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 (F*rom 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.
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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.
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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.

Results: During the pilot testing phase the automated system processed 516 notes and identified 489/516 (94.8%) as successful loads, and 27/516 (5.2%) were flagged as problematic since one or more data elements were missing. Misapplication of the template occurred in 21/27 (77.8%) of notes flagged by the monitoring system and corrected with addendums. An additional NLP run produced 510/516 (98.8%) completed assessments with calculated DAS28 scores. Specific elements recovered using this process are presented in table below.

Total notes processed (n = 516)	Number (%)	
Elements investigated	Missing data elements	Elements Corrected
Tender Joint Count	1/516 (99.8%)	1/1 (100%)
Swollen Joint Count	2/516 (99.6%)	2/2 (100%)
Patient Global Assessment	11/516 (97.8%)	8/11 (72.7%)
Physician Global Assessment	9/516 (98.2%)	7/9 (77.8%)
Modified Health Assessment Questionnaire	15/516 (97.1%)	10/15 (66.7%)
Pain Score	11/516 (97.8%)	9/11 (81.8%)
Total notes with ≥1 missing elements	27/516 (94.8%)	21/27 (77.8%)

Conclusions: The addition of this error monitoring system provides an efficient data correction system and is expected to motivate and reinforce the use of RA templates. The implications of which may be profound as we transition from traditional epidemiological research to a more active learning healthcare enterprise. This pilot study established "proof of concept" and the next challenge is to adapt the technology to other VARA and non-VARA sites. This technology and framework could enable collaborative clinical research networks that are committed to large-scale pragmatic and observational effectiveness studies.

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AB1090 IS THERE AN ETHNIC VARIATION IN ACCEPTANCE OF BIOLOGIC THERAPY? A UNIVERSITY HOSPITAL EXPERIENCE

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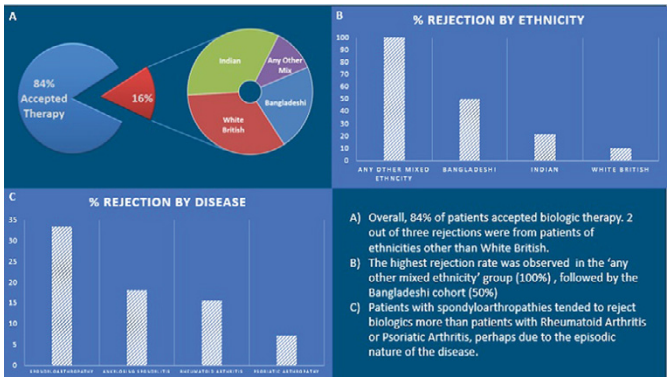
Background: Ethnic variation in drug adherence & preference is well documented (1). While usually a reflection of patient autonomy, the issue takes significance if it impedes the provision of effective evidence based care. Indeed, race affects rheumatological disease outcomes (2), likely for both biological & psychosocial reasons. Studies from United States of America found ethnic minorities were less likely to be on a biologic for a rheumatological disease compared to Caucasians, even after adjustment for education & insurance (3). Studies in the United Kingdom found similar results (4), although few investigated the disparity in the acceptance of biologics between ethnicities. Leicester, a midland UK city has an ethnically diverse population, where identifying and addressing such disparities is crucial in delivering effective & equal care.

Objectives: To determine any disparity in acceptance of biologic therapy, when offered in person, in a healthcare system free at the point of access, between White British and other ethnicities.

Methods: Data was collected from nurse led Biologics therapy clinics, from October 2016 to December 2016. All patients referred were deemed suitable for a biologic as per NICE guidlelines by a Rheumatologist, and were attending the clinic for counselling, assessment & consenting. Proformas were piloted, and improved proformas with information including demographic, disease & treatment details, as well the outcome of the consultation (biologic accepted or rejected) was used to collect data. The collated data were then analysed using EXCEL spread sheet.

Results: Data was collected from 55 patients. Interestingly, sex distribution was nearly equal (54% female). 57% of the total sample was White British (WB). The remaining 43% included; Indian, Bangladeshi, Pakistani, White Other, Asian other, African Caribbean & Any other mixed race. The most common disease necessitating referral for a biologic was rheumatoid arthritis (53%).

16% of patients rejected a biologic drug, of which 66% were ethnic minorities. The rejection rate among ethnic minorities was thus 24% compared to 10% in the WB cohort. The highest rejection rate was within the Any Other Mixed Ethnicity cohort (100%), followed by the Bangladeshi cohort (50%). Of note, all patients who rejected biologic therapy from an ethnic minority background did not speak English as their first language. Rejection rates were highest in the Spondyloarthropathies (21%).



Conclusions: Our results demonstrate a disparity between the White British population and other ethnicities in the acceptance of biologics, despite one to one counselling. This can have detrimental impacts on treat to target concept and disease progression, and thus will be further investigated & addressed.

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AB1091 HIGH ACCEPTANCE RATE IN RA, AS AND PSA PATIENTS WHEN BEING STARTED ON BIOSIMILAR TNF OR BEING SWITCHED FROM THE ORIGINAL TNF MAB (REMICADE, ENBREL) - A SINGLE CENTER EXPERIENCE

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Background: Biiosimilar TNF Mab (BioTNF) have become available in most of the European countries in the last few years. They are labeled to be used in the most common rheumatic diseases, like RA, AS and PsA. Controlled studies have shown comparable efficacy and safety of BioTNF and original TNF (Remicade, Enbrel). BioTNF are allowed to be used in TNF naive patients as well as in TNF pretreated patients (switchers). Prescriptions in different countries may vary due to local most often cost driven restrictions.

So far, little is known about the awareness, acceptance and possible obstacles which may influence patients willingness to accept therapy with BioTNF instead using the original compounds

Objectives: The study was conducted and designed to get a deeper insight in what may influence patients decision making and willingness to accept treatment with BioTNF firsthand or accept switching.

Methods: Between February 2015 and December 2016 41 patients (BioINF n=29, BioETA n=12) were introduced to BioTNF therapy. 9 Patients (Bio-INF n=3, Bio-ETA n=6) received TNF therapy the first time, in 32 patients (Remicade n=23, ETA n=8) werde switched from the originator TNF compound to BioTNF. All patients received comprrehensive information on BioTNF in verbal and written form.

A standardised questionaire was used to ask patients on their awareness, acceptance and about possible obstacles for the usage of BioiTNF Mab.

Results: 6 out of 9 TNF naive patients agreed after their first information on BioTNF to start therapy with BioINF (n=3) or BioETA (n=3). Another 2 patients accepted BioETA therapy on their second visite. Only one patients asked to be started on the originator TNF Remicade. In patients being ask to switch from Remicade to BioINF 19 patients accepted promptly to be switch and in patients with Enbrel therapy 6 out of 9. Finally only 1 patient on Remicade TNF therapy denied even after a third visit to be switched. Mayor concern to deny the use of BioTNF were possible lack of efficacy (30%), safety (32%) and missing longterm experience (35%). The main motivation to switch was patients believe to save money and that they were ask to switch to BioTNF Mab on short notice from their health care insurance company.

Conclusions: There is a high acceptance rate in patients with chronic inflammatory rheumatic disease to be started on or switched to BioTNF (>90%). Their are little concerns in patients accepting BioTNF with regard to safety or efficacy of BioTNF. Patients are aware of BioTNF as a less costly way to treat their rheumatic condition. Physicians should be aware of this willingness and offer BioTNF therapy were it is appropriate. Using BioTNF is a cost saving way to use biologics in rheumatic therapy with equal efficacy and safety compared to the originiator compounds.

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