Semi-structured interviews took place in an age-stratified sample to explore how the diagnosis of RA has influenced patients' life. Items of questionnaires were compared using the chi-square test. Interviews were annotated by two independent readers. Codes were taxonomically organized and linked to themes using NVivo 12.

Results: 32 (36%) of the 90 invited patients participated and 28 completed all psycho-emotional questionnaires. Twelve out of 32 patients (37.5%) were classified as frail by the GFI. On the GDS at current age, 6/12 frail patients had signs of depression compared to 2/17 non-frail patients ($p=0.04$) (Table 1). More frail patients had signs of an anxiety disorder on the HADS, both at current age and age 40 (age 40: 7/11 frail patients versus 0/0 non-frail patients, $p<0.01$; Table 1). Results on the individual level were more blurred: 3 (42%) out of 7 frail patients were anxious at age 40, but not at current age. The loneliness, social support and HADS depression questionnaires showed no difference between frail and non-frail patients, both at current age and age 40. A stratified sample of 10/32 (31%) patients were interviewed of which 5 (50%) were frail on the GFI. Frail patients more often expressed anxious feelings at current age. Since the diagnosis of RA, frail patients worried more about the future, i.e. about the progression of RA. Non-frail patients tended to be more optimistic. In the interviews, patients expressed not having feelings of depression and anxiety at age 40.

Table 1. Number of frail and non-frail patients per questionnaire at current age and age 40.

Questionnaire	Frail	Non-frail	Total	p-value
GDS now				
No depression	6	15	21	0.04
Depression	6	2	8	
GDS age 40				
No depression	9	17	26	0.06
Depression	3	0	3	
HADS anxiety now				
No indication anxiety	6	17	23	0.01
Indication anxiety	5	0	5	
HADS anxiety age 40				
No indication anxiety	4	17	21	<0.01
Indication anxiety	7	0	7	

Conclusion: Although it is difficult to disentangle the causal conundrum between psycho-emotional health and frailty, frail patients were on a group level more anxious at younger age on the HADS in our study. Psychiatric symptomatology might be misinterpreted for frailty at current age. Limitations of our study include a high chance on amplified memory bias.

References:

[1] Cleutjens et al. Ann Rheum Dis 2018;77(Suppl 2):577.

Disclosure of Interests: A. van Moerbeke: None declared, F. Cleutjens: None declared, Annelies Boonen Grant/research support from: AbbVie, Consultant of: Galapagos, Lilly (all paid to the department), Marloes van Onna: None declared

DOI: 10.1136/annrheumdis-2020-eular.1937

FRI0082 SLEEP PROBLEMS IN EARLY RHEUMATOID ARTHRITIS

T. Lehtonen¹, T. Åkerstedt¹, L. Lyne¹, L. Klareskog¹, S. Saevardsdottir¹, L. Alfredsson¹, H. Westerlind². ¹Karolinska Institutet, Stockholm, Sweden; ²Karolinska Institutet, Department of Medicine, Solna, Stockholm, Sweden

Background: It is well known that patients with established RA suffer from problems with sleep quality[1]. There are however few, if any, studies on sleep quality among newly diagnosed patients.

Objectives: To investigate the sleep quality among patients newly diagnosed with RA.

Methods: We used the Swedish study Epidemiological Investigation of RA (EIRA) including patients at the time of diagnosis, based on the 1987 ACR criteria during 2008-2016. At 1 and 3 years after diagnosis, the patients were sent a questionnaire in which they were asked to rate their sleep quality on 10 different questions. We then calculated 6 different sleep components consisting of insomnia, non-restorative sleep, sleep problems, general quality of sleep, if poor sleep affected the health and if they were getting enough sleep[2].

Sleep problems were defined as mostly or always having problems with either of the following: falling asleep, many awakenings with difficulties to go back to sleep, waking up early or having disturbed/restless sleep. Insomnia was defined

as answering mostly or always on either problem with falling asleep, many awakenings with difficulties to go back to sleep or waking up early, in combination with mostly or always being tired during the day.

Having problems with non-restorative sleep was defined as mostly or always having trouble waking up or not feeling well rested when waking up. We defined having problem with not getting enough sleep, sleep quality affecting the health and poor sleep quality as reporting any of the two highest scores on the corresponding questions.

We then calculated the proportion of people experiencing no problems at 1 or 3 years after RA diagnosis, developing problems, improving or always having problems with their sleep.

Results: We identified 1483 patients with data at either one or both time points. The mean age was 59 years (IQR 19), and 1063 (72%) were women. At 1 year, 36% of the patients reported having at least one type of sleep problem, after 3 years, this figure was 29%. Over 20% of the patients reported having "Rather big" or "Very big" problems with sleep after one year (Table 1) and 31% had problems at one or both time points (Table 2). Disturbed sleep was a problem for their health in 20% of the patients and 11% reported having "poor" or "very poor" sleep quality at both times. Insomnia was experienced by 118 (10%) patients at 1 year and 112 (11%) at 3 years.

Table 1. Sleep problems at 1 and 3 years after diagnosis of RA.

	1 year	3 years
Insomnia	118 (9%)	112 (11%)
Not getting enough sleep	102 (8%)	113 (11%)
Problems with sleep in general	270 (22%)	231 (22%)
Sleep quality affecting health	238 (19%)	197 (19%)
Poor sleep quality	218 (17%)	209 (20%)
Problem with non-restorative sleep	218 (17%)	154 (14%)

Table 2. Individuals experiencing no problems, developing problems, improving or always having problems with their sleep at 1 and 3 years after diagnosis of RA.

	No problems at any time point	Improved	Developed problems	Problems at both 1 and 3 years
Insomnia	702 (85%)	43 (5%)	46 (6%)	39 (5%)
Not getting enough sleep	719 (86%)	36 (4%)	47 (6%)	34 (4%)
Problems with sleep in general	576 (69%)	81 (10%)	78 (9%)	103 (12%)
Sleep quality affecting health	616 (74%)	65 (8%)	70 (8%)	85 (10%)
Poor sleep quality	623 (74%)	57 (7%)	66 (8%)	91 (11%)
Problem with non-restorative sleep	654 (78%)	71 (8%)	46 (5%)	67 (8%)

Conclusion: In a population-based early RA cohort receiving today's standard care, 30% of the patients reported some type of sleep problem during the first 3 years. Although this is a lower rate than has been reported in established RA, this is a significant proportion of RA patients, and these findings warrant further studies to closer identify the course of sleep problems and the factors influencing it such as pain.

References:

[1] Bourguignon C et al PMID 14596374

[2] Åkerstedt T et al PMID 18484368

Acknowledgments: The authors wish to acknowledge the EIRA study group and the EIRA data collectors.

Disclosure of Interests: Tiina Lehtonen: None declared, Torbjörn Åkerstedt: None declared, Lauren Lyne: None declared, Lars Klareskog: None declared, Saedis Saevardsdottir Employee of: Part-time at deCODE Genetics/Amgen Inc, working on genetic research unrelated to this project, Lars Alfredsson: None declared, Helga Westerlind: None declared

DOI: 10.1136/annrheumdis-2020-eular.599

FRI0083 GLUCOCORTICOID USE IS ASSOCIATED WITH DETERIORATION OF MUSCLE QUALITY AND FUNCTION: FROM THE CHIKARA STUDY

Y. Yamada¹, M. Tada², K. Mandai², N. Hidaka², K. Inui¹, H. Nakamura¹. ¹Osaka City University Graduate School of Medicine, Department of Orthopedics, Osaka, Japan; ²Osaka City General Hospital, Department of Orthopedic Surgery, Osaka, Japan