

Fatigue and psychological distress in rheumatoid arthritis: the mediation effect of adjustment to disease

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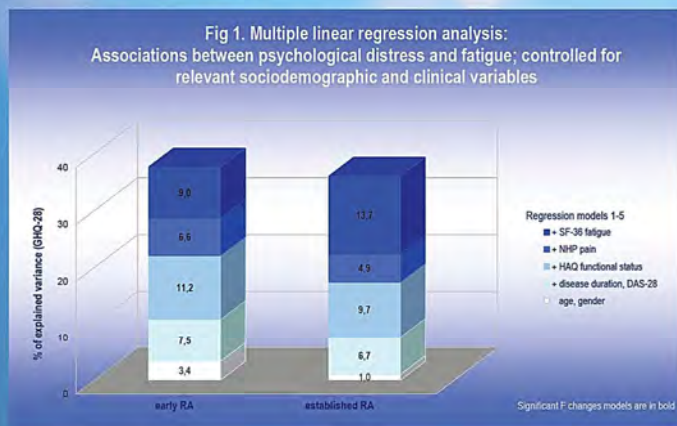
BACKGROUND

Psychological distress (anxiety, depression) is more common in persons with rheumatoid arthritis (RA) compared with healthy subjects and adds substantially to their diminished quality of life. In RA the specific factors that contribute to distress include pain, functional disability and fatigue, which is an important, but often neglected concomitant of RA [1,2]. Another variable that may play a significant role is adjustment to disease [3,4].

AIM

The aim of this study was to evaluate the possible mediation effect of adjustment to disease, viewed as a result of the coping process, on relationship between fatigue and psychological distress in patients with early versus established RA

RESULTS



After controlling for relevant socio-demographic and clinical variables fatigue explained additional 9.0% of the GHQ-28 (psychological distress) total variance in early RA patients, whereas 13.7% in established patients. The full model explained 38% vs 36% of total variance in early vs established RA patients, respectively.

CONCLUSIONS

Fatigue appears to be the most important variable associated with psychological distress in both early and established patients. In addition, with the progression of RA the significant mediation role of adjustment to disease increases. The outcomes have implication for clinical practice, as they provide support for the importance of self-management, coping and adjustment to disease in alleviating the symptoms of anxiety and depression in patients with a chronic incapacitating disease, and thus contributing to improvements in quality of life.

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METHODS

Sample

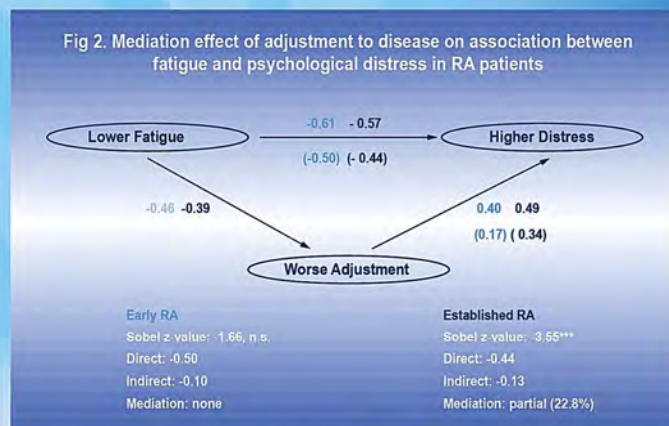
- 111 early RA patients (age 53.3±12.4 years, disease duration 2.8±1.2 years, 74.8.3% females)
- 158 established RA patients (age 58.2±10.6 years, disease duration 16.1±3.5 years, 86.0% females)

Measures

- General Health Questionnaire -28 (GHQ-28)
- General Adjustment to Rheumatoid Arthritis (GARA)
- Short Form Health Survey (SF36-vitality)
- Nottingham Health Profile (NHP-pain)
- Health Assessment Questionnaire (HAQ)
- Disease Activity Score (DAS-28)

Statistical analyses

- t-test, multiple linear regression analysis, Sobel z-test



Adjustment to disease did not play a mediation role in the association between fatigue and distress in early RA, but it yielded a partial mediation effect in the established group: Sobel z-value = -3.55, $p < 0.001$; indirect effect via the adjustment to disease of 22.8%.

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Acknowledgment

This work was supported by the Slovak Research and Development Agency under contract No. APVV-20-038305 (20%) and No. APVV-0220-10 (60%). Furthermore, this work was partially supported by the Agency of the Slovak Ministry of the Education, Science, Research and Sport of the Slovak Republic for the Structural Funds of the EU under project No. ITMS: 26220120058 (20%).

