Results: According to the results of the FACIT-F, the patients were identified: no fatigue (52-34 points) – 99 (53.1%), the presence of fatigue (21-33 and less points) – 68 (36.3%) and severe fatigue (20 and less points) – 20 (10.6%). By patient with fatigue and severe fatigue significant worse in all activity indexes and PROs than in patients not experiencing fatigue ($p<0.001$ and $p<0.0001$), (Table 1). Similar results were demonstrated across all PsAID12 domains (Figure 1), especially the domains "Pain", "Skin problems", "Work and/or leisure activity", "Sleep disturbance", "Function capacity" and "Discomfort" ($p<0.0001$).

Conclusion: In patients with PsA fatigue affected significant and clinically considerable impairment of PsA activity and PROs.

Figure 1. The effects fatigue on PsAID12 domains

Disclosure of Interests: None declared.

DOI: 10.1136/annrheumdis-2021-eular.3698

AB0581

NAIL PSORIASIS AMONG PATIENTS WITH PSORIATIC ARTHRITIS IS MORE ASSOCIATED WITH THE SEVERITY OF SKIN PSORIASIS THAN WITH FEATURES OF SEVERE ARTHRITIS

M. Haroon¹, S. Farrukh², S. Batool¹, S. Asif¹, O. Fitzgerald³. ¹Fatima Memorial Hospital & FMH College of Medicine and Dentistry, Department of Rheumatology, Lahore, Pakistan; ²University Hospital Kerry, Department of Rheumatology, Tralee, Ireland; ³University College Dublin, Conway Institute for Biomolecular Research, Dublin, Ireland

Background: Nail disease is an important feature of psoriasis arthritis (PsA), and has been recognised as one of the 6 important clinical domains by GRAPPA. Little is known about how patients with PsA and nail disease compare to patients without nail disease. Nail disease has been found to associate with severe PsA.

Objectives: The objective of this study was to examine the association of nail disease with patient demographics and features of active psoriasis and PsA.

Methods: For this cross-sectional study, data from 3 PsA cohorts was studied (St Vincent's University Hospital Dublin, Ireland; University Hospital Kerry, Ireland; and Fatima Memorial Hospital Lahore, Pakistan). Following informed consent, patients underwent detailed skin and rheumatologic assessments including disease activity measures. Since a large number of patients were in clinical remission at the time of assessment, we made 2 documentations of reversible clinical variables (e.g., current skin scores (PASI), current nail disease, current tender and swollen joint counts, current enthesitis, current dactylitis) at the time of study entry and, through extensive medical record review, we identified patient's maximum skin and joints disease activity scores ever documented, e.g., maximum skin scores (PASI max), TJC max, SJC max, nail disease ever, dactylitis ever, enthesitis ever. Nail disease was stratified by the presence or absence of nail psoriasis.

Results: Data on 476 PsA patients was assessed (age 53.8 ± 10.8 , PsA duration 13.9 ± 10.5 years, BMI 29 ± 5 ; current PASI 2.5 ± 3.2 , current TJC 1.8 ± 2.6 years, current SJC 1.4 ± 2.2 years; 37% of the cohort had enthesitis ever, 46% had dactylitis ever, 30.7% had current dactylitis, and 28% with current enthesitis). 63.4% (n=302) of the cohort ever had nail disease, and 45.4% (n=216) had current nail disease at the time of assessment. On univariate analysis, significant or marginally significant statistical association of current nail disease was noted with current PASI ($p<0.001$), enthesitis ever ($p=0.004$), current enthesitis ($p=0.11$), dactylitis ever ($p=0.027$), current dactylitis ($p=0.07$), MDA not achieved ($p<0.001$), current SJC ($p=0.08$), and current TJC ($p=0.32$); however, no statistical association was noted with age, gender, disease duration, smoking status, low education status. The following variables were included in multiple stepwise regression analysis: current PASI, current enthesitis, current dactylitis, current TJC, current SJC, MDA not achieved, and low education status; a significant association of current nail disease was noted with current PASI (OR 2.2, CI

1.83-2.54, $p<0.001$) with a borderline association of current dactylitis (OR 1.6, CI 0.94-2.58, $p=0.083$). When we used nail disease ever as a dependent variable in the multiple regression model using covariates of PASI max, TJC max, SJC max, dactylitis ever, enthesitis ever, MDA not achieved and low education status, a significant association of nail disease ever was noted with PASI max (OR 1.09, CI 1.01-1.17, $p=0.01$), TJC max (OR 1.08, CI 1.02-1.14, $p=0.005$) and borderline association with dactylitis ever (OR 1.74, CI 0.96-3.15, $p=0.067$).

Conclusion: The presence of nail disease among patients with PsA is significantly associated with severity of skin psoriasis with only borderline associations with measures of active musculoskeletal involvement.

Disclosure of Interests: Muhammad Haroon Speakers bureau: Roche, Novartis, Grant/research support from: Abbvie, Pfizer, shehla farrukh: None declared., Shabnam Batool: None declared., Sadia Asif: None declared., Oliver Fitzgerald Speakers bureau: Abbvie, Janssen, Pfizer, Consultant of: BMS, Celgene, Eli Lilly, Janssen, Pfizer, Grant/research support from: Abbvie, BMS, Eli Lilly, Novartis, Pfizer.

DOI: 10.1136/annrheumdis-2021-eular.3848

Osteoarthritis

AB0582

KNEE OSTEOARTHRITIS PHENOTYPES STRATIFICATION

K. Korochina¹, T. Chernysheva¹, I. Korochina², V. Klementeva¹, G. Kuznetsov¹.

¹Orenburg State Medical University, The Department of Internal Diseases, Orenburg, Russian Federation; ²Orenburg State Medical University, The Department of Polyclinic Therapy, Orenburg, Russian Federation

Background: Osteoarthritis (OA) relevance is determined by its record prevalence with progredient growth throughout the world [1]. Clinical and pathogenic heterogeneity of disease actualizes problem of its stratification [2]. Lack of unified understanding of OA and its phenotype determination results in incredible number of attempts to group OA, using of different classification criteria in last decade.

Objectives: To analyze and systematize available OA classifications, proposals and phenotypes, to highlight the most promising of them.

Methods: We studied publications from MEDLINE / PubMed and Google Scholar databases found by the keywords "osteoarthritis", "phenotypes", "subphenotypes", "classification", "subtypes", "subsets", "subgroups", "subpopulations", "profiles" and "endotypes" in various combinations in English and Russian. We did not set a time frame, but aimed to include as many different methods as possible in order to reflect evolution of scientists' views on structuring of this disease.

Results: A total of 55 OA grouping methods were covered so that OA was structured by different determinants into 6 big boxes.

STRATIFICATION OF KNEE OSTEOARTHRITIS CLASSIFICATIONS

First OA classifications were characterized by complex etiopathogenetic approach, while subsequent studies differed in joint-mediated approach, and the knee joint was undisputed "champion" in this "race". One of the first attempts to group OA was division into primary, or idiopathic, and secondary, due to known causes. It is now obvious that it is becoming obsolete, and criteria for OA primacy are difficult to determining. Genomic highly specialized studies based on isolation of "favorable" and "unfavorable" genes develops prerequisites to genetic OA classifying. Clinical variants occupy central place as they are the most fully consistent with modern phenotype conception [3], considering as subtypes of disease shared by underlying pathobiological and pain mechanisms and their structural and functional consequences. Trajectories of OA progression are distinguished by longitudinal design, that is, the determinants for grouping here are disease characteristics in dynamics. The ancestor of structural OA trajectories can be considered Kellgren-Lawrence grades;