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Human Immunodeficiency Virus Pre-Exposure Prophylaxis Screening and Linkage-to-Care at an Urban Treatment Center

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Purpose: There has been limited research aimed at developing a model for linking Substance Use Disorder (SUD) patients to pre-exposure prophylaxis (PrEP) services utilizing trained SUD staff as navigators. The purpose of this study was to identify the level of need and develop a model to integrate PrEP screening and linkage-to-care into the service offering of a low-resource drug treatment center with limited capacity for change in the organization's infrastructure.

In 2012, The United States Food and Drug Administration approved Truvada as human immunodeficiency virus (HIV) prevention, or PrEP. The 2015 Bangkok Tenofovir Study, a double-blind, randomized, placebo controlled trial found that among people who inject drugs (PWID), adherence to the daily pill of PrEP was associated with a decreased risk of HIV infection. Rates of risk reduction ranged from 48.9% to 83.5% for those with at least 97.5% adherence (Martin et al., 2015). PrEP is also effective for reducing risk of HIV infection among a number of groups at particularly high-risk of HIV acquisitions, including sexually-active men who have sex with men (MSM), at-risk heterosexual men and women including those in HIV-discordant relationships (CDC, 2014). People with SUD's may have multiple indications for PrEP even if they don't partake in injectable drug use, as substance use is often associated with high-risk sexual behaviors, sometimes in exchange for drugs (sex work).

Despite the efficacy of pre-exposure Prophylaxis (PrEP) for HIV risk-reduction in patients with SUD, this population has remained largely unreached by prevention initiatives offering access to PrEP and PrEP-related services, as most of the focus has gone to men who have sex with men. A variety of behavioral, clinical, service delivery, socio-cultural, and other structural challenges have played a role in the lack of expansion in PrEP access among people with SUD (Shrestha, Karki et al, 2017). In the summer of 2017, it was noted at a drug treatment center in Baltimore City that many patients with SUD had strong indications for ongoing PrEP therapy, yet knowledge of this method of HIV-prevention was severely lacking. Knowledge of PrEP was marginally higher among the members of the staff who work most closely with patients, including the therapists and case managers. Different key stakeholders in the facility were consulted, and ultimately management approved an initiative to: (1) determine the level of need for PrEP therapy among patients admitted to the treatment program, and (2) if warranted by level of need, design a program to screen patients, and when indicated and desired, link them to comprehensive PrEP services.

Methods: This study was a quasi-experimental data analysis for evaluation of navigation staff of SUD patients in an Urban Drug Treatment Center. A literature review of peer reviewed publications was conducted to explore effective methods of implementing a program in the setting of a drug treatment center with limited financial resources and capacity for expansion of the service offerings under the organization's infrastructure. A search was conducted on PubMed, PsycINFO, and CINAHL including the following search terms: PrEP therapy, SUD, IV drug use, and HIV prevention. A total of 30 peer-reviewed publications were retrieved; of which 8 matched the search criteria. Two surveys were administered to all staff at the Treatment center which were standard pre-post surveys for presentation of 4 educational presentations on PrEP and HIV education given by presenters from the Gilead Foundation (a non-profit organization, seeks to improve the health and well-being of underserved communities around the world) and REACH program (Responsible Educated Adolescents Can Help, a drug and alcohol education program).

A diagram has been developed and presented to the treatment center's management, depicting four potential levels of involvement in linking patients to PrEP services. Management supports increasing patients' access to PrEP services. Given the center's infrastructure limitations, eligible screening and referrals for outside PrEP services was considered feasible. It was further determined that the medical staff's work load was near capacity, so the screening process would need to be completed by the front-line counselors and therapists. As a first step, the staff received trainings on "HIV" and "PrEP" at one-hour educational sessions. Staff completed identical surveys, before and after the sessions, designed to measure knowledge of topics covered in the educational sessions; perception of relevance of PrEP to the therapists and counsellors' work; and confidence level for providing basic education and screening to SUD patients.

Results: The surveys revealed staff believed PrEP is relevant to their work, expressed confidence in content on Human immunodeficiency Virus Pre-exposure Prophylaxis Screening and linkage-to-care at an Urban Treatment Center, and in identifying PrEP appropriate patients for referral. One item showed a statistically significant difference ($p=.018$; CI 95%) between pre-and post-survey for increase in basic knowledge of the PrEP regimen. Remaining items produced no significant difference.

Conclusion: There was no statistically significant increase in staff's knowledge or confidence in educating and referring patients for PrEP. Analysis of survey results prompted practice recommendations. Next steps for improving SUD patient care includes developing standardized screening tool, creating an algorithm to assist staff navigators in screening for eligibility criteria and educating patients for PrEP, and improving resources for linkage-to-care services.

Title:

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Keywords:

Practice Recommendations, Pre-Exposure Prophylaxis and HIV prevention and Substance Use Disorders

References:

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Abstract Summary:

There has been limited research aimed at linking SUD patients to PrEP services utilizing trained SUD staff as navigators. This study's analysis of survey results prompted practice recommendations for integrating PrEP screening and linkage-to-care into the service offering of a low-resource drug treatment center.

Content Outline:

1. Purpose: To describe a model for screening and linking eligible Substance Use Disorders (SUD) patients to pre-exposure prophylaxis (PrEP) services with minimal change in organizational infrastructure.
 1. Limited research
 1. Linking SUD patients to PrEP services
 2. Utilization of trained SUD staff as navigators
 2. United States Food and Drug Administration approved Truvada in 2012
 1. PrEP therapy
 2. High-risk individuals for Human Immunodeficiency Virus (HIV) infection
 3. One-pill per day therapy
 1. Reduce incidence of HIV in other communities
 2. SUD community has remained largely unreached
2. Method: Quasi-experimental data analysis
 1. Literature review search
 1. PubMed, PsycINFO, and CINAHL
 2. Search terms: PrEP therapy, SUD, IV drug use, and HIV prevention.
 3. Fourteen publications met criteria
 2. Staff training – HIV and PrEP at one-hour educational sessions
 3. Pre/post surveys – all staff at the treatment center for each educational presentations
 4. Guideline developed – presented to the treatment center management
3. Results:
 1. Staff belief of PrEP
 1. Relevant to their work
 2. Confidence in content
 3. Identifying PrEP appropriate patients for referrals
 2. Statistically significant difference ($p=.018$; CI 95%) increase in basic knowledge on PrEP post survey
4. Conclusion:
 1. Analysis of survey results
 2. Practice recommendations improving SUD patient care
 1. Standardized screening tool
 2. Algorithm in screening eligibility criteria and educating patients on PrEP
 3. Community resources for linkage-to-care services
 3. Reviewed by Urban Drug Treatment Center administration – determine who and when the assessment will be carried out
 4. Further research warranted – assess utilization of the tool and patient outcome

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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 37 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.

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Author Summary: Mr. Davis has spent his career in nursing working in the treatment and prevention of HIV/AIDS in Baltimore City. After obtaining his Bachelors of Science in Nursing, he worked as a nurse on an HIV inpatient unit and now researches HIV prevention in patients with SUD.