AB1083 | WORK IMPAIRMENT IN PATIENTS EXPERIENCING MUSCULOSKELETAL PAIN

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Background: Many individuals with musculoskeletal disorders (MSD) continue to work. Little is known about those who remain occupationally active relative to those who are on sick leave, despite the clear potential for reduced productivity or work ability, and associated downstream effects.
Objectives: To assess self-reported work impairment and its associations with psychosocial risk factors amongst workers seeking care for musculoskeletal pain.
Methods: Recruitment took place in five Irish hospitals. Self-report questionnaires were used to assess risk of progressing to long-term sick leave and work disability (Örebro Musculoskeletal Pain Screening Questionnaire; ÖMPSQ), work ability, work impairment (WPAI) and work performance (WRFQ).
Results: 155 patients (53.5% female; mean age =46.50 years (range 20 to 71)) completed the questionnaire. 25.2% (n=39) were at high risk of progressing to long-term sick leave and work disability according to the ÖMPSQ. 62.6% (n=97) were classified as functioning poorly according to the WRFQ; 52.3% reported having poor work ability (n=81). Higher work role functioning was associated with higher pain self-efficacy (OR =1.514); better work ability was associated with older age (OR =1.063) and poorer function (OR =0.929); absenteeism was associated with lower pain self-efficacy (OR =0.650) and higher return to work expectancy (OR =1.179). Presenteeism was associated with higher pain intensity (β =0.259) and lower pain self-efficacy (β = - 0.385).
Conclusions: MSDs affect many individuals ability to work effectively. While all participants have managed to stay at work despite decreased levels of work ability and functioning, approximately a quarter are at high risk of progressing to long-term sickness absence. Interventions that attempt to improve mutable factors, such as pain self-efficacy, may help reduce the likelihood of work disability.
Disclosure of Interest: None declared

AB1084 | CONTRIBUTION OF CLINICAL TRIALS TO THE EFFICIENCY OF ARTHRITIS RHEUMATOID MANAGEMENT

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Background: Treatment and management of Rheumatoid Arthritis (RA) results in a high cost to the Health system such as the Spanish Health System. During the realization of clinical trials (CT) the sponsor is the one that pays for the direct healthcare costs of the patients, which leads to savings to the National Health System (NHS).
Objectives: To estimate the economic impact of conducting clinical trials (CT) for the NHS in terms of avoided costs.
Methods: A retrospective observational study was conducted using information from the clinical trials performed at the Clinical Research Rheumatology Department in the HUP la Fe from 2011 to 2015. Also a Cost-analysis was performed according Health System perspective. We calculated the length of stay in the CT in weeks for each patient included with RA diagnosis. Afterwards, we also calculated the total number of weeks of treatment for the total number of patients. In order to evaluate the economic impact in terms of avoided costs, economic evaluation included direct healthcare costs (rheumatologist visits, nurse care, laboratory tests and pharmacological treatment), and it was compared to the cost of the best alternative treatment in the market.
Results: A total of 35 CT were analyzed in this period, 14 of them focused on RA. Two observational studies and one CT (premature closure by the sponsor) were discarded. Therefore, 11 were considered in this study and a total of 76 patients with RA were analysed which add together 2609 weeks of treatment. This is approximately equivalent to treating 50 RA patients with biological therapy during one year. Evaluating the health savings that biological treatment would have cost during the 2609 weeks, we obtain a total amount of 699.176,88 €. This represents an annual saving of 139.835€ over the 5 years analyzed.
Conclusions: Our Clinical Research Unit managed to save a total amount of 13.935,30 € per patient in CT per year. Clinical Research Units should be considered as an efficient tool to the NHS.
Disclosure of Interest: None declared

