

at least one ICD10 code (M300, M301, M313, or M318); 2) having at least one prescription of oral corticosteroids with prednisolone-equivalent dosage  $\geq 30$  mg/day, methylprednisolone pulse therapy, immunosuppressive drugs (cyclophosphamide [IVCY], methotrexate, or mycophenolate mofetil), or rituximab (RTX) during hospitalization between April 2008 and April 2017; and 3) having at least 7 days of hospitalization. The observation started from the next day of discharge from the first hospitalization for RT and ended at 24 months later, the month of loss of follow-up, or April 2017. We described the frequency of hospitalization and calculated direct medical costs (per month) during the observation. We analyzed medical costs from a societal perspective. We classified reasons of hospitalization into 3 categories; intensification of treatments for AAV, AAV MT including IVCY or RTX treatments, and comorbidities (infection, cardiovascular disease [CVD], malignancy, and others) using ICD10 codes plus treatments or interventions during the hospitalization.

**Results:** In this study, 1,703 patients with AAV were included. The median [IQR] age was 72 [63, 79] years and 55.7% were female. The total number of hospitalization was 1,897 in 863 patients (50.7%). Among the hospitalizations, 296 hospitalization in 235 patients were categorized as intensification of treatments for AAV, 627 hospitalization in 297 patients were AAV MT, and 974 hospitalization in 572 patients were categorized as comorbidities. In the last category, infections were most frequent (220), followed by malignancy (54) and CVD (15). The mean direct medical costs per month was 20,945 EUR (1 EUR=125 JPY) in patients with hospitalization and 599 EUR in those without. Patients with hospitalization due to intensification of treatments for AAV had the highest direct medical costs (3,000 EUR), followed by those with hospitalization due to comorbidities (2,001 EUR), and those with hospitalization due to AAV MT (1,649 EUR).

**Conclusion:** More than half of the patients had hospitalization during MT, and hospitalization due to comorbidities were most frequent. The mean direct medical costs in patients with at least one hospitalization was approximately 3.5 times as high as that in those without hospitalization.

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#### AB1191 AWARENESS OF PRESCRIPTION DRUGS FOR RHEUMATOID ARTHRITIS AMONGST PATIENTS - A COMPARISON OF THE RESULTS FROM 2014 AND 2018 SURVEYS-

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**Background:** Treatment of rheumatoid arthritis (RA) is based on drug therapy. With the increasing number of effective drugs being authorized for use and generic drugs becoming available in the market, patients with RA now have an abundance of drugs as treatment options.

**Objectives:** To conduct a survey of RA patients to evaluate their knowledge about the prescribed drugs, their names, and the respective categories.

**Methods:** In 2014 and 2018, two different surveys were done in which RA patients were interviewed regarding the name of biologics (trade name) and

other oral medications (category and trade name of anti-rheumatic drugs, steroid drugs and anti-inflammatory analgesics). The results of the two investigations are compared in this study.

**Results:** A total of 135 (34 men and 101 women) and 184 patients (31 men and 153 women) were interviewed in the surveys done in 2014 and 2018, respectively. In the 2014 survey, the mean age of the patients was 58.5 years (range: 25-88 years), while in the 2018 survey, the mean age of the patients was 61.0 years (range: 14-84 years). The various biologics prescribed to the patients who participated in the 2014 vs. 2018 surveys were as follows: infliximab (27 vs. 22), etanercept (11 vs. 9), adalimumab (14 vs. 16), tocilizumab (43 vs. 71), abatacept (29 vs. 46), golimumab (7 vs. 11), certolizumab-pegol (4 vs. 3), sarilumab (0 vs. 2), and tofacitinib (0 vs. 5), respectively. The number of patients who were prescribed various categories of oral medications, as stated in the 2014 vs 2018 surveys, was as follows: anti-rheumatic drugs, 104 (77.0%) vs. 131 (71.2%); steroid drugs, 36 (26.7%) vs. 44 (23.9%); and anti-inflammatory analgesics, 49 (36.3%) vs. 61 (33.2%), respectively. The number of patients that took medications without any knowledge about the drug name or its category, as reported in the 2014 vs. 2018 surveys was as follows: anti-rheumatic drugs, 24 (23.1%) vs. 42 (32.1%); steroid drugs, 11 (30.1%) vs. 24 (54.5%); and anti-inflammatory analgesics, 15 (30.6%) vs. 17 (27.9%), respectively. In the corresponding years, the number of patients who responded negatively to the question whether they knew about the trade name of the biologics prescribed to them was 15 (11.1%) and 26 (14.1%), in the 2014 and 2018 surveys, respectively. The mean age of the patients who expressed lack of knowledge with respect to the trade name of the biologics prescribed to them was 67.3 and 69.5 years old, in the 2014 and 2018 surveys, respectively; thus suggesting the impact of old age on awareness about prescribed drugs. Many of the biologics prescribed to these patients were intravenous drip formulations, and only one patient was prescribed self-administered subcutaneous injection formulation. This implied that the majority of patients who expressed lack of knowledge regarding the trade name of the biologics were administered the drug by health-care providers at the hospital.

