: 'external control', 'sticks and carrots', 'a joint venture', 'the easy way', and 'on one's own terms'. The differences in ways of understanding became clear by distinguishing two aspects related to exercise maintenance, i.e. the type of support needed and personal factors. *Study II* identified and described eight clusters depending on the number of variables affected by the disease. Individuals more affected by their disease improved perceived health following the physical activity intervention compared to those less affected. In *Study III*, the result indicated that the intervention had no significant influence on long-term outcome. However, different patterns in physical activity behavior were observed in the two groups. In *Study IV*, four ways of understanding the promotion of exercise were identified: 'tell and inform', 'to identify and pilot', 'to discuss and enable' and 'to listen and inspire'. The ways of understanding were different regarding four key aspects; knowledge and responsibility in exercise, setting and supervision, tools to support behavior change and the role of the PT.

Conclusions: The coaching intervention in the present work may be most useful for patients more severely affected by their disease. However, no long-term effects of the intervention were found, and this may partly be because the intervention lacked some important behavioral elements for physical activity maintenance, but also due to how the study protocol was implemented. Important aspects of physical activity coaching for patients with RA might be the interaction between the PT and the patient, based on the patients' motivational type in addition to the PT's as well as the patient's regulation of learning. Finding congruence in this interaction could be a way to enhance learning of physical activity behavior by developing patients' self-regulations.