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Goal Management

The role of goal management for successful adaptation to arthritis

Roos Y. Arends [a,b,*], Christina Bode [a,b], Erik Taal [a,b], Mart A.F.J. Van de Laar [a,b,c]

[a] Arthritis Centre Twente, The Netherlands
[b] Department of Psychology, Health & Technology, University of Twente, Enschede, The Netherlands
[c] Department for Rheumatology, Medisch Spectrum Twente, Enschede, The Netherlands

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ABSTRACT

Objective: Persons with polyarthritis often experience difficulties in attaining personal goals due to disease symptoms such as pain, fatigue and reduced mobility. This study examines the relationship of goal management strategies – goal maintenance, goal adjustment, goal disengagement, goal reengagement – with indicators of adaptation to polyarthritis, namely, depression, anxiety, purpose in life, positive affect, participation, and work participation.
Methods: 305 patients diagnosed with polyarthritis participated in a questionnaire study (62% female, 29% employed, mean age: 62 years). Hierarchical multiple-regression-analyses were conducted to examine the relative importance of the goal management strategies for adaptation. Self-efficacy in relation to goal management was also studied.
Results: For all adaptation indicators, the goal management strategies added substantial explained variance to the models (R^2: .07–.27). Goal maintenance and goal adjustment were significant predictors of adaptation to polyarthritis. Self-efficacy partly mediated the influence of goal management strategies.
Conclusion: Goal management strategies were found to be important predictors of successful adaptation to polyarthritis. Overall, adjusting goals to personal ability and circumstances and striving for goals proved to be the most beneficial strategies.
Practice implications: Designing interventions that focus on the effective management of goals may help people to adapt to polyarthritis.

1. Introduction

The current study focused on the adaptation of people with polyarthritis to their disease. Polyarthritis encompasses a variety of disorders, including rheumatoid arthritis (RA), ankylosing spondylitis and psoriatic arthritis. Disorders classified as polyarthritis are typically involved with inflammation in five or more joints and associated with auto-immune pathology. Inflammation generally causes pain, fatigue and swelling in multiple joints. In spite of medical treatment that may alleviate polyarthritis, for many patients, pain, fatigue, disability, deformity, and reduced quality of life persist [1,2]. Patients often face difficulties with attaining or maintaining goals in several domains of life, including work, social relationships, leisure activities and domestic tasks [3,4].

Five key elements of successful adaptation to a chronic disease have been identified [5]: (1) the successful realization of adaptive tasks; (2) the absence of psychological disorders; (3) the presence of low negative affect and high positive affect; (4) adequate work/functional status; and (5) satisfaction and well-being in various life domains. It follows that both the absence of psychological distress and the presence of well-being are important for successful adaptation to arthritis. In the present study two negative (depression, anxiety) and three positive (purpose in life, positive affect, participation) indicators of adaptation are used, as these are thought to be important issues for polyarthritis patients.

As a result of its high prevalence compared to healthy controls [6], depressive mood in RA patients has gained much attention in the scientific literature. Moreover, research has shown that RA patients tend to have increased levels of anxiety [7]. Previous findings also revealed lower levels of purpose in life in patients with RA in comparison with healthy populations [8]. Purpose in life – a central aspect of well-being – means: "*the feeling that there is a purpose and meaning in life, (...) a clear comprehensibility of life's purpose, a sense of directedness, and intentionality*" (p. 1071) [9]. Positive affect, another indicator of well-being, lowered the increase in negative affect when levels of pain were elevated in patients with arthritis [10,11]. The experienced level of participation in society is also an essential indicator of adaptation to arthritis, referring to a person's involvement in life experiences,

* Corresponding author at: Department of Psychology, Health & Technology, University of Twente, P.O. Box 217, 7500 AE Enschede, The Netherlands.
Tel.: +31 534896204; fax: +31 534892895.
E-mail address: r.y.arends@utwente.nl (R.Y. Arends).

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such as socializing and performing one's role in the context of the family. Polyarthritis has been shown to negatively affect participation and work ability [12–14]. Lowered work ability or work loss can imply financial costs for society. For the individual patient, it can mean loss of status, family income and social support [12].

Polyarthritis demands specific competencies by patients for successful adaptation. Due to the absence of a cure, lifelong self-management is essential for coping with polyarthritis. The fluctuating course of polyarthritis and uncertain disease progression threaten patients' feelings of autonomy. Therefore, a sense of regulatory efficacy is of major importance for well-being [15]. Higher self-efficacy for coping with disease symptoms in RA patients is correlated with less fatigue, increased physical ability, decreased pain, improved mood, and improved adherence to health recommendations [16–20].

However, maintaining life as it was before disease onset is often impossible for patients with a progressive chronic disease [21]. Research should therefore not only focus on the management of the disease, but also on how the patient adjusts to abandoning activities and life goals that are no longer feasible. Research has shown that adjusting personal standards and life goals is as important for well-being as pursuing personal goals [22].