**Conclusion:** Our investigation about RA patients' understanding of the trade names and category of the drugs they were administered revealed that 20 to 50% of the patients were unaware about the oral medications they were receiving. In particular, there were many patients who had misinterpreted steroidal drugs as analgesics. In addition, approximately 10% of the patients lacked an understanding of drugs that require cautious use due to their potential for causing adverse events. For those biologics administered at the hospital by health-care providers, the patients had a lack of inclination to learn the drug name. In today's era, with the emergence of generic drugs and an increase in the drug categories, it is not easy for the aging patients to understand and remember information about the prescription drugs. Hence, it is necessary to come up with measures to tackle this situation.

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#### AB1192 THE UNDERWORLD OF DEPRESSIVE SYMPTOMS IN RHEUMATIC DISEASES: OVERLOOKED, UNRECOGNIZED OR UNPERCEIVED?

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**Background:** The concomitant presence of depressive symptoms and rheumatic diseases (RDs) impose a considerable economic and social burden on the communities as they are associated with numerous deleterious outcomes such as increased mortality, work disability, higher disease activity and worsening physical function, higher pain levels and fatigue. Despite growing interest on depressive symptoms burden in RDs, current patient perception on this topic is unknown.

**Objectives:** Italian patients with RDs were invited to participate in an online study gauging the presence and the perception of depressive symptoms using the Patient Health Questionnaire (PHQ-9).

**Methods:** This was a cross-sectional no-profit online study to screen the presence and the perception of depressive symptoms in RDs patients. All participants gave their consent to complete the PHQ-9 and they were not remunerated. Completion was voluntary and anonymous. The PHQ-9 rates the frequency of symptoms over the past 2 weeks on a 0-3 Likert-type scale. It contains the following items: anhedonia, depressed mood, trouble sleeping, feeling tired, change in appetite, guilt or worthlessness, trouble concentrating, feeling slowed down or restless, and suicidal thoughts. Patients were stratified as: <4 not depressed, 5-9 sub-clinical or mild depression, 10-14 moderate depression, 15-19 moderately severe depression and 20-27 severe depression. The survey was disseminated by ALOMAR (Lombard Association for Rheumatic Diseases) between June and October 2019.

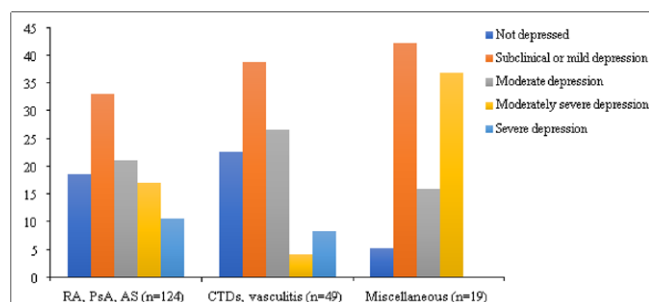
**Results:** 192 patients took part in the study: 170 female with median age 50 years. Among respondents only 35 (18.2%) were not depressed. Depression was sub-clinical or mild in 68 (35.4%), moderate in 42 (21.9%), moderately severe in 30 (15.6%), and severe in 17 (8.9%). 16 (8.3%) of respondents declared to have depressive symptoms and 7 of 16 were under psychiatric therapy.

Moreover, patients were grouped according to diagnosis.

124 respondents had inflammatory arthritis (rheumatoid arthritis, psoriatic arthritis and ankylosing spondylitis). 23 (18.5%) were not depressed. Depression was sub-clinical or mild in 41 (33%), moderate in 26 (21%), moderately severe in 21 (17%), and severe in 13 (10.5%). Among them, 8 (6.5%) declared to have depressive symptoms and 3 of 8 were under psychiatric therapy.

49 respondents had a connective tissue disease or vasculitis. 11 (22.5%) were not depressed. Depression was sub-clinical or mild in 19 (38.8%), moderate in 13 (26.5%), moderately severe in 2 (4%), and severe in 4 (8.2%). Among them, 3 (6%) declared to have depressive symptoms and 1 of 6 were under psychiatric therapy.

19 respondents had other rheumatic diseases. 1 (5.3%) was not depressed. Depression was sub-clinical or mild in 8 (42.1%), moderate in 3 (15.8%), moderately severe in 7 (36.8%). Among them, 5 (26.3%) declared to be depressed and 3 of 5 were under psychiatric therapy.



**Conclusion:** Our study confirmed that the overall real-life burden of depressive symptoms is relevant in all RDs. At the same time, these results highlighted that depressive symptoms are overlooked by physicians and unperceived by patients since fewer than half of respondents (46.4%) had a clinical depression (PHQ-9>10). These results suggested that screening for depression should form part of the routine clinical assessment of RD patients.

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## AB1193 WORK INSTABILITY AMONG POLISH RHEUMATOID ARTHRITIS PATIENTS

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**Background:** Rheumatoid arthritis (RA) affects patients' capacity to work. Rheumatoid Arthritis Work Instability Scale (RA-WIS) is a reliable method to measure work instability (WI) (1–3). We lack data on relationship between RA and work instability among Polish patients.

