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Mental Health Care among HIV Infected Youth in Medical Care: Disparities and Equalities

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Abstract

Objectives—Untreated psychiatric illness can be detrimental to the health and well-being of HIV infected youth and young adults. This exploratory study sought to examine the relationships between social and demographic variables and the rates of psychiatric treatment among HIV infected youth and young adults enrolled at clinics specializing in the provision of HIV care.

Setting/Participants—These analyses are from a cross sectional survey of 1706 HIV infected adolescents and young adults (13-26 yrs) engaged in care at treatment sites or affiliates of the Adolescent Medicine Trials Network (ATN) for HIV/AIDS Interventions from 2010-2011.

Design—Among the youth and young adults who reported recent significant mental health symptoms on the Brief Symptom Inventory (BSI), comparisons on demographic variables (including race, ethnicity, language spoken, level of education, sexual orientation, gender identity, household income, living situation, and history of incarceration/detention) were made.

Results—Among the group with symptoms, Black youth were significantly less likely than non-Blacks to have received mental health care (37.4% vs. 48.6%) and psychiatric medications (19.3% vs. 26.9%). In contrast, Latinos were more likely than non-Latinos to report receiving mental health care (52.9% vs. 35.7%).

Conclusion—Although no disparities in care were found based on gender, sexual orientation, Hispanic ethnicity, or income, care providers should be alerted to the potential disparities that exist for Black youth and young adults living with HIV.

Keywords

Disparities; HIV; mental health care; psychiatric medication; African American

Introduction

Psychiatric disorders are observed among youth and young adults living with human immunodeficiency virus (HIV) infection at higher rates than their non-infected peers. (1-5) Psychiatric sequelae of HIV can be due to the stress associated with managing a chronic, highly stigmatized health condition as well as the neurologic complications associated with HIV infection. (1-5) Psychiatric illness has been linked to greater morbidity and health risk

behaviors among persons living with HIV including unsafe sex, substance abuse and non-adherence to antiretroviral therapy (ART). (6-11) Untreated psychiatric illness can be detrimental to the health and well-being of HIV-infected youth and may place others at risk for secondary HIV-transmission due to unprotected sex and detectable viral levels, creating a significant public health challenge. (12-15) Unfortunately, social, cultural, economic and demographic barriers exist to comprehensive treatment of psychiatric illness in most settings. Data from national surveys with both adults and youth show that marginalized populations and/or ethnic and racial minority populations often utilize less or do not have equal access to psychiatric care. (16) For example, data from the National Longitudinal Survey of Youth, Children, and Young Adults (NLSY-Child), a nationally representative sample of almost 12,700 individuals aged 14–22 years, showed that African Americans and Latinos were less likely than White children to receive mental health treatment. Among this sample, the economic and insurance variables (including maternal education and income) seemed to hold little predictive power. (17) These inequities have not been fully explained but are thought to be the result of combinations of poor resource availability, stigma by the care agencies, historical distrust of the medical system, as well as decreased help-seeking behaviors in specific ethnic and racial groups. (18-23)

Disparities in the frequency of mental health care or medication usage among adolescents and young adults living with HIV and in HIV medical care have not been sufficiently evaluated in prior studies. This exploratory study sought to examine the relationships between social and demographic variables and the rates of mental health treatment and psychotropic medication usage among HIV infected youth and young adults enrolled at clinics specializing in the provision of HIV care. Knowledge of differential utilization of mental health services and psychiatric medications can lead to targeted efforts to overcome barriers for HIV infected youth and young adults with psychiatric illness. (16)

Since all persons in this study were in care at adolescent HIV treatment sites that work with diverse youth populations and provide comprehensive health care, we hypothesized that there would be fewer demographic differences among HIV infected youth and young adults who report clinically significant mental health symptoms based on receipt of mental health care or medication than found in studies among the general population. For any differences found, it was anticipated that those who were racial, ethnic or sexual orientation minorities would be less likely to receive mental health care or treatment with psychiatric medication than majority persons based on studies of disparities in receipt of psychiatric care among the general population. (27-30) Also, we hypothesized that lack of mental health care and medication usage could be associated with less household income, homelessness, less education and non-English speaking. (16,17,29) A history of incarceration was predicted to be associated with greater reports of mental health care and psychiatric medication since incarceration has been found to provide access to health care in prior studies (24). No hypotheses were made for receipt of mental health care or medication based on gender or age.

Methods

A cross sectional survey of 1706 HIV-infected adolescents and young adults engaged in care (a minimum of one clinic visit) in one of the fifteen treatment sites or affiliates of the Adolescent Medicine Trials Network (ATN) for HIV/AIDS Interventions was conducted from 2010- 2011. HIV infected adolescents, ages 13-26 years, who had knowledge of their HIV diagnoses, with the ability to understand written and/or verbal English were assented or consented as determined by respective Institutional Review Boards. Adolescents and young adults were excluded if symptoms impaired their ability to complete the study measures (e.g.

hallucinations). Participants who were intoxicated or under the influence of alcohol or other substances at the time of the consent/assent process were also excluded.

