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Evaluating the HIV Acquisition Risk Screening Tool in an Outpatient Substance Use Treatment Clinic

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Background

With 40,000 new Human Immunodeficiency Virus (HIV) diagnoses every year in the United States (US Centers for Disease Control and Prevention, 2017), there is a need for consistent provider assessment, referral, and treatment. In 2012, Truvada, the medication used for Pre-exposure Prophylaxis, (PrEP) was approved by the Food and Drug Administration (FDA) for use in the prevention of the sexual transmission of HIV (CDC, 2014). Truvada has also been shown to be effective for HIV prevention among persons who inject drugs (PWID) and others with Substance Use Disorders (SUD) (Choopanya et al., 2013). These populations have been shown to be at increased risk for contracting HIV resulting from both high-risk injection and sexual practices (Burnett, Broz, Spiller, Wejnert, & Paz-Bailey, 2018). The CDC has created screening and prescription recommendations for providing PrEP to PWID or people who are in treatment for SUD; however, there is currently little research in the area of PrEP use amongst these populations, especially when looking outside of men who have sex with men (CDC, 2014; Goldstein, Carter-Davis & Seymour, 2018).

The National HIV Strategy for the United States recommends full access to PrEP services as a critical focus area (White House Office of National AIDS Policy, 2015). With nine-percent of new HIV infections being attributable to injection drug use, increasing identification of persons with SUD who are at-risk for contracting HIV within the outpatient setting and linking them to PrEP has the potential to decrease the rates of new HIV diagnoses (CDC, 2017). This current study builds on our previous clinic needs assessments, and utilizes a protocol and screening tool we developed for use in the urban outpatient SUD treatment setting. Using this protocol, the clinic has established a standardized method for identifying patients at risk for contracting HIV in the outpatient SUD treatment setting and linking them to PrEP services.

Purpose

The purpose of this research is to increase: (1) health care providers consistent identification and (2) linkage to PrEP services for persons with SUD who are at-risk for contracting HIV and who may benefit from PrEP, in the setting of an outpatient treatment clinic in Baltimore, Maryland.

Methods

To assess the need for PrEP among the population served by the clinic and identify how HIV-risk is being assessed under the current standard of care the health history and physical (H&P) was reviewed for each patient who began treatment at an outpatient treatment clinic for persons with SUD over a 3-month period. Each H&P was reviewed for information on the patient's HIV status, HIV testing history, drug use history, sexual/relationship history, and use of medication-assisted treatment, as well as

demographic information. After collecting this baseline data about the current standard of care at the clinic, the HIV Acquisition Risk Screening (HIVARS) and PrEP Linkage algorithm were implemented into the clinic's intake process. The same data collected at baseline were collected again three months after the implementation of the HIVARS and algorithm for comparison against the baseline.

The Recommended Indications for PrEP Use published by the US Center for Disease Control and Prevention (2014) was the basis for the criteria used to determine if patients were at-risk at baseline and the basis for the HIVARS Tool.

Results

The final baseline sample consisted of 68 patients and 58 of those reported being HIV-negative. We evaluated the HIV-negative patients for risk factors for contracting HIV and 38.2 percent (n=26) of the clinic's patients were found to be appropriate for further referral to PrEP services. Referral to PrEP services was indicated for 35.3 percent (n=24) of patients based on their drug use behaviors and 2.9 percent (n=2) of patient referrals were based on their sexual behaviors.

Based on the information recorded in the H&Ps, several risk factors for the contraction of HIV were identified that providers did not commonly address with patients, including sharing of drug preparation equipment, sex of their recent sexual partners, recent condom use, sex in exchange for drugs or money, HIV-status of recent partners, and history of high-risk sexual behaviors. The post-HIVARS implementation data collection has been completed and analysis is currently underway.

Discussion

PrEP services/referrals in the outpatient SUD treatment setting are needed to provide more comprehensive care. Furthermore, there is an opportunity to increase the identification of persons with SUD who are at-risk for contracting HIV, by consistently asking patients for information regarding: sharing of drug preparation equipment, sex of their recent sexual partners, recent condom use, and history of high-risk sexual behaviors.

The implementation of the HIVARS screening tool is a potential way to capture these risk factors amongst patients and normalize screening for HIV risk factors. The impact of the HIVARS is currently being evaluated. The PrEP Linkage Algorithm was initially intended to immediately link all patients who screened positive using the HIVARS tool to PrEP services with a local provider; however, clinic providers found that patients seemed overwhelmed during the intake process and most were not willing to be linked to PrEP services at that time. The PrEP Linkage Algorithm will be adjusted to allow for patients to be linked to PrEP services at a time when they feel ready and its effectiveness evaluated in an additional phase of this project.

Future Directions for Research

Future directions include linkage to PrEP services for at-risk patients in outpatient treatment for substance use and begin evaluation of the factors that influence PrEP uptake and adherence in this community.

Title:

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Keywords:

Human Immunodeficiency Virus (HIV), Pre-exposure Prophylaxis (PrEP) and Substance Use Disorder (SUD)

References:

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Abstract Summary:

This project assesses the need for pre-exposure prophylaxis among patients in an outpatient substance use disorder treatment clinic and evaluates the usefulness of the HIV Acquisition Risk Screening (HIVARS) for identification of patients who are at high-risk for contracting Human Immunodeficiency Virus.

Content Outline:

- Background: Linkage to Care for PrEP
- 1. Define Pre-exposure Prophylaxis
- 2. Describe CDC indications for PreP and highlight those specific to patients with SUD
- 3. Short review of current literature on PrEP use in patients with SUD
- 4. Prior Phases of this Project
- PrEP Screening QI Initiative
- 1. Clinic Background
- 1. HIV in Baltimore/Maryland
- 2. SUD in Baltimore
- 3. Clinic Demographics
- 2. Research Methods
- 1. Sample Selection
- 2. Sample Characteristics

- 3. Identification of patients eligible for referral to a PrEP provider based on chart review
- 4. Identification of patients eligible for referral to a PrEP provider based on HIVARS
- 3. Results
- 1. Portion of new patients who should be referred to a PrEP provider
- 2. Breakdown of the indications for referral in patients
- 3. HIV-risk factors for which providers did not assess
- 4. Impact of HIVARS Screening Tool
- 5. Barriers with linkage to PrEP services
- Discussion
- 1. The need for PrEP at this clinic has been established
- 2. The usefulness of HIVARS
- Next Steps
- 1. Reevaluation of PrEP Linkage Algorithm
- 2. Evaluation of patient follow-up with PrEP providers

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Author Summary: Katherine McNabb is a Graduate Student in the Master's Entry Nursing Program at Johns Hopkins University, School of Nursing. After serving as a Peace Corps Volunteer in the Republic of Moldova, she became interested in the confluence of substance use and infectious disease. She is passionate about worldwide access to treatment for patients with co-occurring HIV and TB, specifically amongst patients with substance use disorder.

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Author Summary: Nancy Goldstein, a member of STTI, Nu Beta Chapter, has been a practicing nurse and nurse practitioner combined for over 38 years in the Johns Hopkins Medical Institutions and University. Her main areas of focus in practice, research, and nursing education have been women's and adult health and substance use disorders. In addition, over the past several years, Dr. Goldstein has coordinated the pre-licensure nursing student practicum placements for their program.