ACHIEVING A LOW DISEASE STATE WITHIN FIRST 3 MONTHS IN EARLY RHEUMATOID ARTHRITIS RESULTS IN LOWER FATIGUE OVER 5 YEARS

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Background: Up to 80% of rheumatoid arthritis patients report clinically relevant fatigue. Fatigue is complex multi-factorial process that can result in adverse affects on patients’ physical and emotional well-being. Objectives: To examine the relationship between disease activity and fatigue over time in early rheumatoid arthritis (ERA).

Methods: Data were from patients with ERA (symptoms ≤ 12 months) enrolled in the Canadian Early Arthritis Cohort (CATCH). CATCH participants completed repeat clinical assessments, laboratory investigations and self-reported questionnaires including rating their fatigue over the past week using a 10 point numerical rating scale (NRS). Fatigue severity was classified as low (<2); moderate (>2 but ≤5) and high (>5) based on published RA studies. Bivariate relationships between disease activity measures and fatigue over 5 years of follow-up were estimated using the Pearson correlation coefficient. T-tests and repeated measures ANOVA were used to compare differences in fatigue ratings in patient who did vs. did not achieve a low disease state (DAS28 <3.2) within 3-months of cohort entry.

Results: Of the 1864 patients included, 1640 (88%) met criteria for RA, 1342 (76%) had low disease activity measures at baseline, 180 (10%) had moderate disease activity, and 62 (3.4%) had high disease activity. Fatigue was positively and strongly correlated with pain and patient global ratings (r 0.56-0.67, p<0.001), positively and moderately correlated with DAS28 (r 0.35-0.49, p<0.001), and positively but more weakly correlated with tender/swollen joint count, physician global assessment, ESR and CRP (r 0.10-0.39, p<0.01) throughout the first year of follow-up. Patients who reported low fatigue severity by three months continued to have significantly lower fatigue throughout follow-up compared to those with moderate or high fatigue (p<0.001). Patients who achieved DAS28 REM or LDA within 3-months of cohort entry had significantly lower mean fatigue compared to those with more active disease throughout 5 years of follow-up (p<0.001) (Figure 1).

Disclosure of Interests: Melissa Holdren: None declared, Ott Schieir: None declared, Susan J. Bartlett Consultant for: Pfizer, UCB, Lilly, Novartis, Merck, Janssen, Abbvie, Louis Bessette research support from: Amgen, BMS, Janssen, Roche, Abbvie, Pfizer, Merck, Celgene, Sanofi, Lilly, Novartis, Consultant for: Amgen, BMS, Janssen, Roche, UCB, AbbVie, Pfizer, Merck, Celgene, Sanofi, Lilly, Novartis, Speakers bureau: Amgen, BMS, Janssen, Roche, UCB, AbbVie, Pfizer, Merck, Celgene, Sanofi, Lilly, Novartis, Grant/research support from: Investigator-initiated studies: Amgen, Abbvie, BMS, Eli Lilly, Merck, Novartis, Pfizer, Consultant for: Advisory boards: Amgen, BMS, Celgene, Eli Lilly, Pfizer, Speakers bureau: Merck, BMS, Pfizer, Glen Hazlewood: None declared, Carrol Hitchon Grant/research support from: Pfizer, UCB (unrelated studies), Edward Keystone Consultant for: Amgen, BMS, Eli Lilly, Merck, Novartis, Pfizer, Consultant for: Advisory boards: Amgen, BMS, Celgene, Eli Lilly, Pfizer, Speakers bureau: Merck, BMS, Pfizer, Glen Hazlewood: None declared, Carol Hitchon Grant/research support from: Amgen, BMS, Eli Lilly, Merck, Novartis, Pfizer, Consultant for: Advisory boards: Amgen, BMS, Celgene, Eli Lilly, Pfizer, Speakers bureau: Merck, BMS, Pfizer, Glen Hazlewood: None declared.

Figure 1. Mean patient fatigue scores based on NRS of 1-10 over subsequent visits, split based on DAS28 score at 3 months.

