correlation between seasonal changes and VAS pain score, nocturnal awakenings, TJC, and CRP.

Conclusion: Chronic inflammatory rheumatism activity was higher in winter. Health care professionals should take seasonal changes into account in order to improve therapeutic care.

Disclosure of Interests: None declared

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AB0887-HPR

CHARLSON COMORBIDITY INDEX (CCI) IN RHEUMATOID ARTHRITIS: CLASSIFICATION AND CORRELATIONS

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Background: Charlson Comorbidity Index[1] is a tool including age and chronic diseases assessing the comorbidity burden. The age and the comorbidity burden in RA patients determine the morbidity and mortality.

Objectives: To assess and classification of CCI in RA patients with usage of the health-care system (outpatient clinics) in a real-world setting.

Methods: 327 patients with RA from a large outpatient service of a central hospital were retrospectively reviewed. Demographic characteristics, treatment for RA and comorbidities were recorded. Charlson Comorbidity Index (CCI) was measured and classified as low, intermediate and high score for 1-2, 3-4 and ≥ 5 points, respectively. Its correlation with polypharmacy and necessity of biologic DMARDs was studied. Univariable and multivariable analyses were performed.

Results: Data from 327 RA patients (75,8% females, 24,2%males) with a mean $\pm$ SD age of 63 $\pm$ 11,8 years and disease duration 113 $\pm$ 63 months, were recorded.

CCI was 3 $\pm$ 1,2 points (mean $\pm$ SD) and maximum score was observed at 7 points. High score (≥ 5 points) was observed at 9,2% and in the majority the score was intermediate (3-4points) at 55%. All the RA patients with high score fulfilled the criteria of polypharmacy. Patients with high score had 9,7 times more probability of polypharmacy than the patients with low score ($p=0.09$, 1,4-2,5 95%CI).

70 patients were treated with biologic-DMARDs (21,7%), in the majority with TNF α inhibitors (16,5%). In RA patients receiving biologic-DMARDs was observed low or intermediate score of CCI. The most likely explanation is the severity of the disease that predominated, its complications and the possible overlap with other conditions.

Conclusion: The majority of RA patients had intermediate score of CCI. In patients with high score-meaning more comorbidities- polypharmacy was observed completely. Patients receiving biologic-DMARDs characterized with less comorbidities.

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EULAR SJÖGREN'S SYNDROME PATIENT REPORTED INDEX-FATIGUE SCORE AND HADS-DEPRESSION SCORE MEDIATE IDENTITY SCORE OF ILLNESS PERCEPTION QUESTIONNAIRE IN PATIENTS WITH PRIMARY SJÖGREN'S SYNDROME

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Background: Dryness, fatigue, and pain are common clinical manifestations assessed by EULAR Sjögren's Syndrome Patient Reported Index (ESSPRI)-Dryness, -Fatigue, -Pain scores in patients with primary Sjögren's syndrome (pSS). In addition, depression is also seen in these patients owing to the pattern of the chronic disease.

Objectives: The aim of the study was to assess the complex interactions among Depression status, Illness Perception, and prominent clinical manifestations evaluated by the ESSPRI (Dryness, Fatigue, and Pain) in patients with pSS.

Methods: In this cross-sectional study, 111 patients with pSS (M/F: 5/106; mean age: 52.9 $\pm$ 12.01 years) were included. The data were collected by clinical examination and a questionnaire regarding patient reported outcome measures (PROMs). Unstimulated (U-WSFR) and stimulated (S-WSFR) whole saliva flow rates of patients were calculated as ml/min. Hospital Anxiety and Depression Scale (HADS), Illness Perception Questionnaire-R (IPQ-R) and EULAR Sjögren's Syndrome Patient Reported Index were filled by patients. Increases in HADS score and subgroup scores of ESSPRI (Dryness, Fatigue and Pain) and IPQ-R dimensions regarding Identity, Consequences, and Emotional reflected poor conditions for patients. In addition, patients scored their disease activity (0: inactive-100: the worst activity) by using 100-mm visual analogue scale (VAS). After preliminary analysis, a mediation analysis was used to evaluate the relations among these variables.

Results: In the study, ESSPRI-Dryness score (6,27 $\pm$ 2,79) was associated with U-WSFR (0,40 $\pm$ 0,57) and S-WSFR (1,04 $\pm$ 0,86), (r:-0,4 $p=0.000$; r:-0,3 $p=0.004$). Moreover, patients reported disease activity score (48,78 $\pm$ 26,67) was related to U-WSFR (r: -0,3 $p=0.026$) as well as Consequence (19,12 $\pm$ 5,47) and Emotional (19,54 $\pm$ 7,02) scores of IPQ-R questionnaire (r: 0,3 $p=0.035$; r: 0,3 $p=0.014$).

