Background: Rheumatic musculoskeletal disorders (RMSDs) are a common cause of long term pain and physical disability. In developed countries, RMSDs are a major cause of absence from work and thus have a big financial burden on the country economic status. Several studies have been published the incidence and prevalence of RMSDs in different world countries and found to be widely variable. Estimation of the extend of the problem of RMSDs in developing world, especially in rural economies will help better understanding of the risk factors that contribute to the initiation and progression of these diseases and help the health care authorities to provide proper health care program services in these areas to reduce the physical and financial burden of RMSDs (Bagher et al., 2011; Majumdar et al., 2015 and Usenbo, et al., 2015).

Objectives: To estimate the prevalence rate of RMSDs in a rural population in Upper Egypt.

Methods: A cross-sectional based study was carried out and included 3988 subjects of population (2013 females and 1975 males). Mean age of patients was (46.89±15.25yrs). They proceeded 4 phases of World Health Organization/International League of Associations for Rheumatology community-oriented program for control of rheumatic diseases survey questionnaire WHO-ILAR Community Oriented Program for screening of rheumatic diseases. Modified Health Assessment Questionnaire (HAQ) was used to assess the disability severity. Individuals suspected to have any rheumatic diseases were subjected to full clinical examination, laboratory and radiological investigations to reach a final diagnosis. They were classified according to appropriate criteria of diagnosis of diseases.

Results: A prevalence rate of RMSDs was 16.22%, more prevalence in females (10.38% vs. 5.84% for males, P=0.000). The mean age of patients with RMSDSDS were older (46.89±15.25 yrs) than healthy individuals (29.56±18.95 yrs) (P<0.0001) and with increasing age (≥45-≤ 55 yrs). The identified RMSDs were OA (6.5%), Soft tissue rheumatism (STR) (6.57%), spinal disorders (SD) (6.47%), fibromyalgia (FM) (2.9%), RA (0.30%), arthralgia (0.18%), SPSA (0.15%), Gout(0.16%), Pseudogout (0.08%), SLE (0.5%), JIA(0.03) and MCTD (0.03%). The prevalence rates for the majority of RMSDs were higher in females and with increasing age. About two thirds of the patients had grade II disability.

Conclusion: The prevalence rate of RMSDs in a rural population ≥15years in Upper Egypt has been estimated to be 16.22%.The most prevalent RMSDs are OA, OA and SD causing the greatest burden of the disease. The predictive risk of RMSDs has to be assessed in future studies.

References:

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.779
Conclusion: This preliminary study showed that AE with BEI were more frequent as well as more severe compared to AE presented with OET in patients with rheumatic diseases using BIOBADAMEX data. Our study suggests that use of BEI and comorbidities are associated with the development of AE. Follow up and inclusion of more participants is going on and will allow us to perform further analyses.

References:

Disclosure of Interests: None declared
DOI: 10.1136/annrheumdis-2020-eular.3828

AB1230
PERIPHERAL ARTERY DISEASE AND JOINT PAIN IN TYPE 2 DIABETES PATIENTS, FROM ASSOCIATION TO CAUSATION

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Background: Type 2 diabetes mellitus (T2DM) and arthritis are considered two separate conditions. However, inflammation and metabolic changes play a major role in diabetes co-morbidity (1). The pathogenesis of the joint pain and stiffness in diabetes patients is not fully understood. Diabetic osteoarthropathy (neuropathic arthropathy) considers a quite rare condition (0.1–0.4% of diabetic patients), involving destructive, lytic joint changes (2). Interestingly, over 52% of diabetic patients have joint diseases, compared to only 27% without diabetes; and people with arthritis have over 60% higher risk of diabetes development (3).

Objectives: To test the above 2 algorithms with potential to predict lupus related hospital admissions.

First, we attempted to validate the existing algorithm from the index study of Li et al to predict lupus hospitalization. Second, we tested the 2019 lupus clinical classification score for its ability to predict hospitalizations.

Methods: A retrospective chart review was performed using EHR data collected from 2013 to 2018 at University of Kentucky (UK) Medical Center. Inclusion criteria were 18 years or older at first outpatient rheumatology appointment at UK, at least 3 outpatient rheumatology visits at UK, and ICD 9/10 code for Lupus. A total of 217 patients met inclusion criteria. Variables similar to the index study were extracted from patients' first outpatient rheumatology visit at UK. Additionality, 2019 Lupus Classification Criteria score was calculated. Patients who were subsequently hospitalized, manual chart review was done to determine if the hospitalization was attributable to lupus or not.

Results: Table 1 shows differences between the variables predicting hospitalization in patients in this study (UK) and the Ohio State University (OSU) cohort from whom the admission predicting algorithm was derived (1). All the risk factors that were found to predict lupus hospitalization in the index study, failed to achieve a statistical significance in our validation study.

Table 1. Differences in the variables predicting hospitalization between Index and Validation Cohort

<table>
<thead>
<tr>
<th>Variables predicting Lupus Hospitalization</th>
<th>Index Study (Ohio State)</th>
<th>% of patients</th>
<th>Validation Study (University of Kentucky)</th>
<th>% of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creatinine &gt; 1.2</td>
<td>17%</td>
<td>7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemoglobin &lt; 11g/dl</td>
<td>79%</td>
<td>18%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platelets &lt; 180 × 10^9 / ul</td>
<td>75%</td>
<td>22%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Risk immunosuppression</td>
<td>35%</td>
<td>9.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missed appointment</td>
<td>27%</td>
<td>25%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There was more success predicting lupus hospitalization using the 2019 lupus classification criteria score (CCS) (Figure 1). A CCS >19 predicted higher risk of lupus related hospitalization vs CCS < 19 over the ensuing 2 years (p<0.05).