

Influencers of Deterioration to DMARDS in Patients with Rheumatoid Arthritis

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Abstract

Objective: To identify the socio-demographic, clinical and health care factors that influence deterioration to DMARDS in patients with rheumatoid arthritis.

Design: Prospective cohort study.

Setting: Ambulatory multicenter outpatient clinics at Kenyatta National Hospital in Nairobi, Mater Hospital Nairobi, Mombasa Hospital, Mombasa and The Aga Khan Hospital, Kisumu.

Subjects: Patients with rheumatoid arthritis diagnosed according to the criteria of the American College of Rheumatology (ACR) or ACR/EULAR criteria (score \geq 6) who consented to take part in the study.

Methods: Pre-coded data sheets (questionnaire) were used to capture socio-demographic characteristics and clinical characteristics. Baseline data was collected at time of patient recruitment into the study. They were then followed up over time while on treatment with DMARDS. Only patients who had complete data at 3 months follow up were included in the study analysis. The study's outcome was achievement of remission (DAS -28

score < 2.6) or Low Disease Activity (LDA) (DAS-28 score \geq 2.6 to \leq 3.2) at 3 months follow-up. The study used the Adherence in Chronic Disease Scale (ACDS) by Kubica *et al.* respectively. European Task Force for Patient Evaluation of General Practice (EUROPEP) tool was used to evaluate patient assessments of health care received (the clinical performance of the physician and the organization of practice).

Results: A total of 206 patients were enrolled into the study; 52 (27.7%) patients deteriorated (had severe disease activity at follow up). In the multivariate regression analysis, a high baseline disease activity (DAS-28 score) (OR = 4.4, 95% CI 2.67-7.57, P<0.001) and non-adherence (OR=30.40, 95% CI 4.82-191.66, p<0.001) were identified as independent predictors of deterioration.

Conclusion: High baseline disease activity and non- adherence are independent predictors of disease deterioration in patients with RA.

Key words: Socio-demographic, DMARDS, Rheumatoid arthritis