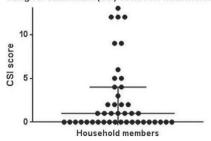
Caregiver Strain Index (CSI) Scores for Household Members



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SAT0760-HPR

PSYCHOLOGICAL VARIABLES PREDICTIVE OF DISORDERS OF SLEEP IN PATIENTS WITH SPONDYLARTHRITIS AND PSORIATIC ARTRTITS. PRELIMINARY MULTICENTER STUDY

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Objectives: To study the psychological variables associated with the severity of insomnia and hypersomnia according to the Oviedo sleep questionnaire (COS) in patients with spondylarthritis (SPA) and psoriatic arthritis (PA), including the disease activity BASDAI and DAS28.

Methods: Design. Cross-sectional descriptive study. Patients: Patients with consecutive SPA or PA were selected by consecutive sampling in follow-up in rheumatology units of 4 Spanish hospitals. Inclusion criteria: Adults (age ≥16 years) with SPA (ASAS criteria) or PA (CASPAR criteria) capable of understanding and willing to perform questionnaires. Exclusion criteria: other rheumatic diseases, age <16 years. Protocol: Upon arriving at the consultation, he was offered to participate in the study, he was explained and the patient was given the battery of questionnaires; His physician performed the evaluation of disease activity and recorded the comorbidities and current medication. Main outcomes: the 3 dimensions of COS: (1) Subjective satisfaction with sleep. (2) Insomnia and (3) Hyperinsomnia. The COS is a semi-structured interview to aid the diagnosis of insomnia and hypersomnia according to the diagnostic criteria ICD-10 and DSM-IV. Other variables: current medication for SPA or PA, comorbidities, use of sleeping pills and/or CPAP according to COS questionnaire (insomnia was divided into mild <15 and moderate-severe ≥15), disease activity: AD BASDAI) and APs (DAS28); Health-related quality of life (HRQL) using SF-36; Pain perception (Brief Pain Inventory BPI questionnaire), SPA (BASDAI) and PA (DAS28, BASDAI) and FACIT fatigue, TMMS emotional intelligence, Resilience with resilience questionnaire, anxiety and depression sceening using HADs. Statistical analysis: descriptive, bivariate analysis using T-Student, Mann-Whitney and  $\chi 2$ ; Followed by binary logistic regression (BLR) (Vd: moderate/severe insomnia).

Results: A total of 126 patients participated: 65 patients with SPA (33.8% women, 49.92±10.92 years) and 61 patients with PA (60.7% women, 49.4±9.5 years) with an average of 8.4±6.8 years of disease. They used biological therapy SPA 29 (23%) and PA 28 (45.9%). The most common comorbidity were in SPA and PA: disc disease 33 (50.8%) and 18 (29.5%). 16 (24.6%). Both patients with SPA and PA were dissatisfied with their sleep (3.42±1.39). We did not find correlation of the COS variables with the HRQoL, the fatigue or the pain. There were no differences in COS scale according to biological treatment and/or FAME. Logistic regression analysis demonstrated an association between insomnia and TMMS repair, resilience and anxiety in PA. Insomnia in SPA showed an association with depression and BASDAI

Conclusions: Insomnia is a common health problem in these diseases. Moderateintense insomnia in patients with SPA was associated with an increase in BASDAI and depression. Also in patients with PA, the insomnia was associated with TMMS repair, resilience and anxiety. The patient assumes the slepp dissorder as part of this chronic illness, this jutifies the good evaluations of resilience and emotional inteligence of the evaluated patients.

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# SAT0761-HPR IDENTIFICATION OF FACTORS THAT CONTRIBUTE TO SUCCESSFUL ONLINE MONITORING OF DISEASE **ACTIVITY: EXPERIENCES FROM PATIENTS WITH** RHEUMATOID ARTHRITIS

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Background: In order to encourage patients to take an active role in their disease management and to enhance the dialogue between patients and healthcare providers, iMonitor was developed. IMonitor is a Software Medical Device developed and funded by Pfizer. Patients can complete patient-reported outcome measures (PROMs) in this online system. This allows for monitoring of disease activity in between visits, identification of patients who need medical attention in between visits, and it may lead to reduction of consultations for patients with stable disease activity. Moreover, completion of a PROM might help a patient to prepare for his or her consultation and might improve the communication between physician and patient.

