

Background

-HIV is one of the leading public health epidemics in America

-The **Human Immunodeficiency Virus** is a chronic disease that attacks the immune system. When someone has HIV, opportunistic diseases like the common cold or the flu become deadly as the body can no longer effectively fight them off

-There is an estimated **1.1 million** people living with HIV in the United States and roughly 38,000 new diagnoses each year

-**1 in 7** people with HIV do not know that they have it-

-**1 in 9** women with HIV do not know that they have it-

Purpose

-Women make up a substantial portion of the adult population with HIV in the United States. Hamilton County is also known to have the highest rates of new HIV diagnoses in the state of Ohio. By studying the intersection between HIV, substance abuse, and the female demographic, we hope to see how substance abuse is impacting the incidence of HIV infection within women

Limitations

-Usually there is only 1 to 2 counselors on a shift at a time- so not every patient can be approached

-Patients are usually approached based on pre-perceived risk factors. Patients who have HIV but are not displaying symptoms, are not a target demographic, or do not have risk factors do not regularly get approached

-The emergency department is fast paced, and interactions can range from 10 minutes-2 hours so some patients can't get approached in time due to patients going missing in action, getting discharged, or being moved to other parts of the hospital

References

Ohio Department of Health. (2019). *New Diagnoses of HIV Infection Reported in HIV Prevention Planning Region 8*. Retrieved from https://odh.ohio.gov/wps/wcm/connect/gov/63c7a5dd-ae06-44d1-930f-4e312a8bb578/Region8-2018.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE.Z18_M1HGGIK0N0J00Q09DDDDM3000-63c7a5dd-ae06-44d1-930f-4e312a8bb578-mMK.s.u

HIV Among Women. (2019, November 12). Retrieved December 8, 2019, from <https://www.cdc.gov/hiv/group/gender/women/index.html>

HIV in the United States and Dependent Areas. (2019, October 30). Retrieved November 3, 2019, from <https://www.cdc.gov/hiv/statistics/overview/atag glance.html>

Methods

-This was a cross-sectional quantitative study -

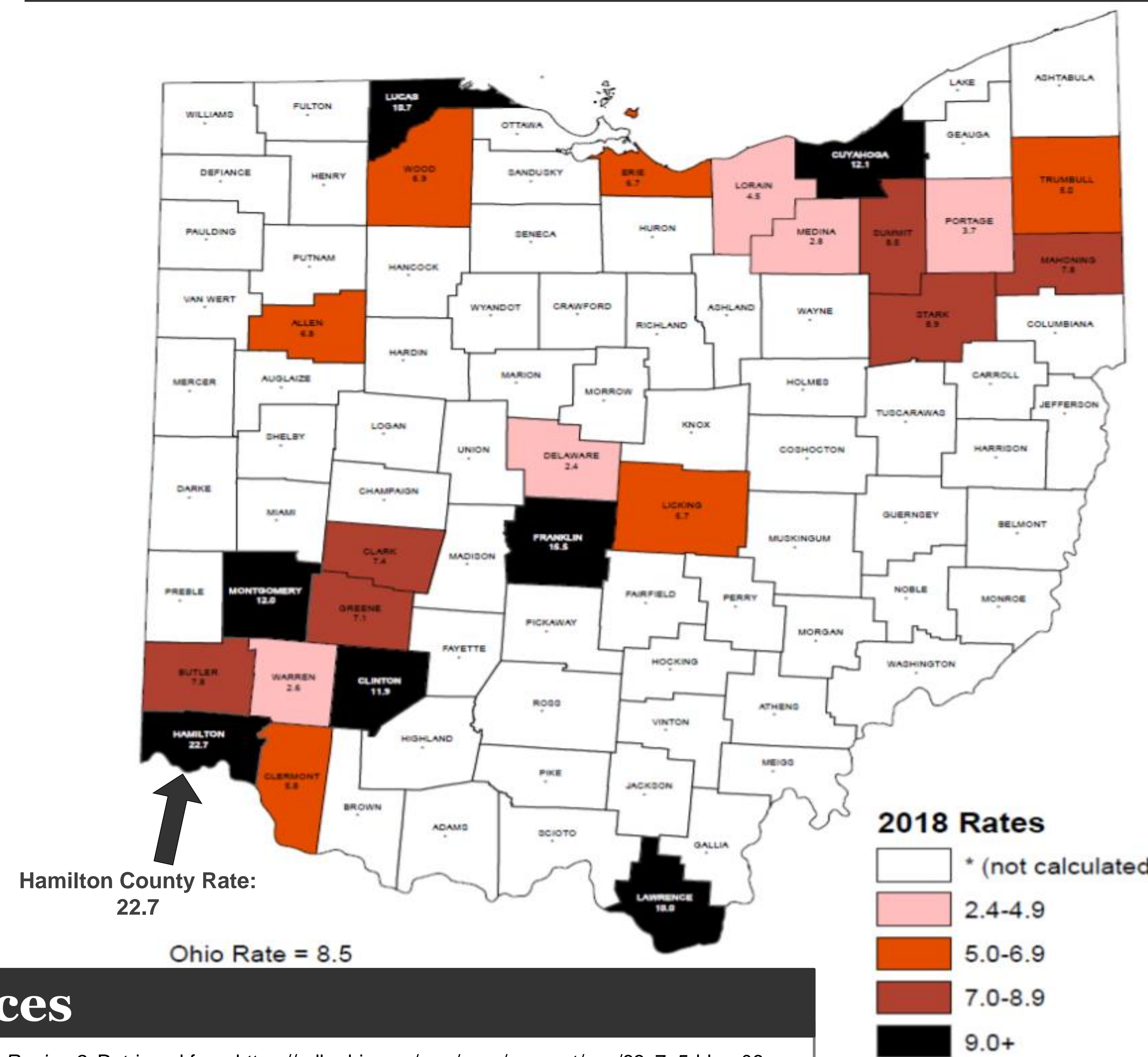
-The setting of this study was conducted at the University of Cincinnati Medical-Center in the Emergency Department

