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 antirheumatic therapy were interviewed. We assessed disease activity by the Disease Activity Score (DAS28). RA parameters in a population of elderly patients.

**Results:** We noted a female predominance (63 women and 7 men) with an average age of 57 ± 10.6 years [29-81]. At the time of the study, the 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 3.3 ± 1.13 [1.14-5.92]. 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 RAID score was 4.72 ± 2.11 [0.6-9.48]. The RAID score was positively correlated with the degree of interference of RA on domestic work (p<0.001) and professional work (p=0.013). No correlation was noted between the impact of RA and the decrease of domestic productivity (p=0.511), professional productivity (p=0.109) or the absenteeism (p=0.248). The mean value of HAQ score was 1.04 ± 0.61 [0.2-6.89]. 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 (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:**

N. Rodwell 1,2,3, G. Hassett 1,2, P. Bird 1, T. Pincus 1, J. Descallar 1, 1Fattouma Bourguiba Hospital, Rheumatology, Monastir, Tunisia; 2Ingham Institute for Applied Medical Research, Rheumatology, Liverpool, Australia; 3UNSW Sydney, Medicine and Health, Sydney, Australia; 2RUSH University Medical Center, Rheumatology, Chicago, United States of America

**Background:** A physician global assessment (DOCGL) 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 (DOCFIN), damage (DOCSTR), and distress (DOCDAM), 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 RA activity measure outcomes.

**Results:** In 173 RA patients, variation in RheuMetric DOCFIN was explained significantly by SJC and inversely by disease duration, DOCSTR by fibromyalgia and depression.

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>B (95% CI)</th>
<th>Standardised B</th>
<th>p-value</th>
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<tbody>
<tr>
<td>DOCFIN r square&gt;0.56</td>
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<tr>
<td>Swollen joint count (SJC)</td>
<td>0.428 (0.342; 0.515)</td>
<td>0.641</td>
<td>&lt;0.001</td>
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<tr>
<td>Disease duration</td>
<td>-0.030 (-0.054; -0.005)</td>
<td>-0.137</td>
<td>0.018</td>
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<td>DOCSTR r square&gt;0.51</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Deformity/limited motion</td>
<td>0.153 (0.987; 0.220)</td>
<td>0.400</td>
<td>0.000</td>
</tr>
<tr>
<td>count (DUC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiographic Sharp van der</td>
<td>0.023 (0.007; 0.039)</td>
<td>0.248</td>
<td>0.006</td>
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<tr>
<td>Heijne score</td>
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<tr>
<td>MHDAG Physical function</td>
<td>0.265 (0.039; 0.492)</td>
<td>0.229</td>
<td>0.022</td>
</tr>
<tr>
<td>DOCDAM</td>
<td></td>
<td></td>
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<tr>
<td>assessment screening tool</td>
<td>0.164 (0.228; 2.103)</td>
<td>0.204</td>
<td>0.015</td>
</tr>
<tr>
<td>MHDAG MDS2</td>
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**Table 1.** Significant Variables Multivariable analyses

**Disclosure of Interests:** None Declared.

**DOI:** 10.1136/annrheumdis-2023-eular.4457


**Acknowledgements:** N.

**Disclosure of Interests:** None Declared.

**DOI:** 10.1136/annrheumdis-2023-eular.4549

**AB0249**

**RHEUMATOID QUANTITATIVE 0-10 PHYSICIAN ESTIMATES OF INFLAMMATION, DAMAGE, AND DISTRESS IN RHEUMATOID ARTHRITIS: VALIDATION AGAINST REFERENCE MEASURES**

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

**Disclosure of Interests:** None Declared.

**DOI:** 10.1136/annrheumdis-2023-eular.4549

**AB0248**

**USEFULNESS OF THE C-REACTIVE PROTEIN TO ALBUMIN RATIO IN ELDERLY PATIENTS WITH RHEUMATOID ARTHRITIS**

**Keywords:** Rheumatoid arthritis, Biomarkers

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**Background:** C-reactive protein (CRP) and erythrocyte sedimentation rate (ESR) are commonly used to assess rheumatoid arthritis (RA) activity. New biomarkers have been developed, such as the CRP to albumin ratio (CAR), which has been proposed as a new inflammatory marker for monitoring disease activity in RA [1].

**Objectives:** The aim of our study was to evaluate the relationship between the CAR and RA parameters in a population of elderly patients.

**Methods:** We conducted a cross-sectional study including patients followed up for RA and aged 65 years or older. CRP, albumin, ESR, orosomucoid and haptoglobin levels were dosed. We calculated the CAR for each patient.

**Results:** Sixty-three patients (11 men and 52 women) were included. The mean age was 68.17±4.35 years. The median duration of disease progression was 11 years with an IQR of [4-16]. The median CRP was 8.33 mg/L. Mean albumin level was 4.13±0.45 g/L. The median ESR was 47 mm at 1 hour. The mean orosomucoid level was 1.29±0.46 g/L. The mean haptoglobin value was 2.07±0.97 g/L. The mean CAR value was 0.51±0.81 [0.01-3.72]. After statistical analysis, we found a significant association between the CAR and the DAS28 (p=0.03). In addition, CAR was positively correlated with ESR, CRP and Orosomucoid (p<0.001, p=0.01 and p=0.002, respectively). In addition, this ratio was significantly associated with HAQ score (p=0.01), and was higher in patients with major functional impairment (HAQ>2) (p=0.002). However, we did not find significant association between CAR and age, duration of evolution, VAS of pain, seropositivity, structural damage or with the use of corticosteroids.

**Conclusion:** Our study showed the association of the CAR with DAS28, inflammatory biomarkers and functional impairment among elderly RA patients. This suggests that this ratio could be a reliable tool as a prognostic index to assess disease activity and inflammation in this population.

**Disclosure of Interests:** None Declared.

**DOI:** 10.1136/annrheumdis-2023-eular.4549

**AB0247**

**WHICH PARAMETERS INFLUENCE DOMESTIC AND OCCUPATIONAL PRODUCTIVITY IN RHEUMATOID ARTHRITIS**

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

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**Objectives:** A cross-sectional assessment was performed at one routine care visit from July 21, 2023 by guest. Protected by copyright.http://ard.bmj.com/ Ann Rheum Dis: first published as 10.1136/annrheumdis-2023-eular.4529 on 30 May 2023. Downloaded from http://ard.bmj.com/ on July 21, 2023 by guest. Protected by copyright.