Factors Associated with Anxiety and Depression in an Underserved African American Population

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1. Abstract

Anxiety and depression are mental illnesses that affect millions annually. Mental health remains a critical area where African Americans hesitate to seek treatment (Brown & Palenchar 2004, Safran et al. 2009). This study sought to identify the subgroups in the underserved Dayton (Ohio) African American community that report more days of experienced anxiety and depression. Income, years of education, gender, and age were the demographic factors investigated for associations with reported days of anxiety and depression in the past (0-30) days of psychiatric medication was co-vary. t-tests and analysis of variance models were used to test the associations of each variable and adjust for others in the model. There was a significant association between gender and both anxiety and depression; women reported significantly more days of anxiety and depression than men. There was a positive association between age and days of reported depression and anxiety. There was a significant association between education and reported depression, but not anxiety. There was no significant association between income and anxiety or depression.

2. Introduction

Approximately 18.8 million (9.5%) of Americans experience depression annually. Although 49% of individuals experiencing depression visit a mental health care provider, depression is often untreated. Racial disparities persist in mental health care (Brown & Palenchar 2004, Safran et al. 2009). Prevalence of depression in the African American community is comparable to that of the white community when adjusted for socioeconomic status. African Americans are less likely to seek treatment compared to Whites. Social stigma discourages many African Americans from seeking treatment (Hanks & Wood 2002).

WSU’s SARDI program (Substance Abuse Resources & Disability Issues) provides substance abuse mental health treatment and prevention programs funded by SAMHSA (Substance Abuse Mental Health Services Administration). CSAT (Center for Substance Abuse Treatment) programs focus on substance abuse treatment, and mental health interventions. Data from four CSAT programs were available.

BBHS-Brother to Brother/Sister to Sister: Grant TI14546 expands and enhances substance abuse treatment, mental health, and medical care, housing, recovery support, and employment services.

MTO-Mount Olive One Stop Center: Grant TI018921 provides substance abuse treatment, mental health treatment, medical care, housing, recovery support, and employment services.

ROSC-Recovery Oriented Systems of Care: Grant TH119766 targets African Americans age 18-24 to decrease substance use and risk factors.

HBHS-Healthy Brother’s Healthy Sisters: Grant TH119766 targets African Americans age 18-24 to decrease substance use and risk factors.

3. Objectives and Hypotheses

To determine which commonly cited demographic factors are associated with anxiety and depression in the underserved Dayton (Ohio) African American community. The fact that participants were all recruited for substance treatment programs might introduce sample-specific associations between mental health and these factors. This study was designed to provide insight into which subgroup(s) should be targeted for mental health treatment.

Hypotheses:

1. Lower income and less education will be associated with anxiety and depression.
2. Women will report more days of anxiety and depression than men.
3. Older age will be associated with more days of anxiety and depression.

4. Methods

Data were compiled from all African American participants of SARDI’s CSAT programs (HBHS, ROSC, BBSS, MTO). A model building approach was used to measure association between factors and to account for confounding variables.

5. Statistical Analysis

Statistical Package for the Social Sciences v. 20 (SPSS, Inc.) was used for all analyses. T-tests compared means across gender. ANOVA general linear model was used to determine which variables have a significant association with the dependent variables anxiety and depression.

6. Results

Prevalence of Anxiety, Depression & Psychiatric Medication

7. Discussion

Hypothesis 1 was not supported by the analysis. The independent t-test showed no significant association between total income and anxiety or depression. There was also no significant association between years of education and anxiety. However, there was a significant association between years of education and depression (F=7.387, p=0.007).

Hypothesis 2 was supported by statistical analysis. Reported average days of anxiety and depression were higher for women than men.

Hypothesis 3 was supported by the statistical analysis. There was a significant association between age and anxiety (F=17.895, p=0.000) and between age and depression (F=10.160, p=0.001). Calculated standardized coefficients of variation showed that, after adjusting for reported use of psychiatric medication, gender and age had similar effects on anxiety. Age had the greatest effect on depression.

Dependent variable = β0 + β1gender + β2age + β3income + β4education + β5work

Hypothesis 4: Women and older individuals should be targeted for mental health treatment. Individuals with less education should be targeted for depression treatment.

8. Conclusion and Future Perspective

As mentioned in the literature, gender and age were significantly associated with anxiety and depression. However, education was not significantly associated with anxiety and income was not associated with either condition.

Lack of variation in income may account for the insignificant association between income and anxiety and depression. Lack of association between anxiety and education could be explained by anxiety having a similar prevalence across education levels. Women and older individuals should be targeted for mental health treatment.

9. References


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