

Comparison of Medication Use in Rheumatoid Arthritis Patients Between University and Private Settings – Results from Ontario Best Practice Research Initiative

Thomas McKeown (Toronto General Hospital, Research Institute, Toronto); Binu Jacob (Toronto General Hospital Research Institute, Toronto); Xiuying Li (Toronto General Hospital, University Health Network, Toronto); Sandra Couto (University Health Network, Toronto); William Bensen (McMaster University, Hamilton); Vandana Ahluwalia (Doctor's Office, Brampton); Arthur Karasik (Doctor's Office, Toronto); Claire Bombardier (University of Toronto, Toronto)

Objectives: The objective of this study was to compare the characteristics and patterns of medication use among rheumatoid arthritis (RA) patients in university and community settings.

Methods: Descriptive analyses were performed using data collected from the Ontario Best Practice Research Initiative (OBRI), a clinical registry of RA patients followed in routine care. Patients were categorized as university if their rheumatologist worked in a teaching hospital, mentored medical students and/or had their Research Ethics Board (REB) located at a hospital. The patients of a community rheumatologist worked at a community center and/or had their REB at a location other than a hospital. A group of mixed Physicians (n=12), who were affiliated with an academic site, but practiced at a community site were excluded from the analysis. Patient baseline demographics, clinical characteristics, socioeconomic features and treatment regimens were compared between university and community patients using chi-square and t-tests.

Results: Among 1583 RA patients, 512 (32%) were from university and 1071 (67%) from community sites. Compared to community patients, university patients were younger (55.5 ± 12.9 vs. 57.9 ± 13.3 yrs, $p=0.004$), had longer RA disease duration (11.3 ± 10.9 vs. 6.9 ± 8.5 yrs, $p<0.0001$), and were highly educated with higher household incomes. Prevalence of depression was higher among community patients (26%) compared to university (21%), $p=0.04$. The disease activity measures and functional status at baseline were similar between the two groups. The use of Biologics was more in university patients (31% vs. 17%, $P<0.0001$) with fewer use of DMARDs (61% vs. 73%, $P<0.0001$).

Conclusion: RA patients in community settings appeared to be older with longer disease duration, had lower socio-economic status and a lower utilization of biologics. The results do not represent the clinician practice patterns as the referral criteria might have biased the patients enrolled in the study. Further analysis is required to evaluate whether the care gap due to differential utilization of biologics have an impact on disease severity in subsequent years.