-The sample used in this study consisted of all the men and women that were- rapid HIV tested by the Early Intervention Program from January 1st, 2015 - December 31st, 2019

-The total number of people included in this study amounted to- **11,174**

-This study did a secondary analysis of the existing data that came from- the program's risk assessment

Rates of New Diagnoses of HIV Infection by County, Ohio, 2018 Reported by the ODH



Data Analysis

-Sample data was pulled via the research team. Evaluation- and interpretation of the data was done by me. Analysis of the data was done by calculating the odds ratio with a Chi-square test for significance

Results

-**CHARACTERISTICS OF EIP PATIENTS TESTED FOR HIV, BY SELF-REPORTED SEX**

	Women (n = 5,505)	Men (n = 5,669)	Total (n = 11,174)
Age ^a	28 (23-36)	30 (24-40)	29 (23-38)
Race:			
Black/African American	3,681 (66.9)	3,688 (65.1)	7,369 (65.9)
White/Caucasian	1,695 (30.8)	1,801 (31.8)	3,496 (31.3)
Other/Unknown	129 (2.3)	180 (3.2)	309 (2.8)
Non-Medical Opioid Use	628 (11.4)	858 (15.1)	1,486 (13.3)
HIV Positive	8 (0.1)	58 (1.0)	66 (0.6)

Age is reported as median (IQR), all other variables are n (%)
^a 28 were missing age overall, 9 women, and 19 men

-**WOMEN REPORTING OPIOID USE DISORDER**

	Women (N = 5,505)			Men (N = 5,669)		
	HIV(+)	HIV(-)	Total	HIV(+)	HIV(-)	Total
ODU	4	624	628	18	840	858
No-ODU	4	4,873	4,877	40	4,771	4,811
Total	8	5,497	5,505	58	5,611	5,669

-**ALL HIV TESTS 2015-2019 (N=11,174)**

	HIV(+)	HIV(-)	Total
ODU	22	1,464	1,486
No-ODU	44	9,644	9,688
Total	66	11,108	11,174

Discussion

-Data indicates that substance abuse does have a substantial- influence on HIV positive status in both men and women

Results

-People with self-reported opioid use disorder (ODU) were- **3.3 times** more likely to have a positive HIV test result

-Women with self-reported OUD were **7.8 times** more- likely to have a positive HIV test result

-Men also were **2.6 times** more likely to receive a positive- HIV test result with self-reported OUD