Objectives: This study aims to identify factors that contribute to adequate online monitoring of disease activity, by collecting experiences from patients with RA with iMonitor

Methods: Patients were recruited at Bernhoven (Uden, the Netherlands) by an announcement of the study on the hospital website, leaflets and by specific meetings. Four instruction classes were organised in which two researchers gave live instructions about the programme. Patients received log-in codes and chose their PROM-preference(s) and PROM-frequency. After nine months a focus group interview was performed and three telephone interviews were held. Questions were semi-structured using a topic list based on Flottorp<sup>2</sup>. Data will be transcribed, coded and grouped

Results: Currently 33 patients with RA are using iMonitor. Of these patients 17 (52%) attended the instruction classes and six patients (18%) attended the focus group discussion. Preliminary results reveal six themes (Technological aspects, Patient factors, Need for getting feedback, Incentives and resources, Reduction of consults and Security aspects). The Flottorp domain "Patient factors" provided most rich information. Most patients said they developed more knowledge about their disease activity and that they felt more aware about their disease activity. Additionally, iMonitor supported them in taking actions such as adjustments in lifestyle and becoming more prudent when noticing a flare. Some patients felt more prepared for a consultation and less dependent from their rheumatologist. With regard to the domain "Capacity for organisational change", patients were confident that iMonitor could contribute to reduction of consultations, but contacting the outpatient clinic when feeling worried should be required.

Conclusions: Patients' experiences with an online remote monitoring system were mainly positive. Instruction classes helped patients to get familiar with the programme. Patients experienced to have more control over their disease and to have developed more knowledge. This may result in enhanced self-management, which is important with regard to retain control over disease.

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SAT0762-HPR THE ACCESSIBILITY AND USABILITY OF AN **AUSTRALIAN WEB-BASED SELF-MANAGEMENT** PROGRAMME (MYJOINTPAIN) FOR PEOPLE WITH LOWER HEALTH LITERACY AND JOINT PAIN IN THE UK

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Background: Osteoarthritis (OA) is disproportionately prevalent in people from lower socio economic groups (1). People from lower socio economic groups are also more likely to have lower health literacy. Health literacy influences people's ability to access, understand and use health information. Currently, health professionals over estimate patients' health literacy (2), potentially reducing the impact of OA self-management interventions that rely on educational approaches (3). As internet usage increases, online OA self-management resources are an option for delivering patient education. Currently, there is no evidence as to whether online education resources are suitable and accessible for people with joint pain and lower health literacy.

Objectives: To identify facilitators and barriers experienced by people with joint pain and low health literacy to access and utilise information available on the MyJointPain website. (https://www.myjointpain.org.au).

Methods: A qualitative interview study was conducted. Participants were invited to use the website for two weeks and then participated in semi-structured interviews. The interview topic guide had been developed in line with current literature. The interviews were audio recorded and transcribed verbatim. Thematic analysis was used by the main researcher (with independent verification) to interrogate the data and identify themes.

 $\textbf{Results:} \ \text{Six people with low health literacy (S-TOFHLA 17<math>\pm 3\text{)} \ \text{were recruited from}$ community groups from an inner-city area with a high index for social deprivation. Four key themes were identified. 1) Dealing with technical issues, where participants demonstrated that they could persevere with technical problems in using online resources: 2) Information overprovision, here participants found there was too much complex health information provided, that hindered usability; 3) Motivation for information seeking, where participants discussed that it was pain that encouraged resource use but motivation to self-manage was influenced by personal beliefs; 4) Specific professional input, the participants whilst willing to use and engage with the website recalled that they also want to have access to a health professional and felt the website could supplement but not replace this contact. "I think you have it from the health care where the healthcare are telling you and explaining to you".

Conclusions: Digital online OA self-management presented by MyJointPain showed potential for use by people with joint pain and lower health literacy levels. This is important as outcomes for this group are poor (1). Text volume, detail and image use should be carefully considered when designing new online resources and involvement of people with lower health literacy when designing online tools will help to ensure information is accessible and useful to all OA patients. Clinicians should consider their patients' health literacy level, computer literacy and readiness to change behaviour before prescribing web based self-management tools.

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# SAT0763-HPR FUNCTIONAL OUTCOMES IN PATIENTS WITH RHEUMATOID ARTHRITIS ON THE BACKGROUND CORRECTION OF PROGESTERONE INSUFFICIENCY

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Background: It is known that one of the main demands of the health system is to improve preventive measures. In particular, issues of optimizing secondary prevention are very important, as it gives an opportunity to reduce the progression of the disease and complications, as well as improve the quality of life of patients. Therefore, the study values the correction of progesterone deficiency on the background of preventive and rehabilitation interventions in a general medical practice in patients with RA is of practical interest.

Objectives: Studying the role of progesterone deficiency correction efficiency to optimize secondary prevention in patients with RA in a general medical practice. Methods: Study involved 180 RA patients aged 35,6±3,9 years. The study group (group 1) consisted of 80 patients with RA, the second 50 (group 2) and third and 50 (group 3). 1 group was carried preventive and curative interventions, based on an integrated approach with the inclusion of preventive and rehabilitation interventions on the background correction of progesterone deficiency (Duphaston) in a general medical practice. Group 2 is the same, but without the correction of progesterone deficiency, and the third group only took pathogenetic treatment. Group 3 as opposed to the 1 and 2 had displays of progesterone deficiency. For an objective assessment of the effectiveness of using EULAR recommendations, assessing the improvement in %, according to the ACR, and to assess the functional status - health status index questionnaire Stanford Health Assessment Questionnaire (HAQ)

