Rheumatoid arthritis - prognosis, predictors and outcome

**Keywords:** Quality of life, Work-related issues, Rheumatoid arthritis

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**Background:** Rheumatoid arthritis (RA) is a chronic rheumatism that mainly affects young adults. It has an impact on the patient’s quality of life and professional abilities.

**Objectives:** The aim of this study was to evaluate the influence of RA activity, its impact, and its functional impact on patients' domestic and professional productivity.

**Methods:** We conducted a cross-sectional study over an 8-month period. Seventy adult patients diagnosed with RA for more than a year and receiving an anti-rheumatic therapy were interviewed. We assessed disease activity by the Disease Activity Score (DAS28), the impact of RA by the Rheumatoid Arthritis Impact of Disease (RAID) score, and functional impairment by the Health Assessment Questionnaire (HAQ).

**Results:** We reported a female predominance (63 women and 7 men) with an average age of 57.8 ± 10.6 years [29-81]. At the time of the study, 13 (19%) patients were employed, 4 (6%) were unable to work because of RA while the rest were either unemployed or retired. The mean DAS28 was 3.95 ± 3.13. The DAS28 was positively correlated with the degree of interference of RA on domestic work (p = 0.001), professional work (p = 0.005), and the decrease of domestic productivity (p = 0.012) and professional productivity (p = 0.021). Absenteeism was not influenced by RA activity (p = 0.109). The average RA ID score was 4.72 ± 2.11 [0.6-9.48]. The RA ID score was positively correlated with the degree of interference of RA on domestic work (p < 0.001) and professional work (p = 0.013). There was no correlation noted between the impact of RA and the decrease of domestic productivity (p = 0.11), professional productivity (p = 0.109) or the absenteeism (p = 0.248). The mean value of the HAQ score was 1.04 ± 0.61 [0.2-6.0]. We noted a positive correlation between the HAQ score and the degree of interference of RA at domestic work (p < 0.001) as well as the interference of RA at professional work (p = 0.012). The decrease of domestic productivity (p = 0.133) and professional productivity (p = 0.128) as well as the absenteeism (p = 0.125) were not correlated with the functional impairment of RA.

**Conclusion:** According to these results, RA activity, impact, and functional impairment influenced mainly the degree of RA interference at work and domestic work. Productivity was essentially correlated with RA activity. Absenteeism was not influenced by any of the parameters studied previously.

**REFERENCES:** NIL.

**Acknowledgements:** NIL.

**Disclosure of Interests:** None Declared.

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**USING SMALL EFFECTS IN THE MDS: A NEW DEPRESSION ASSESSMENT TOOL IN RHEUMATOID ARTHRITIS**

**Keywords:** Rheumatoid arthritis, Fibromyalgia, Outcome measures

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**Background:** A physician global assessment (DOCG) distinguishes active from control treatments in rheumatoid arthritis (RA) effectively in clinical trials. However, RA trials select for patients who have high inflammatory activity, generally only 5-30% of all RA patients. In routine care, DOCGL, and all clinical RA measures and indices, may be elevated not only by inflammatory activity but also by joint damage and/or patient distress, complicating interpretation of RA indices and clinical decisions. A RheuMetric checklist provides feasible physician 0-10 subscale estimates of inflammation (DOCINF), damage (DOCDAM), and distress (DOCDTR), in addition to DOCGL.

**Objectives:** To analyze criterion validity and specificity of 0-10 RheuMetric physician estimates for inflammation, damage, and distress, by comparing these estimates to reference RA core data set measures, as well as joint deformity/ limited motion (DUC), radiographic scores and indices for FM and DEP.

**Methods:** A cross-sectional assessment was performed at one routine care visit in 173 RA patients, variation in RheuMetric DOCINF was explained significantly by DUC and inversely by disease duration, DOCDM by DUC, radiographic scores, and physical function, and DOCSTR by fibromyalgia and depression.

**Conclusion:** RheuMetric DOCINF, DOCDAM, and DOCSTR estimates were correlated significantly and specifically with reference measures of inflammation, damage, and distress, documenting criterion validity.

**Table 1.**

<table>
<thead>
<tr>
<th>Significant Variables</th>
<th>Multivariable analyses</th>
</tr>
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<tbody>
<tr>
<td><strong>DOCINF r square=0.56</strong></td>
<td><strong>B (95% CI)</strong></td>
</tr>
<tr>
<td>Swollen joint count (SJC)</td>
<td>0.428 (0.342; 0.515)</td>
</tr>
<tr>
<td>Disease duration</td>
<td>-0.030 (-0.054; -0.005)</td>
</tr>
<tr>
<td>DOCDAM r square=0.51</td>
<td><strong>B (95% CI)</strong></td>
</tr>
<tr>
<td>Deformity/limited motion joint count (DUC)</td>
<td>0.153 (0.087; 0.220)</td>
</tr>
<tr>
<td>Radiographic Sharp van der Heijde score</td>
<td>0.023 (0.007; 0.039)</td>
</tr>
<tr>
<td>MDHAQ Physical function (FN)</td>
<td>0.265 (0.039; 0.492)</td>
</tr>
<tr>
<td>DOCSTR r square=0.42</td>
<td><strong>B (95% CI)</strong></td>
</tr>
<tr>
<td>MDHAQ FAST4 fibromyalgia</td>
<td>1.858 (0.530; 3.187)</td>
</tr>
<tr>
<td>assessment screening tool</td>
<td>1.164 (0.228; 2.103)</td>
</tr>
<tr>
<td>MDHAQ MDS2 (MDHAQ depression screening)</td>
<td>1.858 (0.530; 3.187)</td>
</tr>
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</table>

**REFERENCES:**

AB0250  PATIENT BELIEFS AND FEARS IN RHEUMATOID ARTHRITIS ASSESSED BY QUESTIONNAIRE FOR ARTHRITIS DIALOGUE

Keywords: Rheumatoid arthritis, Quality of care
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Background: Misinterpretation of patient beliefs can complicate shared decision making in rheumatoid arthritis (RA) leading to inadequate treatment adherence. Objectives: The aim of this study was to determine patients' beliefs and fears about their disease and its treatment.

