

# Less is More: Deprescribing in renal patients on a conservative management pathway

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## Background

Patients with advanced chronic kidney disease (CKD) often have multiple co-morbidities with associated polypharmacy, increasing risks of adverse effects, drug interactions and medication costs<sup>1</sup>. One component of Kidney Supportive Care (KSC) is judicious deprescribing, particularly for patients choosing a non-dialysis, conservative management pathway (CMP).

## Aim

To examine the number and type of prescribed medications of patients on a CMP and identify potential medications to deprescribe.

## Methods

Retrospective analysis of patients on a CMP from February 2016 to February 2019.

Patient demographics, Charlson Comorbidity Index (CCI), and medication lists were extracted from the medical record.

Medications highlighted as potentially able to be deprescribed included:

- anticoagulants
- dual antiplatelet therapy (DAPT)
- HMG-CoA reductase inhibitors (statins)
- proton pump inhibitors (PPIs)
- supplementary vitamins

Patient demographics and drug prescription profiles were described as median (range) or percentage. Associations between demographic/clinical factors and the number of medications potentially suitable to be deprescribed were determined using multiple linear regression, with  $p < 0.05$  considered statistically significant.

## Results

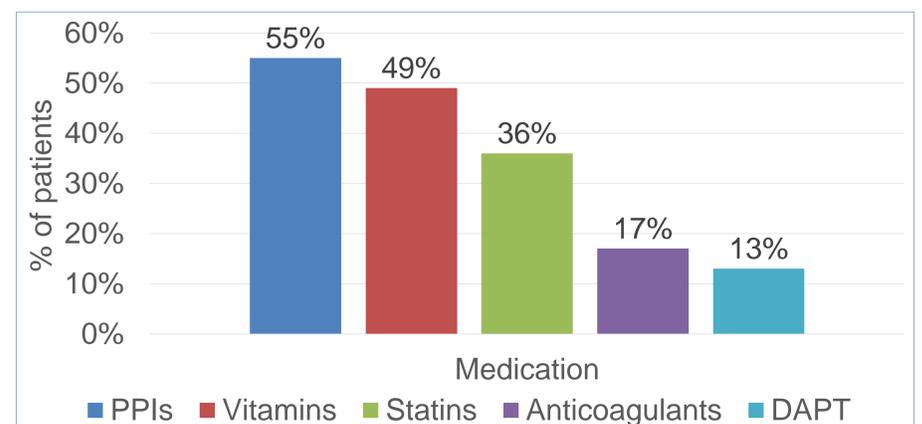
Patient characteristics are summarised in Table 1. Just over half were female, majority had CKD stage 5 and all were taking at least 5 individual medications.

Figure 1 shows the percentage of patients taking each of the medication groups examined. 38/47 patients (81%) had at least one medication that could potentially be deprescribed.

Table 1 – Patient characteristics (n = 47)

Patient characteristics	
Age	
Median	83
Range	29-92
Gender	
Female	53%
Male	47%
CKD Stage	
4	26%
5	74%
Number of individual medications	
Median	13
Range	5-31

Figure 1 – Percentage of patients taking each of the medication groups



Collectively age, gender, CKD stage, total number of medications and CCI significantly explained 30% of the variation in the number of medications suitable to be deprescribed ( $p=0.02$ ). Independent predictors were CKD stage ( $p=0.04$ ) and the total number of medications ( $p=0.02$ ).

## Conclusion

Many patients continue to receive medicines with limited therapeutic benefit for their treatment pathway. There are opportunities in this patient group for deprescribing. More research is required to identify barriers to deprescribing and to develop tools/checklists in this unique population.

### References:

1. Mason NA. Polypharmacy and medication related complications in the chronic kidney disease patient. *Curr Opin Nephrol Hypertens*. 2011 Sept;20(5):492-7