Background: EULAR recommendations emphasize the importance of suitable working conditions for people with Rheumatic diseases (RD). Thus, opportunities and choices at work need to be increased for people with rheumatic diseases. Conversely, the COVID-19 pandemic has challenged the working population and particularly those with chronic conditions, such as those with RD. However, there is still a lack of reliable data.

Objectives: To depict contemporary real-life data regarding the work-related burden of disease among Greek patients with RD. To develop a White Paper with proposals to the State in order to facilitate people with rheumatic diseases to rejoin or be retained in the work force.

Methods: A 24-item quantitative questionnaire was uploaded in the website and social media of REUMAZEIN to capture patients' responses in respect to work life. The questionnaire was online accessible for a 45-day period (15/8-30/9/2020).

Results: The responses of 503 adult people with RD (M/F/NA 94/408/1), were available for analysis. Their age was stratified in decades (18-20 0.6%, 21-30 5.99%, 31-40 22.36%, 41-50 38.92%, 51-60 22.16% and over 60 9.58%); totally, 83.44% were in the "work-reproductive" period. The predominant RD types were RA 30.3%, SLE 22.8%, AS 20.2% and PsA 20.2%, respectively. Nearly 90% were on medication, namely 40% on biologics, 33% on methotrexate (as a monotherapy or combined therapy), 16.2% on steroids. A minority were either on alternative therapies (2.8%) or off medication (7.5%), respectively. Most of the people were still employed (72.9%) on a full-time schedule (57.7%) and 4.8% on a part-time one, due to their RD. The rest of them (27.1%) were out of work either due to RD (17%) or retirement (1.7%) or for unrelated to the RD reasons (8.4%). The main source of financial income was personal work (52.4%), followed by a family member support (31.1%), while 11% had either a state pension (8%) or a subsidy (3.2%). In respect to the daily house-keeping, half of them (59.3%) had a varying difficulty (mild 36.3%, severe 23%) and 0.8% considered themselves as "unable". The diagnosis was mostly established (81%) prior to the work onset. Post-diagnosis, RD had not affected their working schedule in 47.2%, 17% continued to work with respective adaptations but 30% had quitted or resigned from their work 1-7 years later. RD was notified to the work environment by 85%. As for a compassionate work management, 46% reported no change, 28% an improved policy but 28% a worse one. The development of relative adaptations in the work setting (as chairs, devices, flexible schedule) were considered as favorite factors easing the work by 85%. 17% reported an employer's knowledge on RD related working legislation, 43% the contrary and another 38.7% wished for a future employer's awareness. Most of the participants (58.9%) had no personal information on this field but were eager to get it. The uneventful impact of RD on finding or keeping a job was registered by 77.4% and 66.9%, respectively. During COVID, most of the participants (53%) have not asked for an RD-related leave and only 24.2% chose to telework, a policy that raised mutual satisfaction in 19%. Of note, the working conditions have not mainly been altered (67%) after the end of the 1st quarantine.

Conclusion: This study highlighted that although RD predominate in females, women are more willing to participate in such projects (F 90%). The financial income was mainly based on a personal or a family member work reimbursement (83%), while 11% depended on a state pension or subsidy. The majority has notified the RD to their work environment (85%) while another 85% considered as favorite factors easing the work, several adaptations in the work setting such as chairs, devices, flexible schedule etc. Interestingly, 60% of the participants were unaware of the beneficial legal work rights and nearly 70% of them believe that RD is an obstacle for employment or working maintenance. COVID has not dramatically impaired their work life although the use of teleworking should be strengthened.

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.1385

Deconditioning in rheumatic disease, time to recognise and tackle it

OP0318

TREATMENT TAPERING AND WITHDRAWAL IN RHEUMATOID ARTHRITIS WITH STABLE REMISSION - FINAL ANALYSIS OF THE RETRO STUDY

M. Hagen¹, K. Tascilar¹, M. Reiser¹, L. Valor¹, J. Haschka², A. Kleyer¹, A. Hueber³, B. Manger¹, J. Cobra⁴, C. Figueredo⁴, S. Finzel⁵, H. P. Tony⁶, J. Wendler⁷, S. Kleinert⁷, F. Schuch⁷, M. Ronneberger⁷, M. Feuchtenberger⁸, M. Fleck⁹, K. Manger¹⁰, W. Ochs¹¹, M. Schmitt-Haendle¹¹, H. M. Lorenz¹², R. Alten¹³, J. Henes¹⁴, K. Krueger¹⁵, J. Rech¹, G. Schett¹. ¹Friedrich-Alexander-University Erlangen-Nuremberg (FAU), Medical Clinic 3, Rheumatology and Immunology, Erlangen, Germany; ²Hanusch Hospital of the WGKK and AUA Trauma Center, 1st Medical Department at Hanusch Hospital, Ludwig Boltzmann Institute of Osteology, Vienna, Germany; ³Sozialstiftung