In IPQ-R questionnaire, Identity score (8,04 $\pm$ 3,1) reflecting number of symptoms that patients experienced due to their illness was correlated with scores of ESSPRI-Fatigue (5,29 $\pm$ 2,97), ESSPRI-Pain (5,18 $\pm$ 3,01), HADS-Anxiety (11,67 $\pm$ 5,55), HADS-Depression (9,24 $\pm$ 4,98) in the study ($p<0.05$).

In the mediation analysis, Identity score was directly mediated by ESSPRI-Fatigue score ($p=0.0093$) and indirectly mediated by HADS-Depression score ($p=0.0011$).

A bootstrap analysis with 5000 replications was applied to estimate mediation effect to generate 95% CI. Percentile bootstrap of HADS-Depression was found to be an effective mediator for Identity score based on 5000 bootstrap sample.

Conclusion: Both depression status and fatigue affected Identity score reflecting the number of symptoms poorly. Considering this complex relationship in disease activity assessment may positively affect disease outcomes.

Disclosure of Interests: None declared

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PERCEIVED SATISFACTION WITH CHRONIC PAIN CARE IN GERMAN PATIENTS WITH FIBROMYALGIA (FM)

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Background: In chronic pain care a multidimensional perspective with attention to patients' cognitions, emotions, and their ability to cope is needed (1). Previous studies are also pointing to the role of experiencing meaningfulness in life in the adjustment to disability. Therefore care should additionally focus on the existential domain of patients' lives to live up to a holistic care approach (2). However, there are only a few studies on how FM patients are satisfied with practitioners' attention to multiple aspects of life with a chronic pain condition.

Objectives: To assess perceived satisfaction with chronic pain care and its associations with health variables in a cohort of patients with FM.

Methods: We invited 18 FM self-help groups in Germany to participate anonymously in our survey and sent them in total 192 paper-and-pencil surveys. Sociodemographics, disease related variables (e.g. pain, general health) and psychological variables [e.g. depression, anxiety, hope, stress] were assessed with standardized instruments, including 5 items (answer format 1=very unsatisfied – 10=very satisfied) assessing subjective satisfaction with medical care in different domains with the following questions: How satisfied are you with the attention of your treatment team/physician at home for physiological aspects of your pain (Physio)/ the consequences of the pain on your physical functioning (Physical)/ on your psychological well-being (Mental)/ on your social life (Social)/ on your meaning in life (Meaning).

Results: In total 162 FM patients participated (=84% response rate). Their mean age was 58 years (SD=10), 84% (N=135) were female. Highest level of education was Elementary School 29%, Junior High School 35%, High School 15%, College 12%, and other 10%. Duration of chronic pain was

18.2 years (SD=12.0). The satisfaction with care scale showed good internal consistency and measured one factor. The means of the subscale were: Physio 5.7 (SD=2.5)/ Physical 5.5 (SD=2.5)/ Mental 5.5 (SD=2.6)/ Social 5.0 (SD=2.5)/ Meaning 5.3 (SD=2.6). Correlations of the subscales are depicted in Table 1. There were no associations between pain variables and satisfaction with care, but satisfaction with care was associated with mental health, but not physical health, outcomes.

Table 1. Correlations of satisfaction of care with different health variables. Subscales physiological and physical aspects and HADS-anxiety were not significantly correlated. * $<.05$; ** $<.01$; ns=not significant.

	Physio	Physical	Mental	Social	Meaning
HADS-depression	-.10 (ns)	-.12 (ns)	-.19*	-.16*	-.14 (ns)
General Health	.02 (ns)	.14 (ns)	.13 (ns)	.18*	.12 (ns)
Stress	-.15 (ns)	-.14 (ns)	-.17*	-.17*	-.13 (ns)
Hope	.18 (ns)	.18 (ns)	.26**	.26*	.22*

Conclusion: In this cohort of German FM patients the average satisfaction with care overall, as well as the specific aspects of care, was only moderate. Interestingly we found associations between satisfaction with care in mental, social and meaning in life aspects with psychological well-being pointing to the fact that care for chronic pain patients should also include those aspects in addition to just addressing biomedical aspects.

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THE IMPACT OF GENDER ON PHYSICAL FUNCTION, FATIGUE, LONELINESS, DEPRESSION, AND SEXUAL FUNCTIONING IN PATIENTS WITH RHEUMATOID ARTHRITIS WITH A SPECIAL FOCUS ON METHOTREXATE USAGE. A CROSS-SECTIONAL SINGLE-CENTRE STUDY

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Background: We lack knowledge of how gender, disease characterization, and measures of various Patient Reported Outcome Measures (PROMS) relate to Methotrexate (MTX) usage in patients with rheumatoid arthritis.

Objectives: To investigate the impact of gender on physical function, fatigue, depression, loneliness, and sexual functioning with a special focus on MTX usage.

