



## Service Priorities and Programmes Electronic Presentations

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### **Impact of Pharmacist Intervention on Drug Adherence and Drug Knowledge of Rheumatoid Arthritis Patients Discharged from Day Medical Centre**

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#### **Introduction**

Rheumatoid arthritis (RA) is a chronic autoimmune disease that may result in permanent and irreversible joint damage rendering total function loss if not being treated promptly and properly. In the past two decades, pharmacological treatment of rheumatoid arthritis has undergone great advancement to effectively slow disease progression. However, adherence to medications is variable. In Dec 2014, Department of Pharmacy and Rheumatology Team, Department of Medicine in Tseung Kwan O Hospital collaboratively launched RheuMed Service, aiming to enhance patients' drug adherence and knowledge through pharmacist counseling service.

#### **Objectives**

This study aimed at determining the impact of pharmacist intervention on drug adherence and knowledge in patients with rheumatoid arthritis.

#### **Methodology**

This is a single-centre, prospective, self-controlled, single-armed pilot interventional study spanning 8 months. Pharmacist intervention consisted of initial drug counseling session, then one phone follow-up and one face-to-face follow-up scheduled at 1 month and 4 months respectively post first session. Assessments were made at each session. Data collected from follow-up sessions were compared with the initial session with P-value set at less than 0.05 to be statistically significant. Assessments include 1) Patients' drug adherence measured by medication adherence questionnaire. 2) Patients' knowledge on drugs for rheumatoid arthritis (including disease-modifying anti-rheumatic drugs (DMARDs), oral steroids and analgesics and 3) patient satisfaction towards the service. The Disease Activity Score in 28 Joints (DAS28) was also collected to monitor disease condition.

#### **Result**

Thirty-four patients were recruited in the study. Significant improvement in drug

adherence was found at both phone follow-up and second counseling session; percentage of patients with good drug adherence increased from 58 to 77 %. Knowledge on all groups of drugs showed significant improvement. Mean satisfaction score was 36.6 out of 40 (higher score indicating better satisfaction). Disease condition also improved as percentage of patients with 'high disease activity' (DAS28 >5.1) decreased from the baseline value of 27% to 7% at 4 months post first counseling. This study showed that pharmacist intervention has a positive impact on drug adherence and drug knowledge in patients with rheumatoid arthritis and can contribute in improving patients' disease condition.