Bamberg, Section Rheumatology, Bamberg, Germany; ⁴Instituto de Reumatologia, Sao Paulo, Brasil, Instituto de Reumatologia, Sao Paulo, Brazil; ⁵University Medical Center Freiburg, Department Innere Medizin, Klinik für Rheumatologie und Klinische Immunologie, Freiburg, Germany; ⁶Klinikum der Universität Würzburg, Medizinische Klinik 2, Rheumatologie/Klinische Immunologie, Würzburg, Germany; ⁷Rheumatologische Schwerpunktpraxis, Rheumatologische Schwerpunktpraxis, Erlangen, Germany; ⁸Kreiskliniken Altötting-Burghausen, Medizinische Klinik II, Sektion Rheumatologie und Klinische Immunologie, Burghausen, Germany; ⁹Asklepios Klinikum, Rheumatologie und Klinische Immunologie, Bad Abbach, Germany; ¹⁰Rheumatology Practice Bamberg, Rheumatology Practice Bamberg, Bamberg, Germany; ¹¹Internistisch-Rheumatologische Schwerpunktpraxis Bayreuth, Internistisch-Rheumatologische Schwerpunktpraxis Bayreuth, Bayreuth, Germany; ¹²Universität Heidelberg, Medizin 5, Heidelberg, Germany; ¹³Akademisches Lehrkrankenhaus der Charité - Universitätsmedizin Berlin, Innere Medizin II Rheumatologie, Klinische Immunologie, Osteologie, Berlin, Germany; ¹⁴Universitätsklinik Tübingen, Medizinische Abt. II (Onkologie, Hämatologie, Rheumatologie, Immunologie, Pulmonologie), Tübingen, Germany; ¹⁵Praxiszentrum St. Bonifatius München, Rheumatologie, Munich, Germany

Background: Due to better treatment strategies and higher remission rates the management of rheumatoid arthritis (RA) patients in sustained remission is of increasing interest (1). The Rheumatoid Arthritis in Ongoing Remission (RETRO) study investigated the possibility to taper and stop disease modifying anti-rheumatic drugs (DMARDs).

Objectives: To compare one-year remission and relapse rates in rheumatoid arthritis patients randomized to continued treatment, reduced treatment or gradual treatment withdrawal after stable remission under routine care.

Methods: Primary data of the phase III, randomized, controlled RETRO trial in RA patients with stable conventional synthetic and/or biologic DMARD treatment in sustained (>6 months) DAS28-ESR remission (<2.6 units). Patients were randomized 1:1:1 into three strategy arms (continuation of 100% DMARD dose, CONT; tapering to 50% DMARD dose, TAP; 50% tapering followed by withdrawal of DMARDs, STOP). The primary endpoint was the proportion of patients in sustained DAS28-ESR remission after 1 year.

Results: 316 RA patients in sustained remission were included, 303 were randomized (CONT: N=100; TAP: N=102; STOP: N=101) and 282 (93%) had complete data sets after 1 year (CONT: N=93; TAP: N=93; STOP: N=96; Table 1). After 1 year, 81.2%, 58.6%, 43.3% of patients, maintained their remission state over 1 year in the CONT, TAP and STOP arms, respectively (p=0.0004 with log rank test for trend; Figure 1). Hazard ratios for flare were 3.02 (95%CI 1.69 to 5.40) and 4.34 (95%CI 2.48 to 7.60) for the TAP and STOP arms. RA patients who flared were more likely to be female, have longer disease duration, RF/ACPA positivity and higher baseline DAS-28 scores with standardized mean differences >0.2. Serious adverse events were reported in 10.8%, 7.5%, and 13.5% in the CONT, TAP and STOP arms, respectively.