AB1085 | MEASURING PATIENT SATISFACTION OF BIOLOGICAL TREATMENTS IN A REGIONAL HOSPITAL

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Objectives: To determine/measure the satisfaction degree of patients with rheumatologic (rheumatoid arthritis, spondyloarthropathies and other arthritis) and dermatological (psoriasis, psoriatic arthritis and suppurative hidrosadenitis) disease treated with a biological drug.
Methods: Descriptive prospective study conducted in a Regional Hospital with a reference area of 109,530 inhabitants.
A survey was conducted to all patients, thepatientswhocollectedtheir medication at the Pharmacy Service (self-administration treatment) and the patients who came for consultation (treatment administered by the nursing staff). The satisfaction degree before and after the biological treatmentwas evaluated.From 0 to 10, where 0 was the maximum dissatisfaction and 10 the maximum satisfaction; and improvement of pain, where 0 implied no improvement and 10 maximum improvement.
Clinical records were reviewed and a database was generated for exploitation with SPSS-vs 22. All patients received an information sheet from the study and signed an informed consent form.
Results: A total of 100 patients were analyzed: 45 men and 55 women. The mean age was 53 years (SD 14.9). 42% of patients were actively employed.
Distribution of patients by pathologies: 46 (46%) rheumatoid arthritis, 25 (25%) psoriasis, 16 (16%) psoriatic arthritis, 8 (8%) spondyloarthropathies, 2 (2%) suppurative hydrosadenitis and 1 (1%) juvenile idiopathic arthritis.
Distribution of biological drugs: 49 (49%) adalimumab, 20 (20%) ustekinumab, 18 (18%) etanercept, 6 (6%) golimumab, 3 (3%) tocilizumab, 2 (2%) secukinumab,1 (1%) certolizumab. The treatment was self-administered in 61 patients.
Only 30 (30%) patients had undergone previous biological treatment. At present, 43 patients had some additional treatment, 38 with methotrexate and 5 with leflunomide.

Satisfaction degree before biological treatment, n (DE)	2.8 (2.6)
Satisfaction degree after biological treatment, n (SD)	7.9 (1.6)
Pain improvement, n (SD)	7.8 (2.1)
Comfort with the route of administration, n	94
Comfort with frequency of administration, n	97
Degree of pain during administration, n (SD)	3.2 (3.2)
Patients who have missed doses, n	15
Patients who have controlled the disease with the biological treatment, n	93
Patients who have improved the quality of life with the biological treatment, n	93
The patient considers to have sufficient information of the drug, n	80
The patient considers to have sufficient information of the disease, n	87
They belong to a patient association, n	4

Conclusions: The satisfaction degree of patients with their biological treatment is very high regardless of the route of administration. Most of them are in monotherapy or with low doses of FAME. 61% of patients self-administer the drug at home. 93% of patients consider that there has been a change in their quality of life and that they can lead a normal life.
Disclosure of Interest: None declared

AB1086 | THE PREVALENCE AND THE REACTIVATION RATES OF HEPATITIS IN PATIENTS WHO ARE TAKING AN IMMUNESUPRESSIVE AGENT FOR TREATMENT OF A RHEUMATOLOGICAL DISEASE

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Background: Today, the immunosuppressive treatment agents became important for therapy of rheumatoid diseases. Theoretically, the use of these agents may result in reactivations be in patients that infected with Hepatitis B (HBV) and Hepatitis C (HCV) virus.
Objectives: We aimed to study the reactions during treatment and prevalence of HBV and HCV infections in rheumatology patients who are using immunosuppressive treatment.
Methods: The records of a total of 1146 patients who were taking an immunosuppressive treatment for a rheumatoid disease were reviewed retrospectively. The hepatitis serology, type of immunosuppressive treatment, the duration of treatment, liver function tests, complete blood count; HBV – DNA and HCV – DNA and antiviral agents and time of use (if patient is infected) were recorded.
Results: There were 682 (59.5%) women and 464 (40.5%) men, the mean age was 45.04±13.13. Ankylosing spondylitis (AS) was diagnosed in 453, rheumatoid arthritis (RA) in 365, psoriatic arthritis in 151, systemic lupus erythematosus in 43, vasculitis in 39, Behçet Disease in 26, systematic sclerosis in 18, myositis in 9, juvenile rheumatoid arthritis in 7, Sjögren Syndrome in 7, Still Disease in 3, familial mediterian fever in 6, retroperitoneal fibrosis in 1 and mixed connective tissue disease in 1 patient. The rate of HbsAg positivity was 1.8% in AS and 2.2% in RA; the rate of HCV positivity was 0.7% and 1.9% respectively. While

