



Drug Prescribing in Patients with Impaired Renal Function: are Interventions Still Needed to Improve Patient Safety?

Ana GÓMEZ-LOBÓN¹, Olga DELGADO-SÁNCHEZ¹, Pilar MODAMIO²,
Laura ÁLVAREZ-ARROYO¹, Francisco CAMPOAMOR-LADÍN¹ & Eduardo L. MARIÑO^{2*}

¹ Pharmacy Department, Hospital Universitario Son Espases, Palma de Mallorca (Spain).

² Clinical Pharmacy and Pharmacotherapy Unit, Department of Pharmacy and Pharmaceutical Technology,
Faculty of Pharmacy, University of Barcelona, Barcelona (Spain).

SUMMARY. An intervention study of 3 months was performed at a third-level university hospital to investigate if drug adjustment interventions towards chronic kidney disease (CKD) patients are still needed. Patients with a glomerular filtration rate < 60 mL/min/1.73 m² and a prescribed medication that needed an adjustment for CKD were selected. Demographic and clinical data, prescription information, non-adjusted medication, interventions, and acceptance of recommendation were registered. A total of 706 patients were included (77.5 % stage 3 of CKD, 13.2 % stage 4 and 7.2 % stage 5), 281 (8.5 %) of 3,315 prescriptions were considered non-adjusted (52.3 % stage 3, 28.8 % stage 4 and 18.9 % stage 5) and were intervened: 220 (78.3 %) dose reduction, 32 (11.4 %) contraindicated, 21 (7.5 %) follow up, and 8 (2.8 %) dose increment. Fifty per cent of the interventions were accepted. Antibiotics became in 45 % of the interventions. Intervention and education about the important of drug adjustment in CKD is still needed to improve safety on these patients.

KEY WORDS: Chronic kidney disease, Cockcroft-Gault, Drug dosage, Medication error, Modification of diet in renal disease, Pharmaceutical care.

* Author to whom correspondence should be addressed. *E-mail:* emarino@ub.edu