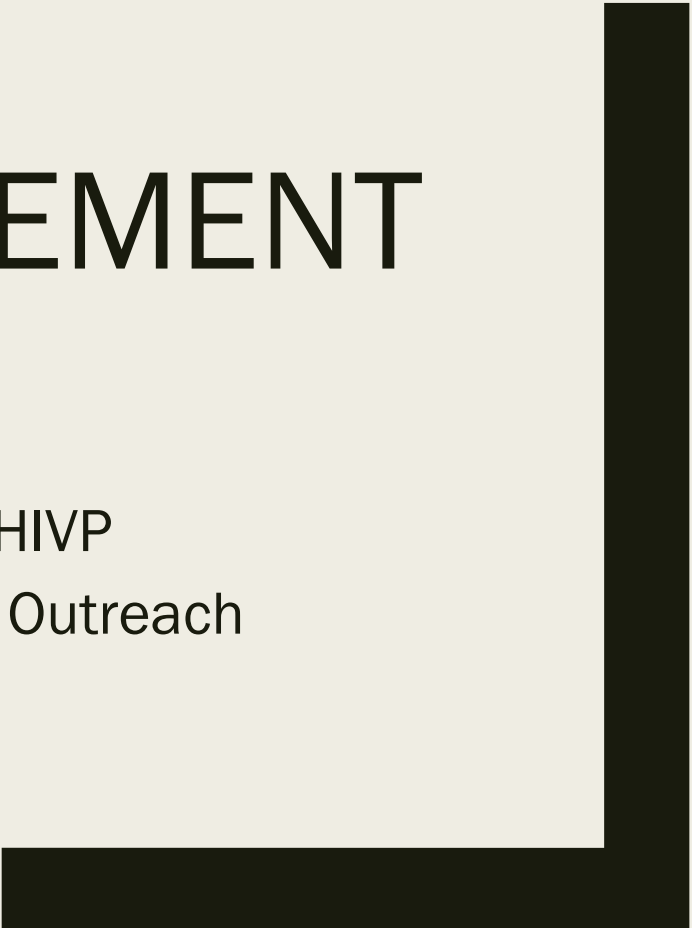




# PHARMACIST INVOLVEMENT IN HIV CARE

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# Objectives

- Describe the unique role of pharmacists in patient education and engagement
- List ways pharmacists can empower patients in the management of their own care
- Discuss the patient/pharmacist/provider relationship and its importance to positive health outcomes
- Describe common HIV medication challenges experienced by PLWH
- Discuss strategies for reducing drug-drug interactions by improving pharmacist/provider/patient communication across the care continuum

# Financial Disclosure

I, Dr. Dyson, declare no conflicts of interest, real or apparent, and no financial interests in any company, product, employment, gifts, or stock holdings.

Poll: I work closely with a pharmacist \_\_\_\_\_

A. Daily

B. Weekly

C. Monthly

D. Rarely

E. Never

# Pharmacist Practice Settings

- Ambulatory Care
- Community/Retail
- Institutional/Hospital

# Ambulatory Care/Institutional Setting

- Medication Review
  - *Reconcile Medication List*
  - *Assess Immunization History*
  - *Monitor Drug Interactions*
  - *Suggest Pharmacotherapies*

# Ambulatory Care Setting

- Patient Education
  - *Medication Counseling*
  - *Disease State Management*
  - *Smoking Cessation*

# Ambulatory Care Setting

- Adherence Monitoring
  - *Filling Medication Boxes*
  - *Monitoring Pharmacy Refill History*



# Institutional Setting

- Similar roles as pharmacists in ambulatory care settings
- Other unique opportunities:
  - *Manage institutions' drug approval systems*
  - *Regulate new drugs in the formulary*
  - *Oversee systems programmed to flag potential drug interactions*