Methods: A cross-sectional study design was used to collect data in a rheumatologic outpatient clinic. The following PROMs were applied: Changes in Sexual Functioning Questionnaire, UCLA Loneliness Scale, Beck's Depression Inventory, Bristol Rheumatoid Arthritis Fatigue-Numeric Rating Scale, and the Health Assessment Questionnaire.

Results: Among 286 patients diagnosed with rheumatoid arthritis (69 men and 217 women), 67.8 % were defined as MTX-users one year after diagnosis.

Comparing women and men we found differences in PROMS, with significantly worse outcomes for women than men in physical functioning at diagnosis and in sexual functioning, depression, fatigue, physical functioning, and patient evaluation of disease burden at enrolment in the study.

There were only significant differences in the HAQ and loneliness score when comparing MTX-users with MTX-non-users in general (Table 1).

Conclusion: The results of this study show that women have more negative outcomes on the selected PROMs compared to men with RA. This difference between genders was also evident when comparing MTX-users with non-MTX-users, again with a poorer outcome on PROMs for women compared to men. This calls for attention in the clinical setting and further research in the used instruments and the importance of gender in the care and treatment of patients with RA.

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Table 1. Second column is adjusted for gender, patient age, years of education, and living alone, all other columns are not adjusted for gender. HAQ Health Assessment Questionnaire, VAS Visual Analog Scale, UCLA University of California Los Angeles, CSFQ Changes in Sexual Functioning Questionnaire, BDI Becks Depression Inventory, BRAF-NRS Bristol Rheumatoid Arthritis Fatigue Numeric Rating Scale

Adjusted analyses	Comparing Women and men (overall)		Comparing MTX-users and non-MTX-users (overall)		Comparing women and men (MTX-user)		Comparing women and men (non-MTX-users)		Comparing male MTX-users and male non-MTX-users		Comparing female MTX-users and female non-MTX-users	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
	(95% CI)		(95% CI)		(95% CI)		(95% CI)		(95% CI)		(95% CI)	
Physical functioning at diagnosis												
HAQ	0.42 (0.19; 0.66)	<0.001	-0.31 (-0.59; -0.04)	0.024	0.30 (0.04; 0.56)	0.025	1.09 (0.68; 1.51)	<0.001	0.25 (-0.14; 0.64)	0.205	-0.54 (-0.84; -0.24)	<0.001
Physical functioning at enrollment												
HAQ	0.38 (0.20- 0.55)	<0.001	-0.13 (-0.29- 0.03)	0.101	0.39 (0.19- 0.59)	<0.001	0.30 (-0.07- 0.66)	0.112	-0.21 (-0.57- 0.16)	0.274	-0.11 (-0.30- 0.07)	0.216
PROMs at enrollment												
Sexual dysfunction												
CSFQ	-12.16 (-14.80 - -9.52)	<0.001	-1.17 (-3.76- 1.41)	0.374	-13.30 (-16.27- 10.33)	<0.001	-9.20 (-14.90- -3.49)	0.002	1.99 (-3.45- 7.43)	0.473	-2.11 (-5.17- 0.95)	0.177
Loneliness												
UCLA	1.60 (-1.35 - 4.54)	0.288	4.15 (1.46- 6.85)	0.003	2.52 (-0.93- 5.98)	0.153	0.37 (-4.64- 5.38)	0.885	2.47 (-2.68- 7.61)	0.347	4.62 (1.50- 7.73)	0.004
Depression												
BDI	2.77 (1.04 - 4.50)	0.002	1.79 (-0.01- 3.58)	0.051	3.18 (1.07- 5.28)	0.003	2.14 (-0.50- 4.78)	0.112	0.98 (-1.58- 3.53)	0.454	2.01 (-0.15- 4.18)	0.068
Fatigue												
BRAF-NRS												
Severity	0.97 (0.31 - 1.63)	0.004	0.40 (-0.20- 1.00)	0.187	1.05 (0.30- 1.81)	0.006	0.87 (-0.50- 2.25)	0.212	0.26 (-1.13- 1.66)	0.713	0.44 (-0.24- 1.12)	0.201
Effect	1.06 (0.39 - 1.72)	0.002	0.25 (-0.38- 0.88)	0.442	1.07 (0.28- 1.86)	0.008	1.10 (-0.24- 2.44)	0.108	0.27 (-1.08- 1.63)	0.694	0.24 (-0.49- 0.98)	0.521
Coping	0.60 (-0.09- 1.28)	0.087	0.33 (-0.33- 0.99)	0.329	0.93 (0.13- 1.72)	0.022	-0.25 (-1.78- 1.28)	0.749	-0.60 (-2.17- 0.98)	0.457	0.58 (-0.15- 1.31)	0.120