

CLINICAL PHARMACIST INTERVENTIONS IN HOSPITALIZED PATIENTS WITH RENAL IMPAIRMENT

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Background

The need for dose adjustment in patients with renal impairment is well known. Despite globally implemented interventions for improvement in dose adjustment, there is a high noncompliance to dosing recommendations in renal impairment.

Purpose

- To determine the degree of drug dose adjustment in hospitalized patients with renal impairment
- To assess the acceptance rate of the clinical pharmacist interventions

Material and methods

Prospective interventional study was conducted at the Department of Internal Medicine during a 3-month period. Using Cockcroft-Gault equation patients with renal impairment were identified at admission and their pharmacotherapy was reviewed daily. Prescribed drugs which needed dose adjustment in renal impairment were classified as adjusted or unadjusted. For the later, written pharmaceutical intervention was sent to the concerned doctor.

Results

- Almost a third of all admitted patients had CrCl < 60mL/min at admission
- 309 patients were included in the study, with 99 (32%) patients having at least one unadjusted drug dose
- 40% of clinical pharmacist's interventions were accepted

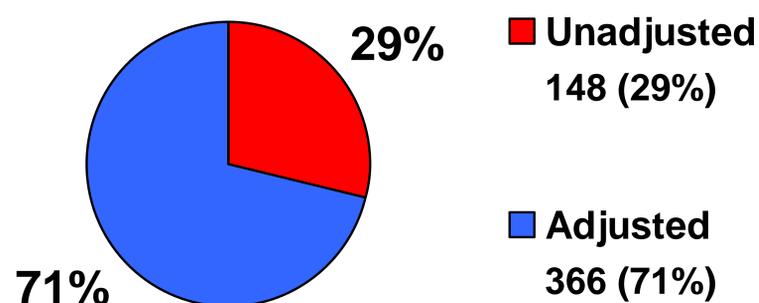


Figure 1. Prescriptions requiring dose adjustment

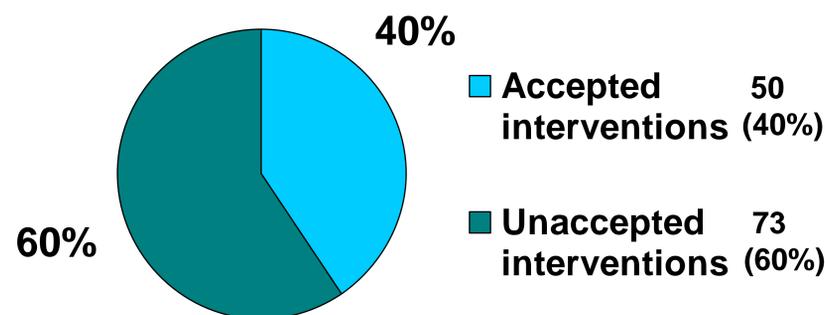


Figure 2. Acceptance of clinical pharmacist's interventions

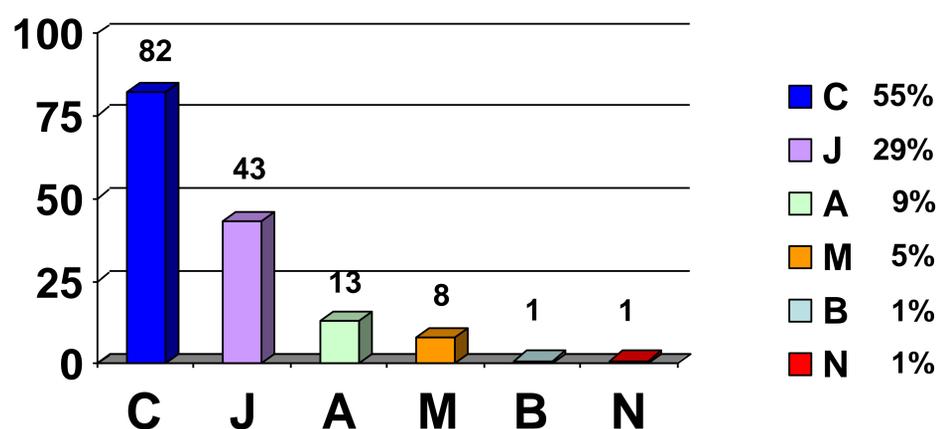


Figure 3. Number of prescriptions of unadjusted medications by Anatomical Therapeutic Chemical (ATC) code

Conclusion

- Clinical pharmacists can increase the rate of proper dose adjustments in patients with renal impairment
- Implementation of systemically provided pharmaceutical care at hospital wards can facilitate positive treatment outcomes and increase patient safety

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