

IMPROVING SAFETY OF ART PRESCRIBING IN AUSTRALIAN GENERAL PRACTICE: USE OF MEDICINEINSIGHT, A LARGE NATIONAL PRIMARY CARE DATASET TO IDENTIFY AND ADDRESS POTENTIALLY INAPPROPRIATE MEDICINE USE

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Background: The success of antiretroviral therapy (ART) has transformed HIV into a manageable chronic disease. Many factors, including comorbidities and potential drug interactions, need to be considered to ensure optimal long-term treatment. We aimed to describe ART use in this population and to investigate the frequency of potential ART interactions with patient comorbidities and co-prescribed medicines.

Methods: We used MedicineInsight, a large Australian primary care dataset to determine the characteristics of the cohort of people living with HIV (PLWHIV) in relation to ART prescribed, comorbidities that may influence choice of ART (cardiovascular and chronic kidney disease), and use of other medications that may interact with ART agents. ART use was compared to best practice recommendations.

Results: In September 2018, 2688 patients 18 years or older were identified in the dataset as PLWHIV, representing 10.9% of the estimated 24646 people diagnosed in Australia. 36.4% of PLWHIV with CVD were prescribed abacavir or a protease inhibitor (PI), which have been associated with an increased risk of cardiovascular events in observational studies. 17.9% of PLWHIV with CKD were prescribed either tenofovir disoproxil fumarate, atazanavir, lopinavir/ritonavir or indinavir, which may worsen renal function. 7.7% of PLWHIV were prescribed a corticosteroid (excluding beclomethasone) with a boosted regimen, which may increase steroid concentration, potentially suppressing the hypothalamic-pituitary-adrenal-axis. 5.6% were prescribed atazanavir or rilpivirine with a proton-pump inhibitor, which may reduce the effectiveness of the ART and reduce viral control.

Conclusion: This study characterised patterns of ART prescribing in Australian primary care and identified potentially inappropriate prescribing in patients with CKD and CVD, or who were prescribed potentially interacting medications. The study identified educational opportunities for GPs that were used as the basis of a quality improvement activity, to review and optimise the management of patients living with HIV.

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