Table 1. Baseline Characteristics

	Group			
	Control	Reduce	Reduce/Stop	Overall
N	93	93	96	282
Age, mean(SD)	55.9 (12.7)	56.9 (13.0)	56.5 (13.3)	56.5 (13.0)
Female, n (%)	53 (57.0)	57 (62.0)	57 (59.4)	167 (59.4)
RF, n (%)	52 (55.9)	58 (62.4)	52 (54.2)	162 (57.4)
ACPA, n (%)	53 (57.0)	50 (54.9)	55 (57.3)	158 (56.4)
Disease duration, years, mean(SD)	7.6 (6.9)	7.8 (6.9)	6.8 (8.1)	7.4 (7.3)
Remission duration, months, mean(SD)	20.6 (18.0)	16.5 (15.9)	22.7 (30.4)	20.0 (22.6)
Biologics, n (%)	39 (41.9)	44 (47.3)	39 (40.6)	122 (43.3)
Methotrexate, n (%)	71 (76.3)	67 (72.0)	75 (78.1)	213 (75.5)
Other DMARDs, n (%)	24 (25.8)	20 (21.5)	16 (16.7)	60 (21.3)
Glucocorticoids, n (%)	27 (29.0)	23 (24.7)	17 (17.7)	67 (23.8)
CRP, mg/L, mean(SD)	0.3 (0.3)	0.5 (0.5)	0.5 (0.6)	0.4 (0.5)
ESR, mm/h, mean(SD)	11.3 (8.4)	12.2 (8.8)	13.0 (10.0)	12.2 (9.1)
Tender joint count, mean(SD)	0.2 (0.6)	0.0 (0.2)	0.1 (0.3)	0.1 (0.4)
Swollen joint count, mean(SD)	0.1 (0.3)	0.1 (0.3)	0.1 (0.4)	0.1 (0.3)
Physician VAS, mm, mean(SD)	1.8 (4.2)	2.6 (4.4)	2.0 (3.9)	2.1 (4.2)
Patient VAS, mm, mean(SD)	6.4 (9.0)	5.5 (8.3)	4.5 (8.4)	5.5 (8.6)
HAQ, standard, mean(SD)	0.2 (0.4)	0.2 (0.3)	0.2 (0.4)	0.2 (0.4)
HAQ, alternative, mean(SD)	0.2 (0.4)	0.1 (0.3)	0.2 (0.3)	0.2 (0.3)
DAS-28, mean(SD)	1.7 (0.7)	1.7 (0.6)	1.7 (0.6)	1.7 (0.6)
SDAI, mean(SD)	1.4 (1.5)	1.4 (1.5)	1.3 (1.3)	1.3 (1.4)
DAS-28 remission, n (%)	91 (97.8)	93 (100.0)	95 (99.0)	279 (98.9)
SDAI remission, n (%)	79 (87.8)	79 (84.9)	88 (92.6)	246 (88.5)
Boolean remission, n (%)	69 (75.8)	71 (76.3)	76 (79.2)	216 (77.1)

Conclusion: This randomized controlled study shows that half of RA patients in sustained remission relapse when tapering/stopping their DMARDs. Presence of autoantibodies, higher baseline DAS28-ESR and female sex are predictors for flares.

REFERENCES:

- [1] Schett G et al. Tapering biologic and conventional DMARD therapy in rheumatoid arthritis: current evidence and future directions. *Ann Rheum Dis*. 2016 Aug;75(8):1428-37.

Disclosure of Interests: Melanie Hagen Speakers bureau: advisory boards, Koray Tascilar Speakers bureau: advisory board, Michaela Reiser: None declared, Larissa Valor: None declared, Judith Haschka Speakers bureau: advisory board, Arnd Kleyer Speakers bureau: advisory board, Axel Hueber Speakers bureau: advisory boards, Bernhard Manger Speakers bureau: advisory boards, Jayme Cobra Speakers bureau: advisory boards, Camille Figuereido Speakers bureau: advisory boards, Stephanie Finzel Speakers bureau: advisory boards, Hans-Peter Tony Speakers bureau: advisory boards, Joerg Wendler Speakers bureau: advisory boards, Stefan Kleinert Speakers bureau: advisory boards, Florian Schuch Speakers bureau: advisory boards, Monika Ronneberger: None declared, Martin Feuchtenberger Speakers bureau: advisory boards, Martin Fleck Speakers bureau: advisory boards, Karin Manger: None declared, Wolfgang Ochs: None declared, Matthias Schmitt-Haendle: None declared, Hanns-Martin Lorenz Speakers bureau: advisory boards, Rieke Alten Speakers bureau: advisory boards, Jörg Henes Speakers bureau: advisory boards, Klaus Krueger Speakers bureau: advisory boards, Jürgen Rech Speakers bureau: advisory boards, Georg Schett Speakers bureau: advisory boards.

DOI: 10.1136/annrheumdis-2021-eular.2174

OP0319

OSTEOSARCOPENIA INCREASES THE RISK OF FALLS IN PATIENTS WITH RHEUMATOID ARTHRITIS: RESULTS OF A FOUR-YEAR LONGITUDINAL STUDY

M. Tada¹, Y. Yamada², K. Mandai³, N. Hidaka¹. ¹Osaka City General Hospital, Orthopaedic Surgery, Osaka, Japan; ²Osaka City University Medical School, Orthopaedic Surgery, Osaka, Japan; ³Osaka Saiseikai Nakatsu Hospital, Orthopaedic Surgery, Osaka, Japan

Background: Osteosarcopenia is defined as osteoporosis combined with sarcopenia. Both osteoporosis and sarcopenia are risk factors for falls and fractures in healthy individuals¹. The relationships of falls and fractures to osteosarcopenia in rheumatoid arthritis (RA) patients are unknown.