EUROPEAN JOURNAL OF PUBLIC HEALTH

Volume 21 Supplement 1

www.eurpub.oxfordjournals.org

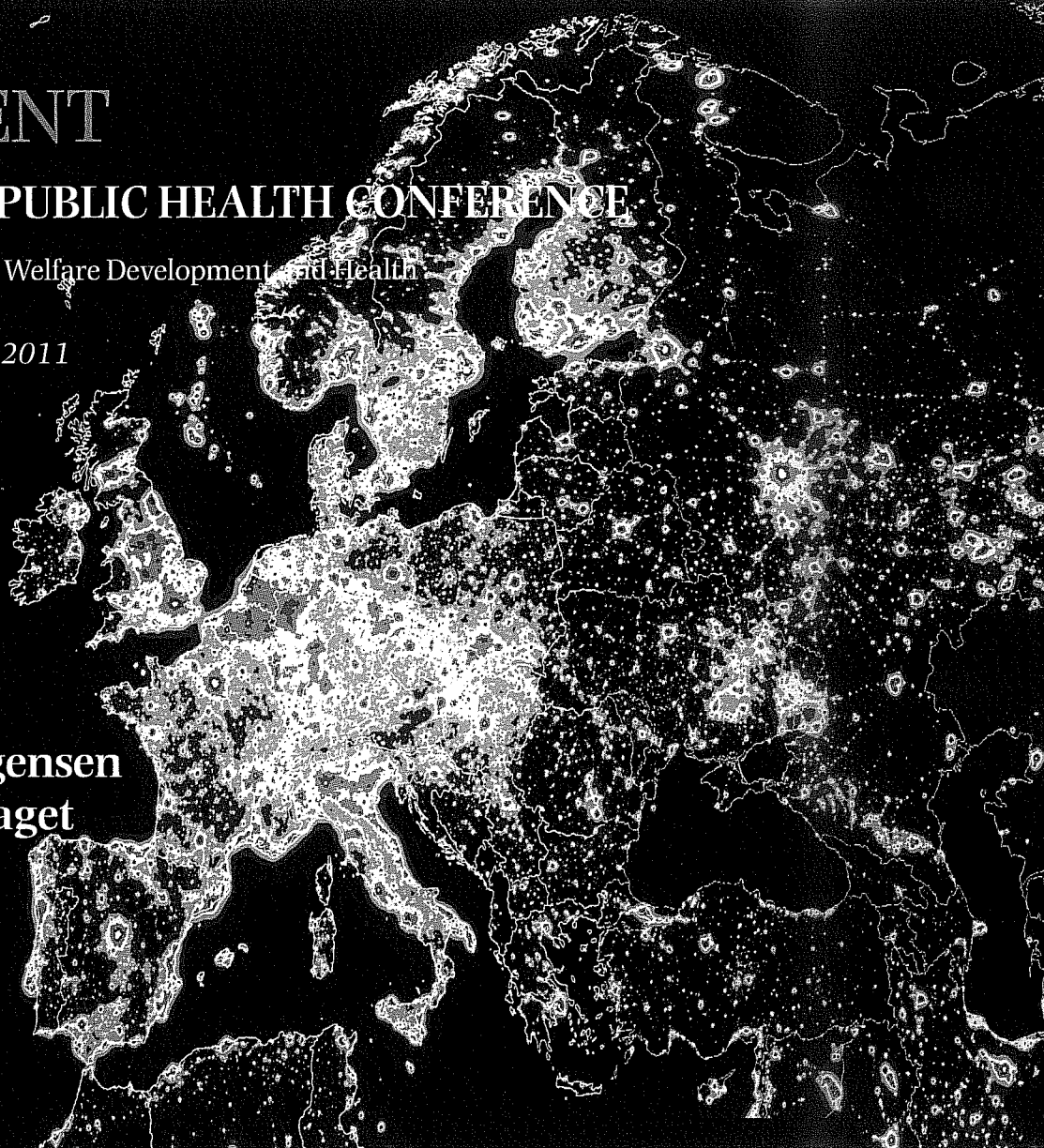
SUPPLEMENT

4TH EUROPEAN PUBLIC HEALTH CONFERENCE

Public Health and Welfare – Welfare Development and Health

Copenhagen, 9–12 November 2011

Guest editors:
Torben Jørgensen
Finn Kamper-Jørgensen
Dineke Zeegers Paget



EUPHA
EUROPEAN PUBLIC HEALTH ASSOCIATION

 **ASPHER**
The Association of Schools of Public Health
in the European Region



Danish Society of Public Health

OXFORD
UNIVERSITY PRESS

EUROPEAN JOURNAL OF PUBLIC HEALTH

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ABSTRACT SUPPLEMENT

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CONTENTS

1. Welcome: EUPHA and ASPHER
2. Welcome: Danish Society of Public Health
3. Detailed Scientific programme
4. Plenary presentations: abstracts
5. Parallel presentations: abstracts
6. List of authors

research. Most research examined the HRQL together in sexes. The aim of our study was to evaluate the HRQL between type 1 diabetes girls (G) and boys (B) using child self-report and parent proxy-report, and to analyse the correlation between HRQL and HbA1c, and between HRQL and diabetes duration (dd).

