RESEARCH CONFERENCE 2020

Research Leading the Way For The Next 50 Years

Predictors of HIV Testing Among African American Men Who Have Sex with Men

POSTER PRESENTATION



OCTOBER I, 2020

Author

Jeanette M. Higgins, PhD

Graduate
School of Health Sciences

Jeanette.Higgins@waldenu.edu

Acknowledgement

Patrick Tschida - Chair

Daniel Li – Committee Member

Ronald Hudak – URR Member

Abstract

African Americans (AA) men who have sex with men (MSM) are disproportionately affected with HIV. This study used a sampling of 344 AA MSM from the 2000-2016 National Health and Nutrition Examination Survey (NHANES) who had reported HIV test results. Age, income, and educational status were predictive of an HIV test result among AA MSM. The results of this study could be used to train patient navigators on coping strategies using Lazarus and Folkman's theory of stress, appraisal, and coping for reducing stigma among AA MSM, encouraging them to seek HIV testing to decrease the incidence and prevalence of HIV among AA MSM.

Doctoral Research

Problem

African American men who have sex with men have been disproportionately affected by HIV. There is a need for more research of the socioeconomic factors that may be predictive of African American men who have sex with men of taking an HIV test.

The problem addressed in this study was if specific socioeconomic factors may make it more likely for African American men who have sex with men of having a reported HIV test result in the National Health and Nutrition Examination Survey (NHANES).

Purpose

The purpose of this quantitative secondary data study examined the factors that may be most likely associated with African American men who have sex with men of not having a reported HIV test result in the 2000 to 2016 National Health and Nutrition Examination Survey (NHANES).

Significance

This study shows that more research is needed to determine which socioeconomic factors are predictive of African American men who have sex with men of taking an HIV test.

It is important to help African American men who have sex with men to develop positive coping skills to see the benefits of being tested for HIV.

The information from this study shows a need for patient navigators to work closely with African American men who have sex with men to reduce the stigma surrounding HIV testing for this population.

Theory or Framework

Lazarus and Folkman's (1984) theory of stress, appraisal, and coping was used for this study;

- knowing that HIV can lead to AIDS may make the HIV test a stressor
- appraisal would be defined as primary, secondary and reappraisal

Relevant Scholarship

Lack of HIV education leads to fear of HIV testing and fear of disclosure.

Poverty is associated with HIV prevalence (Gant et al.,2014).

Seeking HIV testing has been linked to educational levels in AA MSM (Buttram & Kurtz, 2014; Diaz et al., 2014; Gant et al., 2014; O'Leary et al., 2014). Buttram and Kurtz (2014) reported that AA MSM had high school completion rates of 82.4% and college completion rates for AA MSM of 14.8%.

Robinson et al. (2013) reported that HIV positive AA MSM were reporting the use of more **mental health services** (AOR=1.2, 95% CI=1.0, 1.5, p=.054). AA MSM, especially younger AA MSM, **may feel stigmatized** to have an HIV test (Quinn et al., 2017).

Symptoms of **depression and anxiety** were reported by Quinn et al. (2017) as barriers to HIV testing especially among younger AA MSM.

The findings show that AA MSM may see **taking** an **HIV** test as a stressor. Lazarus and Folkman (1984) stated that stress can be defined as a transaction with a cognitive focus on the outcome in regard to if one has the resources available to deal with the outcome.

Research Question

RQ1-Quantitative: Is age predictive of taking an HIV test for African American (AA) Men Who Have Sex with Men (MSM)?

RQ2-Quantitative: Is income predictive of taking an HIV test among African American Men Who Have Sex with Men?

RQ3-Quantitative: Will educational status be predictive of having an HIV test among African American Men Who Have Sex with Men?

RQ4-Quantitative: Will mental health be predicative of taking an HIV test among African American Men Who Have Sex with Men?

RQ5-Quantitative: Will access to healthcare be predicative of having an HIV test for African American (AA) Men Who Have Sex with Men (MSM)?

Participants

The sample population consisted of 344 African American men who have sex with men that had a reported HIV test result for the 2000 to 2016 NHANES surveys.

Procedures

Data were obtained from the CDC's **National Health and Nutrition Examination Survey** (NHANES) conducted between 2000 to 2016.

- The independent variable was having a reported HIV test result.
- The dependent variables were age, income, educational level, mental health (depression), and access to care.

Analysis

Descriptive statistics, chi-square and logistic regression were used.