HBsAg, AntiHBs and anti-HBcIgG was tested for 898 patients, in 28 patients (2.4%) HBsAg and AntiHBs were negative and anti-HBcIgG was positive. The liver function tests were increased in two occult hepatitis patients, and lamivudine was administered for one and tenofovir for another patient. HCV-RNA was found negative in 12 of 18 patients that positive for HCV. Only one patient had ribavirin + interferon treatment and no reactivation was detected during follow up. The mean length of immunsuppressive treatment was 22.26±18.21 months for HBV positive patients, 19.43±21.40 months for HCV positive patients and 20.94±19.7 months for occult hepatitis. Furthermore, we 10.1% of the patients were vaccinated, 13.4% had natural immunity and 50.7% of patients has not encounter with virus.

Conclusions: HBV prevelance was 3.99% and HCV prevelance was 0.95% in general population, although there is difference according to geographical region in our country. HBV prevelance was the highest 9.9% in southeast region and the lowest 0.7 – 2.5% in west region. Low HBV prevelance could be associated with included patients that was young and stay in west region. Because hepatit virus can be reactivate under immunsupressive treatment, patients should be scanned and be careful for occult hepatitis in these scans.

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AB1087 **POVERTY, POOR NEIGHBORHOODS, AND SLE OUTCOMES: THE PATIENT'S PERSPECTIVE**

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Background: Studies have shown that persons in poverty experience worse outcomes of SLE and that the effect of poverty on outcomes is exacerbated for those living in neighborhoods with a high proportion of households in poverty. We report the results of a project to explore the viewpoint of SLE patients on how income and neighborhood affect disease outcomes.

Objectives: To explore the perspective of SLE patients with SLE on the effect of income, neighborhood, and stress on outcomes: 1) How does presence or absence of money affect care for SLE and in dealing with disease? 2) What role, positive or negative, does neighborhood play in SLE care and outcomes? 3) What are specific stresses that make dealing with SLE difficult?

Methods: We recruited SLE patients for qualitative interviews from a national longitudinal study of SLE conducted between 2003 and 2015. Subjects were selected to highlight the effects of income (those in the highest and lowest income quintiles), neighborhoods (living in neighborhoods with a high proportion of households in poverty vs. not), geographic diversity (four regions of the U.S.; urban, suburban, and rural residents), and range of SLE outcomes. An experienced interviewer conducted hour-long semi-structured interviews which were recorded, transcribed, and analyzed using grounded theory methods.

Results: 28 qualitative interviews were completed; 11 from the highest income group and 17 from the lowest (11 from poor neighborhoods).3 were men, 20 members of racial/ethnic minorities, and mean age was 49, range 22–70. Among the poor, none cited lack of money as limiting their access to care, but all stated that it necessitated choosing which pressing needs to focus on, with food and housing a higher priority than dealing with their SLE. Among the more affluent, financial resources were used to provide help in daily chores or to withdraw from work to reduce stress and allow for more time to manage their disease. Among the poor, none cited a positive benefit of neighborhood in finding health care resources or in mitigating how they dealt with disease but all cited a negative effect of being exposed to high rates of crime, the principal stress mentioned (*From a central city resident:* "A good neighborhood for someone with lupus is a place where you're not robbed twice in a year inside your apartment and not raped on way home from the bus". *From a rural resident:* "I don't worry about safety anymore. I sleep with a 357 Magnum"). Among the more affluent, local neighborhoods played no role in accessing care or in dealing with disease, with several stating they used professional networks not based in their neighborhood to find skilled providers or support (*From a resident of suburban Phoenix:* My physician's classmate in medical school was a rheumatologist at Mayo who knew someone here in Arizona").

Conclusions: Poverty forced choices in priorities, with SLE often having a lower priority than housing or food security. Exposure to crime was the stress repeatedly mentioned by the poor as exacerbating the disease. The affluent in this study indicated that they were able to reduce stress by paying for personal assistance, withdrawing from work, and using networks that extend beyond their neighborhoods to help gain access to resources. Mitigating poverty and reducing exposure to crime by helping the poor move to safer neighborhoods through housing vouchers may improve outcomes in SLE for the poor.