**Objectives:** The aim of our study was to assess WI and associated factors among patients with RA.

**Methods:** 315 patients from three rheumatology centres were enrolled and filled questionnaires including demographic and self-reported clinical data, RA-WIS, and The Health Assessment Questionnaire (HAQ). Swollen and tender joints count (SJC, TJC) were assessed by attending physician and current erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) were collected. We excluded 41 patients due to incorrectly filled form and analysed questionnaires of 274 patients. DAS28 (Disease Activity Score in 28 joints) and DAS28-CRP were calculated. We performed statistical analysis with Statistica v. 13.3 using Mann-Whitney U test, chi-square test and Spearman's correlation

**Results:** 140 (51%) patients were employed and their characteristics are presented on Table 1. In univariable analysis we identified following risk factors for high risk WI: moderate-to-high disease activity (DAS28 $\geq$ 3.2 – OR 2.29, 95%CI 1.06-4.96, p=0.033; DAS28-CRP $\geq$ 3.2 – OR 2.34, 95%CI 1.04-5.27, p=0.038), ESR  $\geq$ 30mm/h in women and  $\geq$ 20mm/h in men (OR 2.65, 95%CI 1.20-5.89, p=0.010), CRP $\geq$ 1mg/dL (OR 4.02, 95%CI 1.78-9.10 p<0.001), HAQ-DI>1.0 (OR 2.23, 95%CI 1.04-4.81, p=0.037) and at least moderate pain on visual analogue scale (VASp  $\geq$ 4.5 cm - OR 5.31, 95%CI 2.36-11.96, p<0.001). Correlations were moderate between RA-WIS and VASp (R<sub>s</sub>=0.59, p<0.001) and HAQ-DI (R<sub>s</sub>=0.52, p<0.001) whereas weak with disease activity indices (DAS28 - R<sub>s</sub>=0.31, p<0.001; DAS28-CRP - R<sub>s</sub>=0.28, p<0.001).

**Table 1. Demographic and clinical characteristics of employed patients according to work instability risk, N(%) or mean(±SD).**

Characteristic	RA-WIS score	
	low-to-moderate (0-17)	high (>17)
Patients	94 (67.1%)	46 (32.9%)
Sex, female	73 (77.7%)	38 (82.6%)
Age (years)	47.9 (±11.8)	50.4 (±9.3)
Disease duration (years)	13.0 (±8.4)	14.0 (±8.7)
RF, positive	68 (72.3%)	34 (73.9%)
ACPA, positive	59 (62.8%)	29 (63.0%)
ESR (mm/h)	18.3 (±16.0)	28.2 (±21.9)*
CRP (mg/dL)	0.6 (±1.0)	1.1 (±1.0)*
TJC	4.5 (±4.0)	7.6 (±6.3)*
SJC	2.7 (±3.0)	5.2 (±5.5)*
HAQ-DI	0.7 (±0.5)	1.1 (±0.5)*
pain - VAS 10 cm	3.9 (±1.9)	6.5 (±2.2)*
DAS28	3.5 (±1.2)	4.2 (±1.4)*
DAS28-CRP	3.9 (±1.0)	4.3 (±1.2)*

WI – work instability, RA-WIS – Rheumatoid Arthritis Work Instability Scale, RF – rheumatoid factor in IgM class, ACPA – anti-citrullinated protein antibodies, ESR – erythrocyte sedimentation rate, CRP – C-reactive protein, TJC – tender joints count, SJC – swollen joints count, HAQ-DI – Health Assessment Questionnaire Disability Index, VAS – visual analogue scale, DAS28 – Disease Activity Score in 28 joints

\*p<0.05, Mann-Whitney U test

**Conclusion:** Pain and disability are main factors associated with work instability among patients with RA.

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## AB1194 STRIKING DIFFERENCES IN THE COURSE OF OSTEOARTHRITIS (OA) COMPARED TO RHEUMATOID ARTHRITIS (RA) OVER THE FIRST 24 MONTHS OF RHEUMATOLOGY CARE AT ONE PRIVATE PRACTICE SETTING

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**Background:** Recent reports indicate that disease burden in osteoarthritis (OA) is similar to or greater than in rheumatoid arthritis (RA) when an identical measure is used to assess patients with either disease, generally an MDHAQ/RAPID3 (multidimensional health assessment questionnaire/routine assessment of patient index data). The data suggest that a traditional view that RA is more severe than OA no longer is valid at this time. One concern is that similar disease burdens in OA vs RA may result entirely from superior treatments for RA, and RA may be considerably more severe than OA at initial presentation.

**Objectives:** To analyze MDHAQ disease burden in patients with OA vs RA at initial visit and at 24-month follow-up in routine care at a single solo-rheumatologist private practice setting.

**Methods:** All patients at this setting complete an MDHAQ at each visit in the waiting area, prior to seeing the rheumatologist. The MDHAQ includes three 0-10 scores for physical function, pain visual numeric scale (VNS), and patient global VNS, which may be compiled into a 0–30 RAPID3, as well as a 0-10 fatigue VNS, and 0-16 rheumatoid arthritis disease activity index (RADAI) self-report painful joint count. Mean MDHAQ scores were analyzed