

Attrition and Participant Characteristics in the Ontario Best Practices Research Initiative (OBRI)

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Objective: The purpose of this analysis was to assess the generalizability of the Ontario Best Practices Research Initiative (OBRI), by comparing patient characteristics and disease activity of rheumatoid arthritis patients who continue to participate to those who drop out prior to reaching their 3 year follow-up.

Methods: Sixty-one rheumatologists in Ontario recruit patients into the OBRI. As of January 2015, 2650 patients had consented to participate and 1533 of these patients should have reached their 3 year follow-up assessment at this time. A total of 175 (11.4%) patients dropped out before their 3 yr follow-up. Among the drop outs, 109 (7.1%) withdrew consent, 38 (2.5%) were lost to follow-up, and 28 (1.8%) refused to re-consent after 2 yrs of follow-up. In addition to the drop outs, 38 (2.5%) patients had died. 1320 (86.1%) patients remained active participants. Patient characteristics and disease activity at enrollment were compared in the drop outs versus those who remained active. A survival curve was generated to look at time of drop out over the 3 year follow-up period.

Results: Patients who dropped out were similar to those who remained active with respect to age, gender, race, education, employment status, having private insurance, disease duration, number of comorbidities, and living alone. Compared to patients who remained active at their 3 year follow-up, those who dropped out had lower household incomes (17% vs 26% \geq 75,000), higher disease activity scores, mean (SD), (DAS28: 4.9(4.4) vs 4.4(1.6), CDAI: 25.7(14.7) vs 20.9(14.3), HAQ: 1.44(0.78) vs 1.22(0.76), Pain Score: 1.76(0.89) vs 1.48(0.87), RADAI: 4.8(2.2) vs 4.0(2.2)) and were less likely to be taking a biologic at the time of enrolment (8% vs 15%). The survival curve showed the attrition rate to be 11.4% over the first three years of follow-up, with 4.7% of patients dropping out in the first year, 3.5% in the second year, and 3.2% in the third year.

Conclusions: Patients with higher disease activity at enrollment were more likely to drop out. The majority of patients dropped out within the first two years. The OBRI attrition rates were lower than those reported in the BRASS cohort (4.31% per 6 month follow-up cycle)¹ and the ARAMIS cohort (6% per year)². The lower number of drop outs in the OBRI cohort could be attributed to the time invested in rheumatologist site visits by our study monitors and the biannual follow-up by our OBRI telephone interviewers.