The effects of a vitality training programme on psychological distress in patients with inflammatory rheumatic diseases and fibromyalgia: a 1-year follow-up

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Studies have documented a high risk of psychological distress in patients with rheumatoid arthritis (RA) and other rheumatic conditions (1, 2). The prevalence of depressive and anxiety symptoms are higher in RA patients compared with the general population (3, 4). In early stages of the disease, distress is associated with disease-related factors and their impact on daily life (5). In later phases personal coping resources appear to become more important predictors (6). Self-management interventions have been developed to strengthen the patients’ ability to cope with the complexity of symptoms occurring from their rheumatic condition (7). However, few interventions explicitly address patients’ emotional response to their disease (8).

The Vitality Training Programme (VTP) is a 10-session group-learning programme that has a particular focus on the relationship between emotions, thoughts, and bodily reactions (9). The aim is to help patients to become more aware of their internal and external resources in order to cope with their current life situation. Beneficial effects on psychological distress, pain, and self-care ability have previously been demonstrated in a 1-year follow-up randomized controlled trial in persons with chronic musculoskeletal pain (10). The purpose of this study was to explore whether participation in the VTP would improve psychological distress, pain, fatigue, and self-efficacy (SE) in patients with rheumatic diseases, and to explore factors predicting change in psychological distress.

A total of 175 patients who participated in the VTP at six rheumatology clinics in Norway were included in a prospective, uncontrolled study. Data were collected through self-report questionnaires at admission (T1), immediately after (T2) and 12 months after the VTP (T3). The response rate was 146 (83.4%) at T2 and 126 (72%) at T3. The sample was predominantly female (94%), mean age 49 years (range 23–77 years) and mean time since diagnosis 7 years (range 0–38 years). Included diagnoses were RA (63), fibromyalgia syndrome (FMS) (63), psoriatic arthritis (PsA) (12), ankylosing spondylitis (AS) (8), systemic lupus erythematosus (SLE) (8), osteoarthritis (OA) (8), juvenile ideopathic arthritis (JIA) (2), Still’s disease (1), polyarthritis (1), and ‘other’ (9).

At baseline, psychological distress, measured by the General Health Questionnaire (GHQ-20) (11), was relatively high for the whole sample. Patients with FMS exhibited significant higher mean scores for both pain and fatigue, measured by visual analogue scales (VAS), than patients with inflammatory arthritis (RA, PsA, AS, JIA, and polyarthritis).

Paired t-tests showed statistically significant improvement in GHQ-20, pain, and SE pain and symptoms from T1 to T2 (p < 0.05). At T3, fatigue was significantly reduced (p = 0.003) and changes for all other variables were maintained. However, subgroup analyses showed that most variables did not improve in the FMS group. Further analyses were conducted to explore the differences between the inflammatory group (n = 87) and the FMS group (n = 63), because of heterogeneity, a number of other diagnoses (n = 22) were excluded from these analyses.

Figure 1 shows the differences in standardized response means (SRMs) for changes in the outcome measures from T1 to T3 for the two groups.

In bivariate regression analyses diagnosis was found to be the main predictor of change in GHQ-20 from T1 to T3. Additionally, higher scores of pain and fatigue at baseline were found to be significant predictors of reduction in GHQ-20. None of the demographic variables accounted significantly for change in psychological distress. In multivariate analyses, patients with inflammatory arthritis and more fatigue at baseline showed greater reduction of psychological distress at the 1-year follow-up after adjusting for all other variables (Table 1).

From this study we suggest that a group-learning programme that addresses the relationship between emotions, thoughts, and bodily reactions and aims at helping patients to get in contact with their internal and external resources will mediate a reduction in...
psychological distress and reduce fatigue in patients with inflammatory arthritis. However, the improvements may partly be explained by other treatment interventions, such as medications. Controlled studies are therefore needed to confirm the present findings. The lack of improvement in patients with FMS is contradictory to the findings in the study from Haugli et al (10). Further studies are also needed to investigate whether factors other than diagnosis, such as, for example, personality factors, may have influenced the results.

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