Psychological correlates and predictors of fatigue in Rheumatoid Arthritis: A systematic review

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Background

- Fatigue is common and debilitating in Rheumatoid Arthritis (RA).
- 57% of patients identifying fatigue as the most problematic symptom of their condition [1].
- Fatigue is associated with increased pain, disability, depression and reduced quality-of-life [2].
- The limited efficacy of biotherapies to reduce fatigue [3] suggests that further investigation of the psychological factors relating to fatigue is warranted.

This review aimed to ascertain the strength of evidence for relationships between psychological variables and fatigue in RA, in order to identify potential useful targets for intervention.

Methods

Electronic databases were searched from inception to March 2013. Inclusion criteria were:

- (i) observational design, or baseline data from a trial;
- (ii) published quantitative studies;
- (iii) reported results for RA separately from other rheumatological conditions.

Studies were excluded if they:

- (i) used qualitative, case-series, case-reports, expert opinion or consensus statements;
- (ii) used a selective sample;
- (iii) did not use published/appropriate and replicable measures to assess psychological factors and fatigue;
- (iv) recruited patients with self-reported RA diagnosis.

Psychological factors were defined as variables relating to behaviours, feelings, thoughts and attitudes which would be modifiable for the purposes of intervention, or which may moderate the effects of treatment.

The heterogeneity of the included studies precluded meta-analysis, therefore a narrative synthesis was performed. Where reported, we compared effect sizes between psychological variables and biomarkers of disease severity to examine the driving factors associated with fatigue in these patients.

Results

29 studies met inclusion criteria and were included in the narrative synthesis. A wide range of psychological variables were addressed, spanning 6 categories: mood; RA-related cognitions; non-RA-related cognitions; personality traits; stress and coping; and social support (Table). In the 13 studies that looked at both disease and psychological variables, effect sizes were comparable in 5 (38.5%). Psychological variables were more strongly associated in 7 (53.8%), and disease variables were more strongly associated in 1 (7.7%).

Conclusions

- Associations between mental health and RA-related cognitions and fatigue were fairly consistent, and sustained after adjustment for markers of disease severity.

Interventions for fatigue in RA may benefit from an integrated focus on mental health and RA-related cognitions in addition to established RA pharmacological treatment.