



Comparing Adherence to Medications Used in Treating Comorbid Conditions among Older HIV Patients using Walgreens HIV-Specialized Pharmacies and Traditional Pharmacies

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Objective

- To compare adherence to drugs used to treat comorbid conditions for older HIV patients obtaining their prescriptions at HIV-specialized pharmacies (HIV-SPs) with those using traditional pharmacies (TPs).

Background

- CDC estimated that more than 1.1 million people in the United States are HIV-positive.¹
- Because of advances in antiretroviral therapy (ART), about half will be over the age of 50 by 2015.²
- Older HIV patients are more likely to die of age-related illnesses such as cardiovascular disease (CVD) rather than HIV. Both hypertension and hyperlipidemia contribute significantly to the pathogenesis of CVD, so adherence to related therapies is essential.³

Walgreens HIV-Specialized Pharmacies

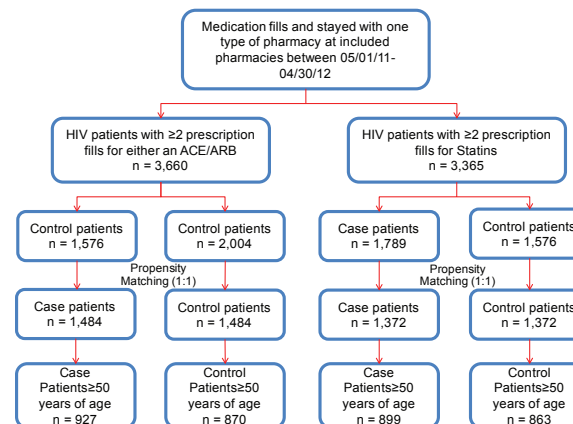
- HIV-SPs offer a variety of services to help patients overcome barriers to medication adherence.
- Personalized services offered by clinically-trained pharmacists at HIV-SPs include: proactive medication management, synchronization of medication refills, confidential one-on-one patient consultation and education, identification of drug interactions, minimization of medication side effects, access to copay assistance, and free prescription delivery in selected areas.

Methods

- Study design: Retrospective cohort study of a sub-population from a previous ART adherence study⁵
- Study period: May 1, 2011 - April 30, 2012
- Study sample: Subgroup analysis of patients aged ≥ 50 years (see Figure 1)
- Outcome variable: Adherence to ACE/ARBs and statins using Proportion of Days Covered (PDC)⁴
- Predictor variable: Walgreens Pharmacy type (HIV-SPs vs. TPs)
- Statistical methods: Propensity score matching, Student's paired t-test, McNemar test, and Z-test. (A p-value of <0.05 was deemed significant.) All statistical analyses were conducted using SAS version 9.2 (SAS Institute Inc., Cary, NC)

Methods (continued)

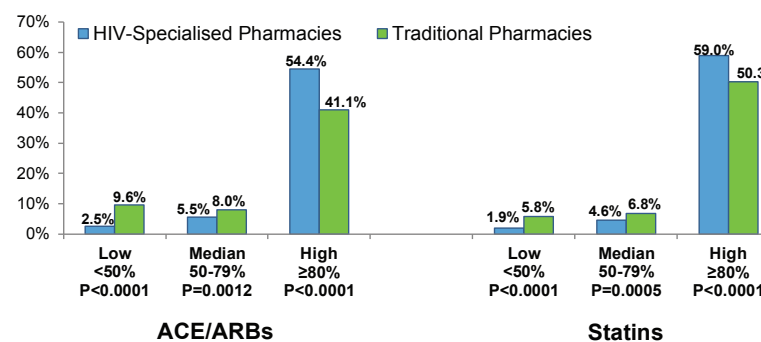
Figure 1. Patient selection flow chart



Results

- For patients at least 50 years old, a greater percentage of patients using HIV-SPs were significantly more likely to obtain a PDC of 80% or higher compared to those using TPs (see Figure 2).

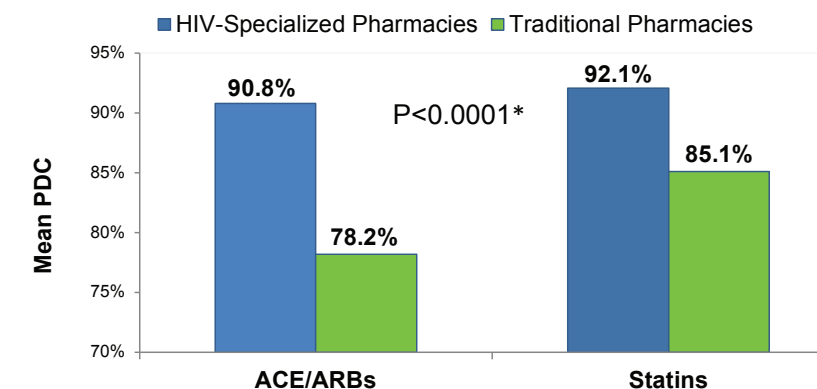
Figure 2. Patient Adherence Level for ACE/ARBs or Statins



Results (continued)

- For patients at least 50 years old, mean PDC to ACE/ARBs and statins by HIV-SP users was significantly higher than for TP users. (See Figure 3).
- * P<0.0001 applies to both groups

Figure 3. Mean PDC for ART Patients using ACE/ARBs or Statins by Pharmacy Type



Limitations

- This study was limited to one pharmacy chain. Adherence could be underestimated if patients used other pharmacies.
- Some factors which might impact medication adherence (e.g. socioeconomic status, educational level) were not included in the propensity score matching.

Conclusions

- Our previous study⁵ showed that adherence to ART medications is higher among HIV-SPs users compared to TPs users.
- This sub-analysis demonstrated that adherence to CVD medications is also higher for HIV-positive patients aged 50 and over who use HIV-SPs than for those who use TPs.

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