# Community Setting

- Drug interaction monitoring
  - *Multiple prescribers*
  - *Over-the-counter (OTC) medications*
- Adherence monitoring
  - *Refill reminders*
  - *Notification and/or resolution of payer issues*
  - *Communication of refill history to other HCP*

# Case 1: Pharmacist Involvement in HIV Care

E.H. is a 56-year-old, HIV-positive (DDx 2001) African-American male. His viral load at last visit was 1367 copies/ml and his CD4 count was 476 cells/mm<sup>3</sup> on DRV/r QD with RAL BID. His past medical history is significant for HTN, asthma, insomnia, CKD, and GERD. He has no known drug allergies. He is a current smoker (1ppd), and admits to past history of IV drug abuse and risky sexual behavior with both men and women. He has a Medicare Part D drug plan.

Current medications include:

- Carvedilol 25 mg – twice daily with food
- Amlodipine Besylate 10 mg – once daily
- Trazodone 50 mg – once daily at bedtime
- Pantoprazole 40 mg – once daily in the morning
- Rivaroxaban 15 mg – once daily
- Darunavir 800 mg – once daily
- Ritonavir 100 mg – once daily
- Raltegravir 400 mg – twice daily
- Albuterol oral inh (200 puffs) – Inhale 2 puffs q 4 h PRN
- Ipratropi/Alb 0.5/3 mg Inh Soln – Inhale contents of one vial via nebulizer four times daily PRN

# Case 1: Pharmacist Involvement in HIV Care

An appointment is scheduled with the clinical pharmacist at the clinic for smoking cessation counseling. During the encounter, the pharmacist also discusses the importance of adherence and discovers that the patient has only been taking raltegravir 400 mg once daily. The patient admits that in the beginning he would often forget the second dose and eventually stopped taking it altogether. The patient asks if this is significant, and the pharmacist should respond:

- A. Yes, it is important to receive 800 mg of raltegravir every 24 hours. If you have trouble with twice daily dosing, simply take both doses at the same time.
- B. No, the second dose is only needed for patients newly diagnosed with HIV in order to decrease the viral load more rapidly.
- C. Yes, both doses of raltegravir ensure adequate drug concentration for viral suppression. If you have trouble with twice daily dosing of raltegravir, you can discuss other regimen options with your provider.
- D. Yes, the dose of raltegravir given with darunavir and ritonavir acts as a booster for these medications to ensure a high enough concentration for these is achieved for viral suppression. The second dose is used to maintain the concentration later in the day.

# Ambulatory Care Setting: How did the pharmacist help?

- *Adherence/Medication counseling*
- *Smoking cessation counseling*
- *Suggest alternate pharmacotherapy*
  - Dolutegravir vs. Raltegravir

# Case 2: Pharmacist Involvement in HIV Care

E.H. visits a local community pharmacist and presents a prescription for the following medications from the hospital emergency department.

- Azithromycin 250 mg – 2 tablets PO on Day 1, then 1 tablet PO QD for 4 days
- Prednisone 20 mg – once daily for 7 days
- Benzonatate 100 mg – once three times daily PRN

The patient states that he was also instructed to get OTC Fluticasone NS, and he wants the pharmacist's help locating the item and instructions for use.

# Case 2: Pharmacist Involvement in HIV Care

After reviewing the patient's past medical history and current medication list, what should the pharmacist advise regarding the medications E.H. received from the ER?

