THE OHIO STATE UNIVERSITY COLLEGE OF PHARMACY

HIV Testing in a Small Free Clinic

Teagan Vaughn, PharmD Candidate and Anna Haas-Gehres, PharmD, BCACP

INTRODUCTION

Human Immunodeficiency Virus (HIV) is primarily sexually transmitted and if left untreated will lead to acquired immunodeficiency syndrome (AIDS) in most patients. Though first clinically observed in 1981, we have only recently developed drug treatments that can successfully suppress the virus. With viral suppression, HIV is generally not able to be sexually transmitted.



HIV

Socioeconomic status, race, sexuality, and gender identity are key demographics that share positive correlations with HIV infections. In addition to sexual transmission (oral, anal, vaginal), HIV is spread via pregnancy, labor, delivery, and breastfeeding, as well as blood to blood transmission in people who share needles for intravenous drug use. ²

There are more than 37 million patients worldwide living with HIV. This includes 1.8 million children under 15 years old, and 1.8 million new diagnoses in 2017.³ In Ohio, there were 1,019 new diagnoses of HIV in 2017, with 23% occurring in Franklin County. As of December 31, 2017, there are 23,587 people living with HIV in Ohio.⁴

World Health Organization: 90-90-90 Targets:⁵ In 2014, WHO 2020 goals for HIV included:

- 90% of patients with HIV will be aware of their infection.
- 90% of patients with a diagnosed HIV infection will be receiving treatment.
- 90% of patients receiving treatment will have been able to become virally suppressed.

Despite these goals and massive effort, 2018 data indicate: ⁵

- 75% of patients with HIV are aware of their infection.
- 60% of diagnosed patients receive treatment.
- 50% of patients receiving treatment are virally suppressed.

New Life Free Clinic

New Life Community Outreach operates a free clinic every Sunday morning for patients in the Short North area of Columbus, Ohio. The clinic runs from 0700 to 0900, and serves between 10 and 30 patients. The patient population is generally uninsured (or underinsured), low/no income community members with varied levels of housing and employment. Many patients follow for high blood pressure, diabetes, allergies, or acute illnesses. The clinic is staffed by physicians, medical students, nurses, nursing students, pharmacists, pharmacy students, and other volunteers.



GOALS

The primary focus of this project is to serve our neighbors and provide tools to mitigate risks associated with HIV infections. These tools can include:

- Patient education of safer sex practices.
- Provision of safer sex materials.
- Referrals for safer injection materials.
- Patient education of HIV transmission models (sexual, needle sharing, childbirth), as well as "U=U".
- Assessment of risk factors for infection, education of Pre-Exposure Prophylaxis (and subsequent referral if needed), as well as Post-Exposure Prophylaxis.
- HIV Testing and subsequent referrals for infected individuals.

DETECTION

Three classes of tests are used to detect HIV. In general, testing can be cheap, accurate, and rapid. ⁶

Antibody Tests

Many HIV tests detect the presence of antibodies made by the immune system in response to contact with HIV. Though accurate, these tests have the possibility for false negatives, given the immune system can take between 3 and 12 weeks to produce these antibodies.

Combination Antibody-Antigen Tests

In addition to antibodies, these tests detect antigens. This shortens the window from 3 to 12 weeks to 2 to 6 weeks after infection.

Nucleic Acid Tests

These tests are much faster than the others, and are able to detect an HIV infection in as little as 1 to 4 weeks after infection. This however comes at a cost, and thus are less frequently utilized.



PLAN

Given the risk factors for HIV infections of the patient population at New Life, we believe routinely offering HIV testing to patients to be of great benefit. Patient interviewing can also help clinicians guide personalized education regarding safer sex, safer intravenous drug use, and general information about HIV. For those patients deemed to be at significant risk, a referral for Pre-Exposure Prophylaxis or Post-Exposure Prophylaxis can be made.

We have explored several options to coordinate with Columbus Public Health (CPH). Optimally, New Life would be granted the use of HIV testing supplies; though this may be limited fiscally. Many of the patients seen in the clinic have very little access to healthcare, and may have few— if any— other touchpoints to be tested for HIV. Since there are few symptoms specific to HIV, patients' disease states may progress if undiagnosed and untreated for a long period of time.

If funding is not currently available for New Life to perform HIV testing through CPH, there are several other testing locations sponsored by CPH in the area that patients may be referred to. Unfortunately the clinic is open early Sunday morning, so patients with limited mobility and scheduling may be unable to access these testing sites.

Safer sex materials donated from CPH will be distributed to patients.

UPDATE

While we continue to seek testing materials from CPH and elsewhere, we will focus on three areas:

- Counseling patients on safer sex practices and transmission pathways.
- Distributing safer sex materials.
- Referring patients who are interested in testing to the appropriate site.

BIBLIOGRAPHY

- 1 Gottlieb MS (2006). "Pneumocystis pneumonia—Los Angeles. 1981". American Journal of Public Health. 96 (6): 980–1.
- 2 Centers for Disease Control and Prevention. (2018). HIV.
- 3 HIV.gov/hiv-basics "Global Statistics" (2018). Accessed online at https://www.hiv.gov/hiv-basics/overview/data-and-trends/global-statistics. January 12, 2019.
- 4 Ohio Department of Health: HIV/AIDS Surveillance Program "New Diagnosis of HIV Infection" (2018). Accessed online at https://odh.ohio.gov/ January 18, 2019.
- 5 World Health Organization. "Why the HIV Epidemic is Not Over. (2018). Accessed online at https://www.who.int/hiv-aids/latest-news-and-events/why-the-hiv-epidemic-is-not-over. January 12, 2019.
- 6 Centers for Disease Control and Prevention. "Types of HIV Tests" Accessed online at https://wwwn.cdc.gov/hivrisk/how_know/different_tests.html January 12, 2019.
- 7 Unaids.org. "Wear Your Red Ribbon on This World AIDS Day". Accessed online at: http://www.unaids.org/en/resources/presscentre/featurestories/2006/november/20061130redribbonen. January 12, 2019.

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