Background and importance Following the implementation of the integrated disease management model for end stage renal disease in 2008, pharmaceutical services throughout Portuguese haemodialysis centres are responsible for medication management, promoting its rational use, safety and effectiveness. Patients in end stage renal disease undergoing haemodialysis have multiple comorbidities, complex pharmacotherapeutic regimens, high pill burden and significant haemodynamic changes to mild medication alterations. The evidence of pharmacists’ interventions in patients with chronic kidney disease is sparse and its evaluation is necessary to improve the quality of interventions and patient healthcare.

Aim and objectives To assess drug related problems and related pharmaceutical interventions registered by each pharmacist in haemodialysis centres since 2018.

Material and methods Pharmacists in 37 haemodialysis centres voluntarily registered drug related problems identified during clinical practice in an internal database, providing data on the drug, patient name, pharmaceutical activity and suggested pharmaceutical intervention. Whenever possible, the result of the intervention was assigned.

A retrospective descriptive study with review and analysis of the database information was performed.

Results Since 2018, a total of 6836 drug related problems with pharmaceutical interventions were registered in 2761 patients. The most frequent were inadequate dosage, duration or pharmacotherapeutic regimen (33%), prescription error (32%) and non-adherence (22%). Pharmaceutical interventions were grouped as prescription changes (84%), patient intervention (9%), information to nephrologist (6%) and other (1%). When registered (62%), the result was accepted in 37% of cases, not accepted in 18% and not applicable in 7%. Drug related problems were identified mainly in prescription review (65%), adherence assessment (18%), drug dispersion (12%) and pharmacist interview (2%), and occurred predominantly with hypertensive agents, vitamins and phosphate binders.

Conclusion and relevance The results suggest that using a database to register drug related problems and pharmaceutical interventions is an applicable tool to assess the development of pharmacists’ interventions, although underreporting was admitted. Pharmaceutical interventions were mainly directed at prescription optimisation, with parameterisation for effective distribution/administration and administration time changes, especially regarding drugs used in dialysis. Accordingly, hypertensive agents and vitamins, used mostly in ambulatory dialysis patients undergoing haemodialisation, were predominant. Pharmaceutical interventions were generally accepted and suggest effective influence on drug therapy management of patients undergoing haemodialysis although clinical outcomes should be considered.

REFERENCES AND/OR ACKNOWLEDGEMENTS


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