Concise Report

Coping and psychological adjustment in recent-onset inflammatory polyarthritis: the role of gender and age

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Objectives. To examine the role of gender, age and coping in psychological adjustment of patients with early inflammatory polyarthritis (IP).

Methods. One hundred and twelve patients with IP of up to 18 months’ duration from the Norfolk Arthritis Register completed questionnaires measuring coping, anxiety, disability and pain.

Results. Thirty-six per cent of the patients were at risk of depressive symptoms. Women had significantly higher levels of depression and anxiety than men. Regression analyses showed that pain and (low) illness acceptance predicted levels of depression. Younger age, wishful thinking and covering up predicted anxiety levels.

Conclusions. The study found higher levels of depression and anxiety for women than men with early IP. Psychological distress was predicted by younger age, specific coping strategies and high levels of pain.

KEY WORDS: Rheumatoid arthritis, Gender, Coping, Psychological adjustment.

Inflammatory polyarthritis (IP) encompasses a set of chronic systemic conditions that include rheumatoid arthritis (RA) and are characterized by painful swollen joints and disability. In the RA literature depression was identified as the most common psychological problem [1], and in a systematic review Dickens et al. [2] also found that RA patients were more likely to suffer from depression than healthy controls. Depressive symptoms have been associated with female sex [3–5], age [6] and the use of passive pain coping strategies [7–9] in RA.

The aim of this study was to examine the role of gender, age and coping in psychological adjustment in a community sample of patients. Specifically, there would be (i) gender differences in levels of depression and anxiety, and (ii) positive correlations between physical and psychological measures. Finally, we explored the extent to which age, gender, and coping strategies would be significant predictors of psychological distress.

Method

Participants

Participants were from the Norfolk Arthritis Register (NOAR). This is a population-based register which covers a population of 0.5 million, predominantly (99%) of European Caucasoid origin within a specified area of Norfolk, England [10]. Patients were recruited to this study between June 1998 and October 2000. The criterion for early IP was onset of symptoms up to 18 months prior to entering the study. Women over 16 yr and men 45 yr and over were included. Younger men were excluded because RA is rare in this age group [11]. Of the 112 patients, five (four females and one male) were taking antidepressant medication (information for four patients was not available).

Table 1 shows baseline characteristics of the male and female groups.

Procedure

Permission to undertake the study was granted by the local research ethics committee. The patients were visited by the NOAR nurse, who collected a range of physiological data, and J.R., who administered a series of self-report psychological questionnaires.

Measures

Depression. The Centre for Epidemiological Studies Depression Scale (CES-D) [12] was designed to measure depressive symptomatology in the general population. This measure offers a cut-off point score (≥16) for risk of depression.

Anxiety. Anxiety was measured by the State-Trait Anxiety Inventory (STAI) [13]. Trait anxiety measures how a person generally feels, and was used as a general indicator of anxiety.

Disability and pain. The Stanford Health Assessment Questionnaire (HAQ) [14] was used to measure disability. A baseline HAQ of >1 is the most important predictor of future disability [10].

Pain was measured with a 101-point visual analogue scale (VAS) [15].

Disease measures

Rheumatoid factor and tender swollen joint count were collected.
Hierarchical regression analyses were performed in order to determine the predictors of depressive symptoms. Sex and age were entered into the regression in step 1, pain and disability were entered in step 2 and then the coping strategies in step 3.

The results indicated that age and gender together accounted for 7.8% of the variance [adjusted $R^2 = 0.08$, $F(2, 106) = 5.50$, $P < 0.01$]. When pain and disability were added to the model, this accounted for 27.6% of the variance [adjusted $R^2 = 0.28$, $F(4, 104) = 11.30$, $P < 0.01$] and when coping was entered the model accounted for 39% of the total variance [adjusted $R^2 = 0.39$, $F(8, 100) = 9.64$, $P < 0.01$]. In the final model, younger age, wishful thinking and covering up were significant predictors of trait anxiety.

**Discussion**

In this investigation, over 36% of the total sample were at risk of depression. This included 30 women and 11 men, women having higher levels of depressive symptoms than men. A longitudinal study of women with established RA found that loss of valued activities, e.g. cooking and shopping, was a significant risk factor for the development of depressive symptoms [17]. The higher levels of anxiety in women may be a reaction to the illness onset. Future studies could examine the longitudinal relationship between mood and disease duration to determine whether anxiety reduces with adjustment to the disease. The associations between disability, depressive symptoms and pain in early IP patients were similar to previous research in RA [7].

The results of the regression analysis indicated that, together with high levels of pain and younger age, specific coping strategies predicted distress. The direction of the relationship is still unclear, however, as the data are cross-sectional.

Possible markers of the presence of anxiety and depression are high levels of disability and pain [18]. When patients present with increased levels of these symptoms, health-care professionals should be alerted to the possibility of concurrent distress.

This study's findings suggest that younger age, passive coping strategies and high levels of pain are risk factors for the presence of distress. For some early IP patients, however, psychological interventions targeting pain and mood may be necessary.

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**References**