Methods: This is a cross sectional study conducted among patients diagnosed with RA based on ACR/EULAR criteria. All patients completed the Arthritis Dialogue Questionnaire (QuAd) which included 21 opinion statements that they scored from 0 (totally disagree) to 10 (totally agree). A score of more than 7 was interpreted to mean the patient significantly agreed with the opinion. The beliefs in this questionnaire include those that are supported by scientific evidence and those that are inconsistent with current medical opinion.

Results: A total of 56 RA patients were included in this study. There were 53 females (94.6% of cases) and 3 males (5.4%). The mean age of participants was 51.5 ± 11.7 years [21-74 years]. The average duration of disease was 11.5 ± 8.6 years [1-40 years]. The mean of DAS 28 ESR and DAS 28 CRP were respectively 4 ± 1.5 and 3.4 ± 1.5. The socio-economic status was low in 14 patients (25% of cases). 19.6% of patients were illiterate and 50% of patients had no education beyond primary level. Twenty-four patients (42.8%) believed that the onset of RA and its flare-ups were due to physical overload. As a result of these false beliefs, these same patients did not believe that doing sport or a physical activity can reduce flare-ups. Sixteen patients (28.5%) believed that RA was triggered by an emotional shock and 10 (17.8%) patients considered that flare-ups of the disease are triggered by psychological factors. The belief that the disease has a genetic cause was reported by 11 patients (19.6%). Uncertainty about disease progression was reported by 31 patients (55.3%) and 19 patients (33.9%) thought that all treatments have negative effects in the long term. The relationship between change in the weather and disease flare-ups was reported by 10 patients (17.8%).

Conclusion: The most widely held beliefs were related in our study to uncertainty about disease progression, physical and psychological factors that may trigger the disease, and fears about side effects of treatments. It is important to understand patients' beliefs about RA in order to optimize the adherence to treatment and to encourage patients to take up healthy lifestyles and habits that are beneficial for their disease management.

REFERENCES:

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Disclosure of Interests: None Declared.
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AB0252  IMPACT OF ADHERENCE TO THE MEDITERRANEAN DIET ON DISEASE ACTIVITY IN PATIENTS WITH RHEUMATOID ARTHRITIS

Keywords: Rheumatoid arthritis, Disease-modifying drugs (DMARDs), Diet and nutrition
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Background: The Mediterranean diet (MD), mainly consists of olive oil, cereal products, fresh or dried fruit and vegetables, nuts, a moderate amount of dairy and meat, and many condiments and spices, has been suggested to have a beneficial effect on mortality and cardiovascular diseases. However, there is limited evidence regarding its impact on rheumatoid arthritis (RA) disease activity.

Objectives: The aim of this study was to assess association between adherence to MD and disease activity in RA patients.

Methods: In this cross-sectional study, we included patients with RA in remission or low disease activity. Patients with intestinal disease and smokers were not included. Socio demographic data (age, sexe, educational level and living area) were recorded. Tender and Swollen Joint Count (T/SJC), Disease Activity Score (DAS28), Clinical Disease Activity Index (CDAI) and Score Disease Activity Index (SDAI) were used to access disease activity. Levels of C-reactive protein (CRP) and hemoglobin (Hb) were determined. Medication (paracetamol, Non Steroidal Anti-inflammatory Drugs (NSAIDs) and Disease-modifying antirheumatic drugs (DMARDs)) were recorded. We assessed MD adherence through a 14-item questionnaire in RA patient. The MD adherence score was classified as follows: good adherence (≥ 10 points) and low and medium adherence (≤ 9 points). We divided patients into two groups: G1: good adherence and G2: low and medium adherence to MD. We compared parameters of G1 and G2 using the Mann-Whitney U test.

Results: We enrolled 39 patients (34 female) with mean age of 52.74 ± 11.31 [20-74] years. Most of patients lived in rural area (61.5%). Half of patients (53.8%) had primary school level. The mean disease duration was 8.68 ± 6.6 years. The mean CRP and Hb levels were respectively 2.9 ± 9.67 [0-21] and 11.72 ± 1.14 [10-14]. The mean DAS28, CDAI and SDAI were respectively: 2.06 ± 0.71 [1-3.1], 5.46 ± 3.4 [1-10] and 8.26 ± 5.62 [2-28]. The most of patients were on paracetamol (53.9%) and conventional synthetic DMARDs (82.1%). NSAID were used by 35.9% of patients. The mean MD score was 9.1 ± 2.67 [4-12]. G1 enrolled 20 patients and G2 19. No significant differences emerged in the distribution of sexe, age, living area and education level between two groups. G1 had significantly lower disease activity in comparison to G2: median [extrema] TJC [0 [0-1] vs 1 [0-2], p=0.02], DAS28 [1.7 [1-3] vs 2.2 [1.7-3.1], p=0.001], CDAI [2 [1-7] vs 9 [3 -11] p<0.001] and SDAI [4 [2 -9] vs 11 [5 -30], p<0.001]. No significant differences was observed in SJC and CRP level, p=0.11 and p=0.22 respectively. However, Hb levels were higher in G1 (13 [13-14]) than in G2 [10 [10-13], p<0.001]. G2 had higher paracetamol and NSAID consumption with 84.3% vs 57.9% and 57.9% vs 84.3 % respectively. Less use of biological DMARD was observed in G1 since all patients were on conventional synthetic DMARDs.