Goal management strategies are intended to minimize discrepancies between the actual situation and the goals a person has. These strategies can be seen as possible ways to react to difficulties along the path towards a goal. The dual-process model [23–25] incorporates both assimilative and accommodative modes of coping. The assimilative mode is directed at maintaining goals by actively attempting to alter unsatisfactory life circumstances and situational constraints in accordance with personal preferences. Maintaining goals that are achievable gives people a purpose in life and can offer satisfaction. Accommodative coping is directed towards a revision of self-evaluative standards and personal goals in accordance with perceived deficits and losses – an approach that adjusts goals to the personal bounds of what remains possible. In contrast, the goal adjustment model [26] focuses on goals that are experienced as no longer attainable. This model combines goal disengagement with goal reengagement. Goal disengagement consists of withdrawing effort and commitment from an unattainable goal, with the benefit of releasing limited resources that can then be deployed for alternative actions and new goals. Goal reengagement consists of identifying, committing to and starting to pursue alternative goals. New personal goals seem important for promoting a person's sense of identity [27] and subjective well-being, which should be improved by engaging in personally meaningful activities [28].

The models are partly complementary, and neither is comprehensive with regard to the possible goal management strategies a polyarthritis sufferer – or indeed anyone – can adopt. To be comprehensive but still straightforward, we hypothesized a model that integrates the four strategies (see Fig. 1). This Integrated Model of Goal Management focuses on goal maintenance, goal adjustment, and goal reengagement. The maintenance of goals is considered to be the preferred strategy when a person still perceives opportunities to attain a goal. Goal adjustment is more suitable for situations in which goals are under threat. Goal reengagement seems an appropriate strategy at all times, to complement existing goals or replace unattainable goals. We hypothesized that the strategy of disengaging from goals is one facet of the broader strategy goal adjustment.

To the best of our knowledge, there have been no previous studies that have combined both models of goal management. However, several studies have explored the relationship between goal management strategies and distress for various chronic diseases. Adjustment of goals was found to have beneficial effects on depression and social dysfunction in vision-impaired adults [29]. Among patients with chronic pain, the ability to adjust goals buffered against the deteriorating effect of the pain experience on depression [25]. A study with patients diagnosed with peripheral arterial disease suggested that, when patients applied the strategy of engaging in new goals, this resulted in fewer depressive symptoms [30]. Another study among patients with multiple sclerosis found that combining low disengagement and low reengagement resulted in fewer depressive feelings [31]. To summarize, the relation between the use of the goal management strategies and distress for patients with a chronic disease is not completely clear yet. For facets of well-being in chronic disease, research has shown positive associations with the use of various goal management strategies [29,31,32]. In the present research, both distress (anxiety and depression) and well-being (purpose in life, positive affect and participation) as indicators of adaptation to a chronic disease were studied.

The main research question was as follows: What is the role of various goal management strategies (goal maintenance, goal adjustment, goal disengagement, and goal reengagement) for adaptation to polyarthritis, as operationalized by the following indicators: anxiety, depression, purpose in life, positive affect, and participation? Hypothesized was that the use of goal management strategies relates positively to successful adaptation. Within the Integrated Model of Goal Management, we hypothesized goal disengagement to be a subcategory of goal adjustment, which would imply a strong relationship between the two strategies. As said before, arthritis related self-efficacy is known to be an important mechanism in adaptation to a rheumatic disease, therefore we studied main effects of self-efficacy on adaptation. The self-efficacy a person perceives in managing disease symptoms like pain and fatigue may also play a role in the effectiveness of different ways of goal management a person can utilize. Therefore, we also examined the role of self-efficacy in relation to goal management strategies and adaptation.

2. Methods

2.1. Sample

For this questionnaire study, participants were selected from an outpatient clinic for rheumatology. Based on the following inclusion criteria, 803 patients were at random selected from the electronic diagnosis registration system: (1) patient is diagnosed with polyarthritis; (2) patient is receiving treatment for polyarthritis. Subsequently, the rheumatologists checked the chart of every patient for the additional inclusion criteria: (3) patient is 18 years or older; (4) patient is able to complete the questionnaire in Dutch, either autonomously or with help. Out of 803 patients, 164 were not approached because they did not meet the inclusion criteria. The internal review board of the Faculty of Behavioural Sciences at the University of Twente approved the study.

2.2. Procedure

A total of 639 patients received an invitation letter, together with the questionnaire and an informed consent form. In time, 305 questionnaires and signed informed consents (48%) were received. Table 1 shows the demographic and clinical characteristics of the participants.

2.3. Measures

Questions were asked about sex, age, marital status, education and employment. Disease duration was asked with the following question: 'In which year did the complaints associated with your arthritis start?' All other questionnaires – including the measures