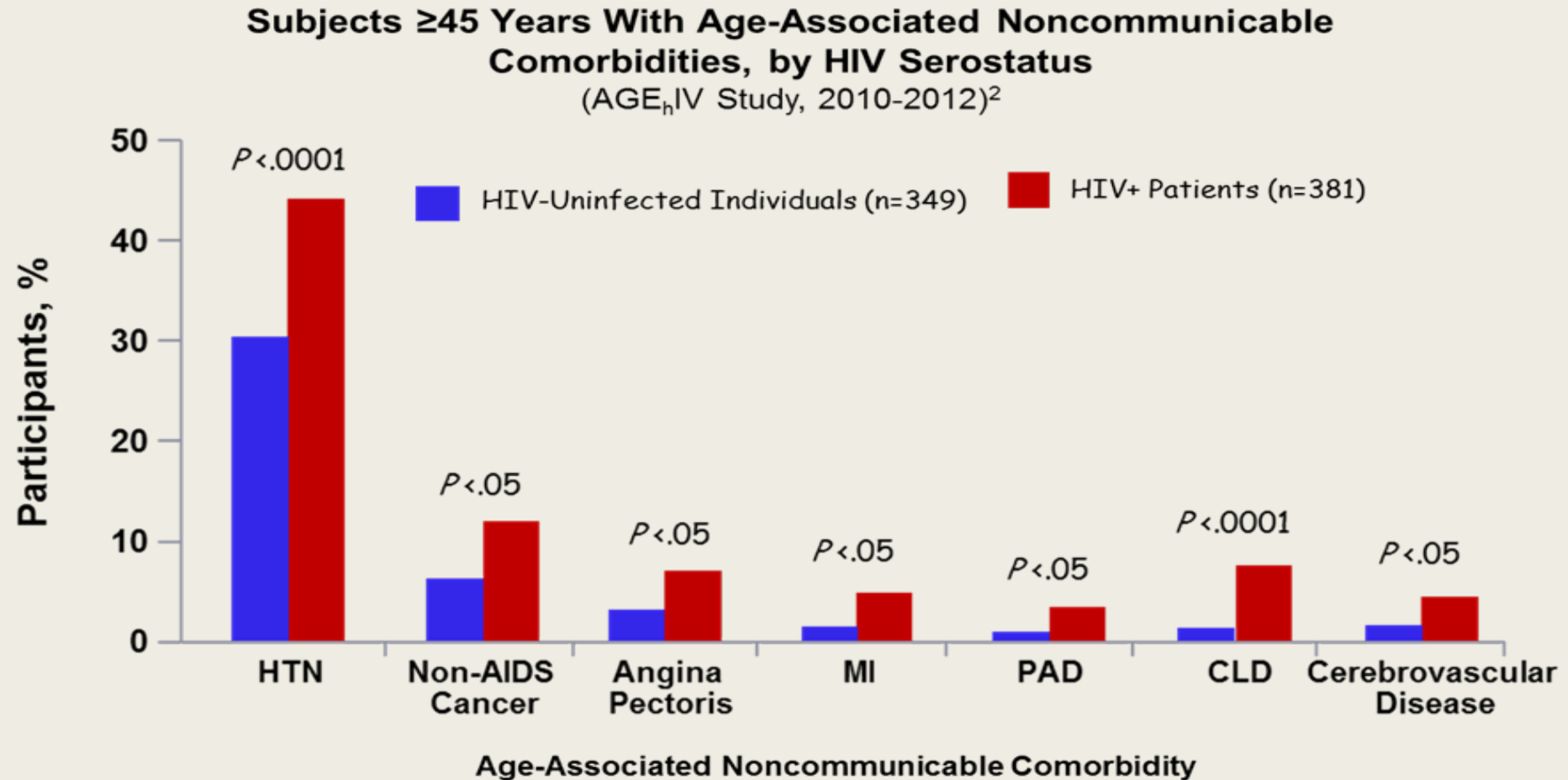
- A. There isn't an issue with any of the medications E.H. received from the E.R. The pharmacist should provide E.H. with the medications as is.
- B. Combining Raltegravir with Azithromycin may increase risk of QT prolongation. The pharmacist should contact the E.R. to request an alternative antibiotic for E.H.
- C. Combining Fluticasone with Ritonavir may increase plasma fluticasone exposure. The pharmacist should suggest an alternative nasal spray for E.H. to use.
- D. Combining high dose steroids with Darunavir may decrease Darunavir levels, efficacy. The pharmacist should not fill the prescription for prednisone.