Objectives: The synergistic effect of osteoporosis and sarcopenia and the impact of osteosarcopenia on falls and fractures in RA patients were investigated using four years of data from a longitudinal study.

Methods: The data from a prospective, observational study (CHIKARA study: UMIN000023744) were examined. The patients were divided into four groups according to their baseline status: no sarcopenia and osteoporosis (SP-OP-); only sarcopenia (SP+OP-); only osteoporosis (SP-OP+); and both sarcopenia and osteoporosis (SP+OP+). Sarcopenia was diagnosed by the criteria of the Asia Working Group on Sarcopenia 2014². Patients with osteoporosis were defined as those having a therapeutic intervention for osteoporosis. The survival rate and Cox hazard ratio were analyzed using falls and fractures as endpoints, adjusted by age, sex, and body mass index.

Results: A total of 100 RA patients (female 78%, mean age 66.1 years) were enrolled. The number of SP-OP-, SP+OP-, SP-OP+, and SP+OP+ patients was 45, 17, 27, and 11, respectively. Their baseline characteristics are shown in Table 1. A total of 35 patients had falls, and 19 patients had fractures during the four-year follow-up. The fall-free survival rate in the SP-OP-, SP+OP-, SP-OP+, and SP+OP+ groups was 75.6%, 64.7%, 51.9%, and 36.4%, respectively; that of the SP+OP+ group was significantly lower than that of the other groups (P=0.021) (Figure 1). The fracture-free survival rate in the SP-OP-, SP+OP-, SP-OP+, and SP+OP+ groups was 86.7%, 82.4%, 81.5%, and 54.5%, respectively. That of the SP+OP+ group was relatively lower than that of the other groups (P=0.121). The hazard ratio of falls was significantly increased in the SP+OP+ group by 3.32-fold (95%CI: 1.01-10.9) compared to that in the SP-OP- group, whereas that in the SP+OP- and SP-OP+ groups was 2.58-fold (95%CI: 0.75-8.8) and 2.29-fold (95%CI: 0.94-5.6) higher, respectively. There were no significant differences compared to the SP-OP- group. The hazard ratio of fractures in the SP+OP+ group was increased 2.73-fold (95%CI: 0.61-12.2) compared to that in the SP-OP- group.

Table 1. Baseline characteristics of the four groups

	SA-OP-	SA+OP-	SA-OP+	SA+OP+	P value*
Female, %	73.3	58.8	88.9	100	0.027
Age, years	63 (49, 72)	69 (60, 79)	73 (64, 75)	73 (65, 81)	0.008
Disease duration, years	4.4 (1.0, 8.4)	4.0 (1.3, 8.9)	7.6 (1.5, 14.5)	10.5 (3.2, 26.5)	0.035
DAS28-ESR	3.14 (2.66, 3.70)	3.55 (3.01, 4.65)	3.93 (3.28, 4.63)	3.53 (2.48, 3.89)	0.01
mHAQ	0.25 (0, 0.375)	0.375 (0.125, 0.875)	0.375 (0.125, 0.875)	0.5 (0.125, 0.875)	0.065
MTX, mg/week, rate (%)	8.4 ± 2.9 (86.7)	8.7 ± 3.5 (70.6)	8.3 ± 2.8 (92.6)	6.8 ± 1.0 (90.9)	0.388
Glucocorticoid, mg/day, rate (%)	3.7 ± 1.9 (20.0)	6.3 ± 1.8 (11.8)	4.0 ± 1.7 (44.4)	3.8 ± 1.8 (18.2)	0.400
Body mass index, kg/m ²	23.4 ± 3.8	19.2 ± 2.3	21.7 ± 2.4	19.2 ± 2.0	<0.001

Data are shown as mean ± standard deviation (SD) or median (25th, 75th percentile).*: compared in four groups by Kruskal-Wallis test.

Figure 1. Fall-free survival rates of the four groups.

Conclusion: The survival rates with the endpoints of falls and fractures in RA patients with osteosarcopenia were lower during the four-year follow-up. In particular, the risk of falls increased with the synergistic effect of osteoporosis and sarcopenia in RA patients.

REFERENCES:

- [1] Dennison, E. M. et al. Fracture risk following intermission of osteoporosis therapy. *Osteoporos Int* **30**, 1733-1743, doi:10.1007/s00198-019-05002-w (2019).
- [2] Chen, L. K. et al. Sarcopenia in Asia: consensus report of the Asian Working Group for Sarcopenia. *J Am Med Dir Assoc* **15**, 95-101, doi:10.1016/j.jamda.2013.11.025 (2014).

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.942