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POS0303

PREVENTION OF CHRONIC DISEASES DUE TO INFLAMMATION IN INFLAMMATORY ARTHRITIS: RESULTS OF A DELPHI PROCESS TO SELECT CARE RECOMMENDATIONS FOR AN ELECTRONIC MEDICAL RECORD (EMR) INTERVENTION

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Background: Inflammatory arthritis (IA) predisposes patients to several chronic conditions including cardiovascular diseases (CVD), diabetes (DM), osteoporosis (OP) and infections, likely due to systemic effects of inflammation. Studies have found that patients with IA often receive suboptimal care for screening and managing these conditions.

Objectives: This is the first phase of a study which will develop and pilot test automated EMR reminders for family physicians. The reminders will prompt family physicians to screen for and address risk factors for these conditions. We conducted a Delphi process to select care recommendations to be addressed by the EMR reminders.

Methods: We conducted a review of current BC, Canadian and international guidelines for screening and addressing risk factors for CVD, DM, OP and infection. A list of 22 care recommendations, including their level of evidence and risks/benefits of implementation, was reviewed by a panel of six family physicians, three rheumatologists and three IA patients, in a three-round online modified Delphi process. Panelists rated each care recommendation, using 9-point scales, on 1) their clinical importance, 2) their likelihood of improving outcomes, and 3) implementation feasibility. Results were discussed in an online forum. Panelists then rated slightly revised care recommendations, modified based on feedback from the discussion. Care recommendations were retained if the median rating was ≥ 7 with no disagreement as defined by the RAND/UCLA Method handbook.

Results: A list of 15 care recommendations was selected by the Delphi process for EMR integration, including recommendations that address CVD risk assessment (1), hypertension screening (1), DM screening (2), fracture risk assessment (1), BMD testing (1), osteoporosis prevention (1) and treatment (1) with bisphosphonates, preventing infections through immunization (2), minimizing steroids (1) and hepatitis screening (1), screening for hydroxychloroquine retinal toxicity (1), and counselling for lifestyle modifications (2). We excluded 7 recommendations which addressed lipid testing (1), BMD testing in steroid users (1), immunizations (2), weight management (1), and DMARD laboratory test monitoring (2). Recommendations were excluded on the basis of importance (1) or feasibility (6).

Conclusion: The results of the Delphi process will inform the development of reminders, integrated in EMRs, that will support family physicians in their efforts to engage IA patients in addressing risk factors for chronic diseases related to inflammation. We hope to improve the prevention of these diseases, which represent an important cause of morbidity and mortality for people with inflammatory arthritis.

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POS0304

EPIDEMIOLOGY AND ECONOMIC BURDEN ASSOCIATED WITH MENTAL HEALTH COMORBIDITIES IN SYSTEMIC LUPUS ERYTHEMATOSUS AND LUPUS NEPHRITIS PATIENTS

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Background: Systemic lupus erythematosus (SLE), a multisystem autoimmune disease, is associated with mental health (MH) disorders. There is scarce information on the epidemiology and economic burden associated with MH comorbidities and the impact on SLE as well as the subpopulation with lupus nephritis (LN).

Objectives: Examined the incidence and prevalence rate of MH, healthcare resource utilization (HCRU), and costs associated with MH comorbidities in SLE/LN patients.

Methods: Adult SLE and LN patients with ≥ 1 inpatient or ≥ 2 outpatient diagnosis claims for SLE/LN (ICD-9 code: 710.0; and ICD-10 codes M32.10-19, M32.8, M32.9) were identified between 01JAN2013-30JUN2019 from two large US commercial databases. Inclusion required continuous enrollment benefits 12 months pre-/post-index date. Patients were divided into two groups: those with (WMH) vs. those without (NMH). WMH was defined as a MH diagnosis of depression, anxiety, bipolar disorder, or psychosis. Index date for the WMH group was first MH diagnosis claim. For the NMH group, a random index date was assigned between 01JAN2014-30JUN2018. The groups were then matched with a 1:1 ratio based on age, sex, and region within their respective databases. Incidence and prevalence rate of MH in the SLE/LN population were determined. All-cause healthcare costs and HCRU per patients per year (PPPY) were examined with generalized linear models.

Results: A total of 7,760 SLE and 336 LN patients were identified. The majority of patients were female (SLE=93.5%; LN=95.2%) with a mean age of 55.1 years (SLE) and 44.5 years (LN). The prevalence rate of MH was 35.7% for SLE and 28.8% for LN patients and the incidence rate was 18.5% and 15.3%, respectively. Anxiety and depression were the most common MH comorbidities (Figure 1). WMH inpatient stays averaged an additional 2.6 and 7.2 days longer than NMH for SLE and LN, respectively. In addition, WMH patients averaged 10.4 (SLE) and 18.4 (LN) significantly more outpatient visits PPPY than NMH. Overall healthcare cost PPPY was significantly higher for WMH patient in both SLE (\$49,553 vs \$26,064), and LN (\$112,169 vs \$39,529). Inpatient costs were approximately 3 – 5 times greater in the WMH group (Table 1).

Conclusion: This real-world study shows that MH comorbidities have a high incidence and prevalence rate in SLE and LN patients. Health care costs and utilization for SLE and LN patients with MH comorbidities were significantly higher than patients without MH comorbidities. This study highlights not just the high prevalence of MH comorbidity but its large contribution to SLE healthcare costs.

Figure 1. Incidence and Prevalence Rate of Mental Health Comorbidities in the SLE and LN Populations. LN: Lupus nephritis; SLE: Systemic lupus erythematosus