REFERENCES:


Acknowledgement: On behalf of Canadian Early Arthritis Cohort (CATCH) Investigators

OPTIMIZING THE ACCESS TO NEW TREATMENTS FOR RMD PATIENTS

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Background: Quality of care measures for rheumatoid arthritis (RA) have been endorsed by the American College of Rheumatology and the CDC. Similar quality indicators have been studied and recommended by the European League Against Rheumatism. Improving quality metrics in an underserved community is a problem given the lack of resources.

Objectives: To identify quality metrics for RA patients with need for an effective intervention.

Methods: An initial retrospective chart review established baseline data from patients with RA seen in our clinic (July 2015 - July 2016), they were identified by ICD-9/10 coding. We identified 3 RA measures needing improvement: (a) tuberculosis screening (TBsc) 12 months prior to starting a new biologic agent, b) documentation of clinical disease activity index (CDAI) in 5/50% of encounters, c) appropriate pneumococcal vaccination. We then planned an intervention by placing index cards at computer stations to remind providers to check these measures. We collected data on these 3 variables prior to the intervention (December 2016 – July 2017) and 30+ days after (August 2017 - December 2017). We also compared these results by provider type (attendings and fellows). For statistical analysis we used Chi-Square test and SPSS 24.

Results: Baseline data included 240 patients, analysis prior to the intervention included 86 patients, and after the intervention included 131 patients. CDAI documentation was improved from 72.1% to 100% (P=0.001), however we already found a compliance of 100% prior to the intervention. (Figure 2, p=0.002 when compared with baseline data). Finally, there was no difference in

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Conclusion: Placing a card reminding providers to check 3 RA quality measures significantly improved CDAI documentation after 30 days of starting the intervention. The compliance with TBsc prior to starting a new biologic agent was 100% even before the intervention, which was better compared to baseline data, likely due to providers being aware there was a problem after initial data was collected. We did not find improvement in pneumococcal immunization rate, most likely because there are multifactorial components to motivating patients to get the vaccine. Our results suggest that interventions as simple as raising provider awareness to a problem such as TB screening, and an index card to remind people to document CDAI can be effective to improve QI measures in RA patients in underserved communities.

REFERENCES:

Disclosure of Interests: None declared

**OP0317**

ASSOCIATION OF PATIENT SATISFACTION WITH HEALTHCARE UTILIZATION, COST, AND QUALITY OF LIFE IN RHEUMATOID ARTHRITIS

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Background: Patient satisfaction and experience with care is being used as a surrogate marker of quality and value of healthcare delivery. No study has evaluated the association of patient satisfaction with healthcare utilization and cost, and quality of life in RA patients.

Objectives: To examine the association of RA patient satisfaction with healthcare utilization and cost, and quality of life.

Methods: 2010-2015 longitudinal files from the Medical Expenditure Panel Survey (MEPS), a nationally representative survey of the US civilian non-institutionalized population were used to identify patients with self-reported RA diagnosis. MEPS has overlapping panel design with participants interviewed up to 5 rounds over a 2-year period. In rounds 2 and 4, patient satisfaction is assessed by the four items about physician interaction – listened carefully, explained things well, showed respect, and spent enough time; and one item for overall satisfaction with care received. A patient satisfaction score was constructed from standardized composite score of these items, and classified as most satisfied (patient satisfaction quartile 4) and less satisfied (patient satisfaction quartiles 1-3). The outcome measures were assessed in year 2: healthcare utilization (any emergency department visit, any inpatient stay, number of visits to office-based providers, outpatient department, and prescription drugs); total healthcare expenditures (measured in 2015 dollars), and quality of life (QoL, measure using 12-item Short Form healthy survey (SF-12)). Two statistical approaches were used: a standard logistic regression comparing most satisfied with less satisfied, and propensity score matching. Propensity scores were estimated using a logistic regression to model most satisfied quartile (vs. lower) as a function of covariates (satisfaction score in year 1 were matched 1 to 1 without replacement using a greedy matching algorithm. After matching, means of outcomes in year 2 were compared among matched pairs. Standard errors were estimated using bootstrapping method with 200 repetitions. Covariates included socio-demographic measures, health behaviors, health status (Charlson Comorbidity Index, general health, activity limitation, and pain affecting activities); RA measures (DMARDs, corticosteroids, and analgesics use); and the Year 1 outcome measures (utilization, total expenditure, QoL).

