16 years old or older. We define the month patients met the above criteria for the first time in this database as the index month. We excluded patients who were prescribed any DMARDs during the first 12 months from MTX users and did not have prescription of any TT during the first 12 months from TT users (i.e., prevalent users). Among the study population, we divided patients into 3 groups according to their age at the index month; young group (16-64), elderly group (65-74), and older elderly group (≥75). The observation started from the index month and ended at 36 months later, the last month of the exposure of DMARDs, the month of loss of follow-up, or September 2019, whichever came first. HI was defined by ICD10 code with one prescription of prednisolone for each infection during hospitalizations. Some of HI were defined by ICD10 code alone.

**Results:** In this study, 8269, 6454, 5745 patients with RA were included in the young, elderly, and older elderly groups, respectively. The incidence rate (IR) of HI ([100 patient-years [PY]) ([95%CI]) in the young group, 5.8 (5.3-6.3) in the elderly group, and 12.0 (11.2-12.8) in the older elderly group. The IR rate (IRR) of HI (reference: the young group) was 1.7 [1.5-1.9] in the elderly group and 3.6 [3.2-4.0] in the older elderly group. In the young group, the IR of HI in TT users vs MTX users was significantly elevated (1.8 [1.5-2.1]), whereas, those of the elderly and the older elderly groups were significantly decreased (IRR 0.8 [0.7-0.9] for elderly; 0.6 [0.5-0.7] for older elderly). Concomitant use of immunosuppressive DMARDs or prednisolone ≥10mg/day with TT became less (IRR 0.8 [0.7-0.9] for elderly; 0.6 [0.5-0.7] for older elderly). Concomitant use of immunosuppressive DMARDs or prednisolone ≥10mg/day with TT became less (IRR 0.8 [0.7-0.9] for elderly; 0.6 [0.5-0.7] for older elderly).

**Conclusion:** The elderly and older elderly patients had significantly higher risks of HI compared to the young. The risk of HI under the TT compared to MTX was decreased in the elderly patients, probably due to adjusting for treatment by aging. The risk of HI under the TT compared to MTX was decreased in the elderly patients, probably due to adjusting for treatment by aging.

Methods: Descriptive observational study included RA patients diagnosed according to ACR / EULAR 2010 randomly recruited between June and September 2019 at University Hospital “Dr. José Eleuterio González” in Monterrey, Mexico. Beck Depression Inventory (BDI) and Rheumatoid Attitude Index (RAI) were applied for measure depression and LH, to measure disability Health Assessment Questionnaire (HAQ-DI) was applied. CDAI and DAS28-PCR scales were used for mental disease activity.

Descriptive analysis was carried out, with measures of central tendency and dispersion. Spearman correlation were used for comparisons, according to the distribution of the variables. A p < 0.05 was considered statistically significant.

**Results:** A total of 177 patients were included, demographic and clinic features are presented in table 1. Prevalence of LH was 94.5% (167/177); 60% (100/167) mild levels (9-15) and 33% (57/167) high levels (≥15). A significant correlation was found between higher levels of dysfunctions and BDI and higher levels of LH (rho = 0.338; p = 0.001). There was a positive association when measuring CDAI (rho = 0.235; p = 0.002) BDI (rho=0.278 P<0.001) and DAS28-PCR (rho=0.166; p=0.027) with higher levels of LH. There was no association found between other variables as gender, years of diagnosis of RA, years of study or presence of comorbidities like fibromyalgia or osteoarthritis.

**Conclusion:** In this study the prevalence of LH was high >90%, mainly in mild levels. Dysfunctionalism seems to be the factor most associated with the presence of depression and LH. Rheumatologist should consider the high levels of LH, to assess patients in order to obtain a better outcome.

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**Disclosure of Interests:** Akira Fujita Consultant of: None declared.

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<th>Table 1. Demographic and clinical characteristics of the patients, HAQ-DI Health Assessment Questionnaire RAI Rheumatoid attitude index, DAS28-PCR Disease Activity Score CDAI Clinical disease activity index BDI Beck Depression Inventory</th>
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**Conclusion:** In this study the prevalence of LH was high >90%, mainly in mild levels. Dysfunctionalism seems to be the factor most associated with the presence of depression and LH. Rheumatologist should consider the high levels of LH, to assess patients in order to obtain a better outcome.

**Table 2. Correlation between learned helplessness and clinical variables**

**Gender**

- BDI (mean), DE 52.16 (12.8)
- Years of study, SD 8.3 (3.6)
- Years with RA, mean 8.2 (8.0)
- RA (mean), SD 13.83 (3.9)
- HAQ-DI (mean), SD 0.67 (0.77)
- CDAI (mean), SD 12.0 (11.4)
- DAS28-PCR (mean), SD 2.4 (0.6)
- BDI (mean), DE 9.30 (9.7)
- LH, n (%) 168/177 (94.5%)
- High levels 10/177 (61%)
- Low levels 57/177 (33%)

**Conclusion:** In this study the prevalence of LH was high >90%, mainly in mild levels. Dysfunctionalism seems to be the factor most associated with the presence of depression and LH. Rheumatologist should consider the high levels of LH, to assess patients in order to obtain a better outcome.