AB1088 **THE PATIENTS' VIEWPOINT ON A SPECIALISED BIOLOGIC SERVICE**

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Background: Biologic disease modifying anti-rheumatic drugs (DMARDs) have been a major breakthrough in the treatment of inflammatory arthritis. In clinical practice, providing timely monitoring to ensure continued efficacy and safety remains a challenge. The availability of a dedicated clinic for patients on biologics may help meet these standards.

Objectives: The aim of this study was to get the patients' perspective of our dedicated biologic clinic and identify any unmet needs.

Methods: Patients attending the biologic clinic between April and September 2016 and who were on a biologic for more than 2 years were interviewed by a trainee following their clinic visit. The patients were asked about their level of satisfaction on various aspects including waiting times, education, involvement in decision-making and duration of consultations.

Results: 44 patients (23 females, 21 males) participated in the survey, of whom 21 suffered from rheumatoid arthritis, 17 from ankylosing spondylitis and 6 from psoriatic arthritis. The mean age of participants was 55.1 (SD 12.62) years. The mean DAS28 was 2.26 (SD 1.03) and the mean BASDAI was 4.21 (SD 2.4). Disease duration was less than 5 years in 20%, 6 to 10 years in 30% and more than 10 years in 50%. Overall satisfaction with arthritis education before initiation of treatment was 91%, which then dropped to 76% after treatment initiation. Satisfaction with education regarding biologic therapy was more consistent at 84% and 81% before and after starting treatment, respectively. 84% of patients reported to be satisfied with their involvement in the decision to start and continue biologic therapy. 77% of patients were satisfied with a consultation lasting 15 to 20 minutes and 77% were also satisfied with 6-monthly visits. The most valued source of education was communication with the caring rheumatologist (n=32), followed by specialist nurse education (n=15), Internet resources (n=14) and use of leaflets (n=13). 95% of patients reported to have rarely or never missed an appointment. The rheumatology advice line was used by 54% of patients, whilst the rest reported that they did not need it since starting the biologic. The greater majority of advice line users were very satisfied with the service provided. Amongst the unmet needs mentioned, were better arthritis education and the introduction of telephone consultations.

Conclusions: Even though most patients were clinically well-controlled, continued education delivered by the caring rheumatologist and specialist nurse is still greatly valued. Patients attending this clinic highly valued the staff dedication and had good communication with their caring clinician. They were highly satisfied with the length and frequency of consultations. Nonetheless, a significant number suggested the need to introduce telephone consultations, which could be considered for those stable patients after receiving proper education.

AB1089 **USE OF NATURAL LANGUAGE PROCESSING TO ENHANCE RETRIEVAL OF RHEUMATOID ARTHRITIS DISEASE ACTIVITY OUTCOMES MEASURES IN US VETERANS**

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Background: Rheumatoid arthritis (RA) disease activity measures in the Veterans Affairs RA (VARA) registry are extracted automatically through natural language processing (NLP). While this system is very effective at extracting data when templated notes are properly used, it lacked an error detection and feedback mechanism. Accuracy of the registry is essential for credible epidemiological research and patient care. We report a new automated approach with an active error monitoring and reporting system to alert providers of missing or potentially erroneous elements that can be easily corrected using standardized addendums available in the electronic medical record. The automated NLP system was revised to identify, extract, and integrate these updates to support the calculation of DAS28 and other composite outcome measures for the VARA database.

Objectives: 1. To describe the systems to identify needed corrections of VARA data.

2. To outline the procedures that allow providers to easily use addendums to enter corrections into the medical record to be automatically captured and loaded into the VARA database.

Methods: Procedures were developed and tested at a single pilot VARA site using data available in the Corporate Data Warehouse (CDW) from 01/01/2016 to 12/31/2016. A Java program was designed to retrieve Rheumatology notes, and corresponding addendums, based on "local" and "national" note titles. Notes were then processed to extract defined elements of RA disease activity listed in the table below. After each scheduled NLP run the system generates a log file that provides a summary, and patient-level report of completed and missing data elements. Providers receive the report and are asked to review the clinical notes of patient visits with missing data elements and follow simple procedures that leverage addendums to add or correct data elements when template violations occur. Addendums are also used to terminate the flag and request for review when the items are not available in the notes. Updating the VARA database from addendums occurs during the next NLP run.