Findings

The findings were not statistically significant, however, some of the results may be clinically meaningful:

- AA MSM aged 20 to 29 years were 1.6 times more likely to have a reported HIV test than those aged 30 to 69 years.
- AA MSM making \$30,000 to \$49,999 were 1.5 times more likely to have an HIV test result than those making \$75,000 and above.
- African American MSM making \$20,000 to \$29,000 were 1.2 times more likely to have an HIV test result and those making \$50,000 to \$74,000.
- AA MSM who completed some college were 1.5 times more likely to have an HIV test result than those who were high school graduates.
- AA MSM who felt down or depressed were 1.5 times more likely to have an HIV test result than those who were not feeling down or depressed.
- AA MSM who had access to routine care were 0.2% more likely to have an HIV test result than those who did not have a routine place for care.

Interpretation

This research demonstrated that **more needs to be done** to increase HIV testing within the AA MSM community. More research is needed to better identify predictors of HIV testing among AA MSM.

Stigma from HIV might result in AA MSM using self-isolation as their primary coping strategy.

These findings make a positive push for the use of **patient navigators** to work with the AA MSM community.

Active positive coping skills such as being positive and hoping for the best can be used to encourage HIV testing rather than non-positive coping skills such as denial to avoid HIV testing.

Limitations

Institutionalized individuals, incarcerated individuals, active duty military members, and any citizens living outside of the continental 50 states are excluded from NHANES studies.

Homeless and mentally ill individuals were not surveyed as part of the NHANES survey.

Small sample size of AA MSM with reported HIV test results

Causation cannot be determined due to the cross-sectional nature of the study.

Recommendations

A few recommendations for future research would be:

- To analyze the age groups in more than two groups within the AA MSM population.
- To include incarcerated, homeless, and military populations in a new study
- To use other tools than self-reporting for depression and for access to care

These findings make a positive push for the use of **patient navigators** to work with the AA MSM community.

Social Change Implications

This research demonstrated that more needs to be done to increase HIV testing within the AA MSM community.

The theory of stress, appraisal, and coping may be an ideal theory to address HIV stigma and to increase HIV testing among AA MSM.

Active positive coping skills such as being positive and hoping for the best can be used to encourage HIV testing rather than non-positive coping skills such as denial to avoid HIV testing.

References

Buttram, M. E. (2015). The social environmental elements of resilience among vulnerable African American/black men who have sex with men. *Journal of Human Behavior in the Social Environment*, 25(8), 923-933. doi:10.1007/s40615-014-0042-2.

Centers for Disease Control. (2016). HIV among African American gay and bisexual men. In *HIV/AIDS*. Retrieved from www.cdc.gov/hiv/group/msm

Diaz, A., del Romero, J., Rodriguez, C., Alastrue, I., Belda, J., Bru, F. J. ... Gil, L. (2015). Effects of region of birth, educational level and age on late presentation among men who have sex with men newly diagnosed with hiv in a network of sti/hiv counselling and testing clinics in Spain. *Euro Surveillance*, 20, doi:10.2807/1560-7917.es2015.20.14.21088

Gant, Z., Gant, L., Song, R., Willis, L., & Johnson, A. S. (2014). A census tract–level examination of social determinants of health among black/African American men with diagnosed HIV infection, 2005–2009—17 U.S. areas. *PloS One*, *9*(9), e107701. doi:10.1371/journal.pone.0107701

Lazarus, R. S. & Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer.

Mirel, L. B., Mohadjer, L. K., Dohrmann, S. M., Clark, J., Burt, V. L., Johnson, C. L., & Curtin, L. R. (2013). *National health and nutrition examination survey: estimation procedures, 2007-2010. Vital and health statistics. Series 2, Data evaluation and methods research,* (159), 1-25. PMID: 25090039

O'Leary, A., Jemmott III, J. B., Stevens, R., Rutledge, S. E., & Icard, L. D. (2014). Optimism and education buffer the effects of syndemic conditions on hiv status among African American men who have sex with men. *AIDS and Behavior*, *18*(11), 2080-2088. doi: 10.1007/s10461-014-0708-0

References

Quinn, K., Voisin, D.R., Bouris, A., Jaffe, K., Kuhns, L., Eavou, R., & Schneider, J. (2017). Multiple dimensions of stigma and health related factors among young black men who have sex with men. *AIDS Behavior*, 21(1), 207-216. doi: 10.1007/s10461-016-1439-1

Robinson, B., Galbraith, J.S., Swinburne Romine, R.E., Zhang, Q, & Herbst, J,H. (2013). Differences between hiv-positive and hiv-negative African American men who have sex with men in two major U.S. metropolitan areas. *Arch Sex Behav 42*, 267–278. doi: 10.1007/s10508-011-9891-5