

## Correlations between fatigue and disease duration, disease activity, and pain in patients with rheumatoid arthritis: a systematic review - DTU Orbit (08/11/2017)

Correlations between fatigue and disease duration, disease activity, and pain in patients with rheumatoid arthritis: a systematic review

OBJECTIVES: Rheumatoid arthritis (RA) patients suffer from disabling fatigue but the causes of this condition are unknown. Our aim was to assess which of the variables disease activity, disease duration, and pain is associated with fatigue. METHOD: We conducted a systematic literature search in MEDLINE and EMBASE, followed by selection of studies according to set criteria, data extraction, and statistical analyses of the relationships in RA between fatigue and the following covariates: disease duration, erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), the 28-joint Disease Activity Score (DAS28), swollen to tender joint count ratio (STR), and pain. Linear regression analyses of fatigue regressed on each of the six covariates, and a multiple regression analysis where fatigue was regressed on the six covariates through a forward selection procedure was carried out with construction of correlation measures between fatigue and the covariates. RESULTS: A total of 121 studies were included in the analyses, including > 100 000 RA patients. A high level of fatigue was seen even in well-treated patients, demonstrating fatigue as a major problem in RA. Fatigue was found to be positively correlated with pain, CRP, DAS28, and ESR but not with the STR or disease duration, with pain as the overall domineering factor. CONCLUSIONS: Fatigue has a substantial influence on the lives of RA patients, independent of disease duration. Pain is the domineering factor in the experience and degree of fatigue. Disease activity is positively correlated to fatigue but does not contribute substantially when pain is considered. Optimal pain relief is therefore an important part of the treatment to improve fatigue in RA.

## **General information**

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