Methods

216 type 1 diabetes youths took part in this cross-sectional survey from Northern-East Hungary in 2010. There were 107 G (age: 13.27 ± 3.19 yrs, dd: 5.44 ± 2.84 yrs, HbA1c: $8.87 \pm 1.40\%$) and 109 B (age: 13.34 ± 3.09 yrs, dd: 5.04 ± 3.25 yrs, HbA1c: $8.40 \pm 1.53\%$). No patient had diabetes complication. HRQL was evaluated with PedsQL™ 3.0 Diabetes Module using child self-report (CSR) and parent proxy-report (PPR). The questionnaire analyses the diabetes symptoms (Ds), treatment barriers (Tb), treatment adherence, worry and communication. The higher scores indicate better HRQL. T-test and Mann-Whitney U test was employed according to the distribution of normality. Pearson coefficient was used for analysing the correlation between HRQL and HbA1c and HRQL and dd.

Results

B reported significantly better HRQL (G: 67.29 ± 12.06 vs B: 72.53 ± 12.38 ; $p=0.002$). Patients had significantly higher scores in CSR than in PPR in both sexes (PPR of G: 64.22 ± 12.92 vs PPR of B: 68.29 ± 11.56 , $p=0.016$). B had significantly better results in Ds subscale (G: 57.90 ± 13.69 vs B: 65.18 ± 14.04 ; $p=0.000$) and Tb subscale (G: 66.76 ± 19.53 vs B: 73.70 ± 18.05 ; $p=0.000$). We observed significant differences between the CSR and PPR both in G (CSR: 67.29 ± 12.06 vs PPR: 64.22 ± 12.92 ; $p=0.000$) and B (CSR: 72.53 ± 12.38 vs PPR: 68.29 ± 11.56 ; $p=0.000$). No significant correlation was found between HRQL and HbA1c and HRQL and dd in sexes.

Conclusions

B had better HRQL than G and this is approved by the PPR. The difference in sexes was caused by the perception of Ds and the Tb (pricking fingers or giving insulin shots, embarrassed about having diabetes, arguing with parents about diabetes care, sticking to diabetes care plan). The parents underestimated their children HRQL in both sexes. The HRQL is not affected statistically significantly by the metabolic control and the diabetes duration.

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Background

Psychological distress (anxiety, depression) is more common in persons with rheumatoid arthritis (RA) compared with healthy subjects and adds substantially to their diminished quality of life. In RA the specific factors that contribute to distress include pain, functional disability and fatigue, which is an important, but often neglected concomitant of RA. Another variable that may play a significant role is adjustment to disease. The aim of this study was to evaluate the possible mediating effect of adjustment to disease, viewed as a result of the coping process, on the relationship between fatigue and psychological distress in patients with early versus established RA.

Methods

268 consecutive RA patients (age 52 ± 11.6 years, disease duration 10.6 ± 7.2 years, 81.3% females) filled in self-reports on fatigue (SF36-vitality), adjustment to disease (VAS) and distress (GHQ-28). The relationship between fatigue and distress was examined using multiple linear regressions, controlling for relevant socio-demographic (gender, age) and clinical variables (disease duration, disease activity (DAS-28), pain (NHP) and functional disability (HAQ)). The mediating effect was determined by the Sobel test.

Results

In early RA patients (disease duration <4 years, $n=111$) fatigue explained 32% of the total variance in distress, whereas in the established group it was 31%. The full model explained 38% vs 42%, respectively. Additional analyses revealed that adjustment to disease did not play a mediating role in the association between fatigue and distress in early RA, but it yielded a partial mediating effect in the established group (Sobel z -value = -3.55 , $p < 0.001$; indirect effect via adjustment to disease of 22.5%).

Conclusions

Fatigue appears to be the most important variable associated with psychological distress in both early and established patients. In addition, with the progression of RA the significant mediating role of adjustment to disease increases. The outcomes have implication for clinical practice as they provide support for the importance of self-management, coping and adjustment to disease in alleviating symptoms of anxiety and depression in patients with a chronic incapacitating disease, and thus contributing to the improvements in quality of life.

Self-reported quality of life among patients living with ischaemic heart disease in Scandinavia

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Background

Decreased mortality from ischaemic heart disease (IHD) has led to numerous patients living with a chronic heart disease. Recognizing the importance of including health related quality of life (HRQL) in evaluations of treatment options for IHD, an international project group is now developing and validating a core specific HRQL-instrument, HeartQol, including 6249 patients from 21 countries. The instrument is developed using established condition-specific HRQL questionnaires and can be used across countries and diagnosis within IHD. As part of the study data on HRQL are collected in samples of heart patients in participating countries. The aim of this study is to present differences in self-reported HRQL for patients living with angina, MI or heart failure in Norway, Sweden and Denmark.

Methods

Patients were recruited from cardiovascular departments in 2005. 976 patients with angina ($n=335$), MI ($n=352$) or heart failure ($n=289$) in Norway ($n=328$), Sweden ($n=295$) and Denmark ($n=353$) completed a sociodemographic and a clinical questionnaire, SF-36, HADS, MacNew, SAQ and MLHF. Clinical, sociodemographic, and scale characteristics are described with frequencies, means, and standard deviation. Analysis of variance (for continuous variables) with post-hoc analysis controlling for multiple comparisons by Bonferroni and Chi-square (for categorical variables) are used to compare the three cardiac groups.

Results

Characteristics of self-reported quality of life for Scandinavian patients with IHD will be presented. Self rated health will be compared using SF36 and anxiety and depression using HADS.