POLYPHARMACY OF CONCOMITANT MEDICATIONS IN HIV-INFECTED AUSTRALIAN ADULTS IS COMMON, AND ASSOCIATED WITH ADVERSE EFFECTS

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Background: Polypharmacy, commonly defined as ≥5 medications, is more common in HIV-infected adults than the general population, and is associated with increased risk for morbidity, non-adherence, drug interactions, and side effects in the general population. The risk for polypharmacy is not well understood in HIV-infected adults.

Methods: We recruited 522 HIV-infected adults into a cohort study at 17 Australian sites. All participants were on stable ART with an undetectable viral load for at least three months. A 90-item survey recorded demographics, physical health, life stressors, social supports, HIV disclosure, stigma/discrimination, healthcare access, treatment adherence and side effects, health/treatment perceptions, and financial/employment status. Neurocognitive, clinical, and virological data were collected. Factors associated with concomitant medications (CM) polypharmacy (including over-the-counter and alternative medications) were identified using multivariate logistic regression. Pearson's chi-squared test was used to evaluate the relationship between CM use and CM polypharmacy with the following symptoms: nausea, diarrhoea, fatigue, sleep disturbance, muscle pain/weakness, rash, and peripheral neuropathy.

Results: Of 522 participants, 392 (75%) took a CM, most commonly cardiovascular, non-prescription items (vitamins/minerals), antidepressants, endocrine agents and anti-infectives. CM use significantly associated with sleep disturbance (OR 2.6, 95%CI 1.5-4.2, p<0.001) and myalgia (2.1 [1.1-3.9], p=0.019). CM polypharmacy was present in 122 (23%) and independently associated with: clinical trial participation (adjusted odds ratio [AOR] 3.5, 95% confidence interval [95%CI] 1.3-9.0), renal impairment (3.8 [1.5-10.1]), major comorbidity (4.2 [2.0-8.6]), hospital/general practice-based HIV care (vs. sexual health clinic), and benzodiazepine use (2.8 [1.1-7.7]). CM polypharmacy significantly associated with diarrhoea (OR 1.6, 95%CI 1.0-2.4, p=0.046), fatigue (1.7 [1.1-2.6], p=0.015), myalgia (1.7 [1.0-2.9], p=0.033) and peripheral neuropathy (3.9 [2.4-6.4], p<0.001).

Conclusions: CM polypharmacy was common and associated with several adverse effects. Management of CM to prescribe fewer CMs with fewer adverse effects is warranted.

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