Results: The impact of interventions carried out by us on the functional outcome showed some differences between groups. Thus, according to ACR 50 criteria dynamics between groups were significant difference at 24 months, since improvement was noted in 52% of group 1 and 32% in group 2 (p=0.032).By the end of 3 months of intervention minimal effect on performance within the HAQ 0,22≤ ∆NAQ≤0,36 was observed in 80% of group 1, 78% in 2nd group and 76% in group 3 (p>0.05), while not a single case was fixed not satisfactory or pronounced effect. By the end of 12 months, the dynamics of functional status was noticeable and patients in group 1 have prevailed a satisfactory effect within 0,36  $\! \leq \! \Delta \text{HAQ} < \! 0.80$  - 48.75% (p=0.043 and p=0.048, respectively), so a marked effect within ∆HAQ≥0,80 functional status - 15% (p=0.001; p=0.011, respectively). This trend continued and by the end of 24 and 36 months, as the group 1 compared with group 2 is almost 8 times (p=0.001) and group 3 2 times (p. =0.045) greater △HAQ≥0,80 a marked effect.

Conclusions: The preventive and therapeutic interventions on the background correction of progesterone deficiency in RA patients in a general practice reliably delivers stable ACR 50 response (64%) and significantly improves the functionality of the joints in RA.

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# SAT0764-HPR RETROSPECTIVE STUDY ABOUT ASSOCIATION OF MENTAL AND SLEEP DISORDERS AMONG ADULTS WITH PAINFUL MUSCULOSKELETAL CONDITIONS

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Background: Chronic pain is a common condition that affects one-third of the population, accounting for a large number of medical consultations and a significant proportion of health care costs.

Evidence suggests that anxiety and depression are associated with increased pain sensitivity and pain-related disability, co-morbid states that are more disabling than either condition alone.

Likewise, sleep disorders have also been linked with chronic pain, and people who experience pain-related sleep disturbances are significantly more disabled

Objectives: The objective of this study was to determine the prevalence of anxiety, depression, and sleep disorders, painful musculoskeletal conditions in a sample of adults with disabilities.

Methods: This cross-sectional study analyzed data of 1692 adults aged 18 or older who have disabilities over 10 years (2005 to 2014). We examined the following chronic conditions, in which pain is a key symptom and forms part of the diagnosis, and organized them into 3 groups. Group 1 consisted of (rheumatic diseases), arthritis, osteoarthritis, rheumatoid arthritis, and ankylosing spondylitis; group 2 consisted of muscular dystrophy; and group 3 consisted of neck or back pain;

The prevalence (95% confidence interval) of painful musculoskeletal conditions was determined according to the diagnosis. Factors associated with these painful conditions were analyzed separately for men and women by using a logistic regression model.

Results: The prevalence of painful musculoskeletal conditions was 66.9% (95% CI, 66%-67.5%). Factors associated with these conditions in both men and women included older age, a sleep disorder, and concomitant chronic anxiety and/or depression was 23.5% (95% CI, 22.5%-24%), all of which were higher in women than in men. Of the 1692 adults with disability included in the study, 65% were women. The average age was 50.5 (standard deviation, 12.5 y), and 65% of participants were 50.5 or older. In addition, 48% of participants were married. Of the participants, 16% had been diagnosed with chronic anxiety and 22% with chronic depression; and 32% with sleep disorder (sleeping 6 hours or less per day. Prevalence of Painful Conditions in Adults with Disabilities, by Group of Conditions and by Sex, Differences between men and women were significant at P <.001 (for all groups of conditions, except muscular dystrophy.

Conclusions: The prevalence of painful musculoskeletal conditions associated with depression, anxiety, and/or a sleep disorder, is high in people with disability, especially in women. To design plan for rehabilitation and improving the quality of life of adults with disability and painful conditions; treatments for depression, anxiety and/or sleep disorders should be considered in addition to conventional treatments.

Disclosure of Interest: None declared DOI: 10.1136/annrheumdis-2017-eular.3353

SAT0765-HPR

## **CRITERION AND CONCURRENT VALIDITY OF THE** AMERICAN-ENGLISH VERSION OF THE FLARE QUESTIONNAIRE TO DETECT AND MEASURE FLARES IN RHEUMATOID ARTHRITIS

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**Background:** Despite advances in rheumatoid arthritis (RA) therapeutic agents. difficulty in managing RA flares persists, and remission or the persistent absence of inflammation remains challenging to achieve. The French FLARE (F-FLARE) was developed to facilitate and standardize detection and measurement of RA flares between clinic visits. 1,2 We have previously reported the cognitive debrief for the published British English version, which determined that revision of wording and presentation of items was required. Here we report validation of the American English version of FLARE (Am-E FLARE-RA).<sup>3</sup>

Objectives: To assess whether the Am-E FLARE questionnaire performs comparably to the French version of FLARE in detecting RA flare in an American English-speaking clinic population.