**Table 2. Correlation between learned helplessness and clinical variables**

**BDI Beck Depression Inventory**
Background: Rheumatoid Arthritis (RA) and Psoriatic arthritis (PsA) are both chronic, progressive inflammatory arthritis that can cause significant disability and morbidity. Depression in RA has been associated with higher levels of disease activity, pain, fatigue, work disability, lower treatment compliance and increased suicidal risk and mortality [1]. PsA patients suffer from psoriasis and joint involvement; hence have greater odds of depression by 2.1 times compared with RA [2].

Objectives: To compare the prevalence rates of depression and anxiety and its associated factors between RA and PsA patients in Hospital Putrajaya.

Methods: A cross sectional survey using the Hospital Anxiety and Depression Scale (HADS) questionnaire were distributed to 300 patients who attended rheumatology outpatient clinic from February – April 2019. The HADS was categorized into 3 groups based on their scores 0-7 (Normal); 8-10 (Borderline); and 11-21 (Abnormal). Data on patient demographics and components of disease assessment scores were recorded. Disease activity was assessed using DAS28-ERP for all patients. Additional evaluation using Bath Ankylosing Spondylitis Disease Activity Score (BASDAI) and body surface area (BSA) were done for PsA patients. P value of < 0.05 was taken as significant.

Results: In total, 205 RA and 73 PsA patients were eligible for analysis. Majority of the patients were female, Malay and married for both groups. The mean age group for RA and PsA were 56.2 ± 11.9 years and 51.0 ± 14.6 years. The mean duration of disease for RA were 8 ± 10 years; while for PsA were 6 ± 11 years. The prevalence rates of depression and anxiety for RA were 8.3% and 13.7%; and PsA were 9.6% and 17.8% respectively. Borderline scores for depression occurred in 16.1% of RA patients and 12.3% for PsA. Twenty percent of RA patients (n=41) and twenty-four percent of PsA patients (n=18) scored borderline for anxiety. The significant positive correlations with depression and anxiety in RA include high disease activity scores (r = 0.27; r = 0.31), number of tender joints (r = 0.26; r = 0.24) and pain (r = 0.29; r = 0.27). Higher number of swollen joints significantly correlated with depression (r = 0.16) but not with anxiety. RA patients with Ischaemic Heart Disease (IHD) a heart failure have higher depression scores (p < 0.05). As for PsA group, high BASDAI score (anxiety; r = 0.34; depression; r = 0.26) and psoriasis involving head and neck region (p < 0.05) were significant associated factors. Age was inversely correlated with anxiety in the PsA group.

Conclusion: There is higher prevalence of anxiety in both RA and PsA as compared to depression. Higher disease activity scores were associated with depression and anxiety in both RA and PsA with axial involvement.

References:

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FR0078 CHARACTERISTICS OF DIFFICULT-TO-TREAT RHEUMATOID ARTHRITIS
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Background: Despite remarkable progress in therapy, not a few patients with rheumatoid arthritis (RA) have not achieved treatment target. Various factors can be ascribed to difficult-to-treat RA, however, little is known about their characteristics.

Objectives: To clarify characteristics of patients with difficult-to-treat RA in real-world.

Methods: We reviewed all consecutive RA patients in Keio University Hospital between 2016 and 2017 and collected medical information. We defined patients in moderate disease activity and high disease activity according to disease activity score for 28 joints (DAS28) at the last visit despite more than one year treatment for RA as difficult-to-treat RA and analyzed their clinical characteristics.

Results: A total of 1693 patients with RA were enrolled in the analysis. The mean age at the last visit was 64 years old, female was 83%, and the mean disease duration was 11.9 years. Rheumatoid factor and anti-cyclic citrullinated peptide were positive for 76% and 75% of the patients, respectively. The initial treatment were conventional synthetic disease modifying anti-rheumatic drugs in 73%, biologic agents or Janus kinase (JAK) inhibitors in 57%, and glucocorticoids in 13%. Disease activity according to DAS28 was remission in 65%, low disease activity in 21%, and moderate/high disease activity in 14%, which was defined as difficult-to-treat RA. Characteristics of difficult-to-treat RA were the mean age of 70 years old, female of 89%, and the mean disease duration of 11.9 years.

Conclusions: Despite remarkable progress in therapy, not a few patients with rheumatoid arthritis (RA) have not achieved treatment target. Various factors can be ascribed to difficult-to-treat RA, however, little is known about their characteristics.

References:

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