# HIV-Positive Patients Are Living Longer

- Estimated percentage of persons living with HIV/AIDS aged older than 50 years has increased.<sup>2-4</sup>
  - *2001 (17%) < 2010 (35%) < 2015 (50%)*<sup>2-4</sup>
- A 20-year-old HIV-positive patient can now expect to live into his/her early 70s.<sup>5</sup>



# Prevalence of Comorbidities in HIV-Positive Patients



# Case: Pharmacist Involvement in HIV Care

E.H. was so impressed with his previous visit with the local community pharmacist that he decides to have all of his remaining prescriptions transferred to this pharmacy. Among the prescriptions transferred are Sildenafil 100 mg PRN 30 minutes to 1 hour prior to sexual activity and FDC Isosorbide dinitrate/hydralazine 20 mg/37.5 mg TID. The pharmacist notices that 1) Each prescription was written by two different specialty providers and 2) FDC Isosorbide dinitrate/hydralazine 20 mg/37.5 mg TID was prescribed nearly 2 months ago but was never filled by the patient.

When the patient returns to the pharmacy to pick-up his Sildenafil, the pharmacist informs the patient that he needs to speak with the provider prior to dispensing the medication. In the meantime, the pharmacist questions the patient on why he has not picked up the FDC isosorbide dinitrate/hydralazine previously.

# Community Setting: How did the pharmacist help?

- Drug interaction monitoring
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# HIV Prevention: Testing Opportunities

# Rapid HIV Testing in Community Pharmacies

- Two independent pharmacies located in Michigan
- 69 participants
  - *42% first-time testing*
  - *Reported high-risk behavior in the past 6 months*
- Participants were diverse by gender and race
- Pharmacists reported favorable perceptions of the HIV testing experience
- Author conclusion: "Expanding HIV testing to community pharmacies could improve HIV testing uptake."

# Rapid HIV Testing in Community Pharmacies

- Gauged patients' interest in HIV testing in the community pharmacy setting
- Looked at potential barriers to testing
- Five community pharmacies
- 380 patient surveys
  - *135 (35.8%) participants were interested in pharmacy-based HIV screening*
  - *Interest higher among those 18-29 years old compared with those 30-49 years old*
- Barriers:
  - *Most commonly- Lack of perceived risk for HIV*

# HIV Prevention: PrEP Education/Promotion

# Case 3: PrEPared to Educate

R.W. is a 29-year-old, gay, HIV-negative male (self-reported last test was 1 year ago) who regularly visits the local community pharmacy for pharmacy-based rapid HIV-testing. He drops by for testing today after recently attending a weekend party in Florida approximately one week ago. He shares with the pharmacist that he engaged in sexual activity with multiple partners throughout the weekend, and he is not sure of his partners' statuses. He admits that he did not use protection with every encounter.

Should the pharmacist suggest PrEP to the patient in addition to educating the patient on proper timing of rapid HIV testing after an encounter and risk reduction methods?



# Case: PrEPared to Help

R.W. returns to the community pharmacy location 3 months later to thank the pharmacist for the information he provided previously. Additionally, R.W. would like to get his prescription filled for TDF/FTC 200 mg-300 mg QD with 2 refills. What next steps should the pharmacist take in assisting R.W.?

- A. Identify any financial barriers and suggest financial assistance offerings.
- B. Counsel R.W. on side effects and how to manage them.
- C. Discuss barriers to adherence and employ approaches to support adherence.
- D. All of the above

# Case: PrEPared to Educate

While discussing PrEP, R.W. hesitates, and then confides to the pharmacists that he has a new partner that is HIV-positive. They had unprotected sex last night, and he is not sure what to do. As he discusses his concerns with the pharmacist, he states, “I’m just going to get started on PrEP today, and hopefully it will prevent me from becoming infected.”

How should the pharmacist respond to his concerns?

Questions?