HIV/AIDS: A Widespread Disparity Among the Black Population of Massachusetts as Compared to the General Population

Talya Briana, Jake de Medeiros, Monica Tawadros
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University of Massachusetts Medical School
Human Immunodeficiency Virus (HIV)

- Virus that targets the body's immune system
  - Attacks T-Cells (CD4 Cells) which are responsible for preventing infections
- Unable to be removed due to expression of a resistance gene
  - Virus remains in host for duration of their life
- Leads to AIDS in most cases
Acquired Immune Deficiency Syndrome (AIDS)

- Caused by HIV
  - Patients with HIV acquire AIDS after enough of their immune cells are killed
- Chronic and life-threatening
- Patients usually die due to AIDS-defining complications, such as:
  - Pneumocystis pneumonia
  - Tuberculosis
Risk Factors & Transmission

At risk for acquiring HIV/AIDS if:
1. have unprotected intercourse
2. have a sexually transmitted infection
3. are an uncircumcised male
4. use needles

HIV/AIDS is transmitted through:
1. intercourse
2. blood transfusions
3. shared needle-use
4. pregnancy
What is a Disparity?

“the differences in the incidence, prevalence, mortality, and burden of disease and other adverse health conditions that exist among specific population groups in the United States”

- National Institutes of Health
According to the state census, the population of MA consisted of 6,708,874 people in 2013.

- 75.1% White NH
- 10.5% Hispanic/Latino
- 8.1% Black
- 6% Asian

As of December 31, 2012, 18,886 cases of individuals with an HIV diagnosis

- 5,531 African American cases (29.3%)
- 8,072 White NH cases (42.7%)
Incidence

- Defined as the rate of new cases (diagnoses) of a specific disease in a set period of time
  - Case in figure refers to 2010-2012
- Incidence rate for Blacks roughly 5x total MA population; roughly 10.3x when compared to white NH
- Note: 55% of the Blacks diagnosed with HIV/AIDS are non-US born
  - Vulnerable immigrant population
Prevalence

- Defined as percentage of individuals affected by a disease in a set time period
- HIV/AIDS is 10.3x higher in Blacks than in the general population.
  - 46% of the black population living with HIV/AIDS are non-US born compared to the white population at 6% non-US born.
  - Blacks primarily migrate from Sub-Saharan Africa.
Mortality

- Number of deaths caused by the disease
- Blacks have highest death rate
  - 1.5x higher than Hispanics
  - 4x higher than total MA population
  - 6.3x higher than whites
  - no deaths among American Indians, Asians, or Native Alaskans/Hawaiians
Potential Causes of Disparity

- Lack of consistent **prevention**
- Limited **access** to receive diagnosis & treatment

**African Americans**
- Poverty - highest STD in nation
- Incarceration - increase in MSM & shared needles
- Substance Abuse
  - Alcohol Abuse - increases sexual activity
  - IDU - 2nd leading cause
- Homosexuality is taboo
- Denial of being at risk despite behaviors
Poverty

- Blacks 5.5% of the total population, but make up 13.1% of the total poor
- Whites 76.3% of the total population, but only 51.8% of the poor
  - Can influence incidences of STDs
    - Increases HIV exposure
  - Lack of health care access
    - Absence of treatment for HIV/AIDS
Incarceration

- Blacks 8.1% of the total population, but make up 28% of the total incarcerated
- Whites 75.1% of the total population, but only 44% of incarcerated
  - Can influence rate of MSM
  - Can increase use of shared needles
    - both risk factors for contracting HIV
Substance Abuse Treatment

- Corresponds to two main ideas:
  - Lack of access to treatment (socioeconomic)
  - Denial of being at risk despite behaviors (cultural)
- 2009, Blacks had more admissions than whites for substance abuse treatment
  - Downward trend, less than white in 2013
    - Seems to be widening
- Lack of drug abuse treatment → Higher potential for contraction of HIV through contaminated needles
Conclusions

- Blacks have a significantly higher incidence, prevalence, and mortality of HIV and AIDS than the white population.
  - Although this data is from 2010-2013, the trends are likely to be very similar.
  - Multiple factors that increase disparity of HIV/AIDS between blacks and whites in MA
    - barriers between ethnicities have not changed
    - poverty rate disparity still exists
    - alcohol & drug abuse disparity
    - Incarceration disparity
- HIV/AIDS is a preventable disease, but has no cure.
Necessary Changes

- Develop new prevention strategies
- Continue researching to find a cure
- Change perception of acceptable behaviors
- Increase number of blacks who can access health care
  - related to socioeconomic status & health insurance
- Treat Drug/Alcohol Abuse as medical disease
"Estimated Death Rates (per 100,000) of Adults and Adolescents with an HIV Diagnosis, By Race/Ethnicity." *Estimated Death Rates (per 100,000) of Adults and Adolescents with an HIV Diagnosis, by Race/Ethnicity.* The Henry J. Kaiser Family Foundation, 2011. Web. 10 June 2015.