Results: 568 patients had a self-reported RA diagnosis, 1025 (65.4%) patients were analyzed (326 patients excluded for missing satisfaction response; 201 patients for missing information on other study variables; and 16 for not having data in all 5 rounds). The results using the propensity score matching approach are presented in the Table (202 most satisfied matched to 202 less satisfied patients). There were no differences in the healthcare utilization, cost and QoL among the two groups. Logistic regression approach yielded similar results.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Most satisfied, Q4</th>
<th>Less satisfied, Q1-3</th>
<th>Difference</th>
<th>Bootstrapped SE (t-sets 200)</th>
<th>P Value</th>
</tr>
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<tbody>
<tr>
<td>Total expenditure, $</td>
<td>13452</td>
<td>14095</td>
<td>-123</td>
<td>2607</td>
<td>0.633</td>
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<tr>
<td>Number of Office Visits</td>
<td>13.24</td>
<td>12.73</td>
<td>0.51</td>
<td>1.55</td>
<td>0.741</td>
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<tr>
<td>Number of Outpatient Visits</td>
<td>1.06</td>
<td>1.34</td>
<td>-0.28</td>
<td>0.35</td>
<td>0.622</td>
</tr>
<tr>
<td>Number of Inpatient Visits</td>
<td>0.23</td>
<td>0.34</td>
<td>-0.10</td>
<td>0.085</td>
<td>0.367</td>
</tr>
<tr>
<td>Number of ER visits</td>
<td>0.600</td>
<td>0.525</td>
<td>-0.075</td>
<td>0.107</td>
<td>0.547</td>
</tr>
<tr>
<td>Number of Prescriptions</td>
<td>48.996</td>
<td>53.465</td>
<td>-4.469</td>
<td>4.931</td>
<td>0.561</td>
</tr>
<tr>
<td>QoL - Mental health summary scores</td>
<td>47.557</td>
<td>47.186</td>
<td>0.371</td>
<td>1.136</td>
<td>0.739</td>
</tr>
<tr>
<td>QoL - Physical health summary scores</td>
<td>36.526</td>
<td>34.840</td>
<td>1.686</td>
<td>0.969</td>
<td>0.082</td>
</tr>
</tbody>
</table>

Conclusion: Patient satisfaction score of RA patients was not associated with healthcare utilization and cost, and quality of life measures.

REFERENCE:

Disclosure of Interests: None declared

**FRIDAY, 14 JUNE 2019**

Teenage look in the mirror (sexuality and body image meeting health care)

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Background: Rheumatoid arthritis (RA) and adult juvenile idiopathic arthritis (AJA) is associated with a significant impact on psychological well-being.1,2 UK guidelines for the management of RA3–5 state that psychological interventions should be offered to people with RA to help them adjust to living with their condition and manage their psychological well-being. Three in four rheumatology units in the UK however, rate their overall provision of psychological support as inadequate.6

Objectives: To establish levels of anxiety and depression in people with RA or AJA and how this relates to the prevalence of diagnosed mood disorders and receipt of psychological support.

Methods: The 2018 National Rheumatoid Arthritis Society (NRAS) ‘Emotional Health and Well-being Matters’ survey was designed by patients and researchers. This included a questionnaire designed to capture self-reported comorbidities, receipt of psychosocial support and the Hospital Anxiety and Depression Scale (HADS).7 Participants were recruited by NRAS via their social media platforms, membership and non-membership lists and in newsletters and forum. The survey was open from May-July 2018. Recruitment was focused on those diagnosed with RA or AJA aged 18 years and over and living in the UK.

Results: A total of 1565 people with RA and 55 AJA completed the survey. Although mean scores on the HADS were within the normal range in both populations, over 25% of the samples were experiencing clinical levels of anxiety or depression. Over half of those reporting clinical levels of anxiety or depression had never received a formal diagnosis. Most concerning however, was that 1 in 2

Disclosure of Interests: None declared