Participants were asked to complete a series of socio-demographic, psychosocial, behavioral, and medical measures via an audio computer assisted survey instrument (ACASI) to minimize problems with literacy and to enhance confidentiality and validity. (25) Administration took approximately one hour and assessed demographic variables such as race, ethnicity, language spoken, level of education, sexual orientation, gender identity, household income, living situation, and history of incarceration or juvenile detention. Participants were also asked about whether they had received mental health care or psychotropic medication with the following items “In the past 12 months have you seen a psychiatrist, psychologist, marriage & family therapist, or social worker about the way you were feeling or behaving?” and “In the past 12 months, have you taken any medication that was prescribed for emotional or psychological problems or problems with your nerves?” Mental health symptoms were assessed by the Brief Symptom Inventory (BSI). The BSI consists of 53 items covering nine symptom dimensions: Somatization, Obsession-Compulsion, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic anxiety, Paranoid ideation and Psychoticism. It yields a global symptom index (GSI) that reflects general symptomatology in the past 14 days and has reported norms for community adolescents and adults. The reliability, validity, and utility of the BSI has been tested in more than 400 research studies. The BSI also has high internal consistency (Cronbach's alpha: 0.71-0.85), test retest reliability, and convergent, discriminant, and construct validity. (26)

Participants with mean item GSI scores on the BSI in the clinical range as defined by norms for age and gender (males 19, GSI 1.71; females 19, GSI 1.59; males 20, GSI 0.58; males 20, GSI 0.78) were defined as the subset of the sample reporting significant symptoms and formed the basis for these analyses (26). Bivariate comparisons (Chi Square or t-test as appropriate) were made between those who reported mental health treatment in the past year and those who did not and the variables of interest described above. Similar comparisons were made between those who reported receiving psychotropic medication and those who did not.

Results

Of the 1706 participants living with HIV who were enrolled in the larger study, 42.6% reported symptoms in the defined clinical range. Of the 727 reporting significant symptoms, 27.5% were born female and 72.4% were born male. Because the ATN clinics serve transgender individuals, gender was assessed both at birth and currently since youth could be in various stages of gender transition. Eighty-seven percent of the sample was age 20 years or older, with the entire sample between the ages of 13-26 years. Of the 727 reporting clinical symptoms, 39.7% reported mental health care in the past year and 21.9% reported receiving medications for emotional issues.

As shown in Table 1, Blacks were significantly less likely than non-Blacks to have received mental health care (34.7% vs. 48.6%, Chi-Square=12.95, $p<.001$). In contrast, Latinos were more likely than non-Latinos to report receiving mental health care (52.9% vs. 35.7%, Chi-Square=16.07, $p<.001$). There were no other proportional differences based on those who received or did not receive mental health care, and likewise there was no difference based on mean age (21.3 [SD=2.1] vs. 21.4 [SD=2.1], $t=.61$, $p=.54$).

Table 1 also indicates that Blacks were less likely to receive psychiatric medications than non-blacks (19.3% vs. 26.9%, Chi-Square=5.48, $p=.019$). In contrast, those with a history of

incarceration were more likely to have received psychotropics in the past year (26.1% vs. 18.7%, Chi-Square=5.56, $p=.018$). There were no other proportional differences based on those who received or did not receive psychotropic medication and likewise there was no difference based on mean age (21.3 (SD=2.1) vs. 21.6 (SD=2.0), $t=1.70$, $p=.09$).

Posthoc analyses, to examine whether the observed racial and ethnic differences in receipt of mental health care were associated with differences in symptom severity found no differences in mean item GSI scores between Blacks and non-Blacks (1.60 (SD=0.7) vs. 1.59 (SD=0.7), $t=0.1$, $p=.93$) or between Latinos and non-Latinos (1.57 (SD=0.7) vs. 1.50 (SD=0.7), $t=0.54$, $p=.59$).

Discussion

Our findings suggest that there is a significant disparity in mental health care utilization for psychiatrically symptomatic Black adolescents and young adults living with HIV. This disparity exists when considering youth with significant recent mental health symptoms as measured by the Brief Symptom Inventory. We agree with the Institute of Medicine's report, "Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care," which defines disparity as any difference in health care quality not due to differences in health care needs.(27) Disparities can be caused by a range of social factors, including inequalities in access to providers, differences in insurance coverage, or discrimination by professionals in the clinical encounter. In addition, cultural aspects of expression can influence many aspects of receipt of care, including how patients from a given culture communicate and manifest their symptoms, their style of coping, their family and community supports, and their willingness to seek treatment. Furthermore, financial resources, life stress, and poverty influence how medical care or psychiatric care is prioritized by patients and families.

Several common barriers to care would not seem likely in this sample. All youth were receiving medical care at a HIV treatment center that provided a comprehensive range of medical and social services, so it is presumed that lack of access to mental health care caused by economic disadvantage (no inequity based on income was observed) was not a significant barrier. Because there were no differences between Black youth and their peers on the mean GSI scores, severity of symptoms was not likely the cause of the inequity.

Unfortunately, our limited data does not allow us to discern which of many possible factors were responsible for the inequity in receipt of mental health care for Black youth. It is possible that Black youth could have a historical mistrust of the health care system that creates barriers to accessing mental health care, such as perceiving it to be coercive, unhelpful, or stigmatizing. (28) Furthermore, there could be an interaction between being HIV positive and Black that causes greater stigmatization than for other ethnic/minority groups and this could influence how care is accessed.(29-31) Also, differences, based on race, in the thoroughness of providers' assessment of mental health symptoms or openness in patient's reporting of symptoms could have accounted for our findings (32,33). Alternatively, other systems of support, such as the church, may be providing care to Black youth with counseling, and other sources of support were not measured in our study. How these factors influence receipt of care is worth further research.

The lack of disparity of mental health care for Latinos, sexual minorities, and impoverished or homeless youth and young adults, suggests that some of the usual processes leading to discrimination were less active at ATN sites for these populations. (17,34,35). It is possible that barriers to mental health care, were reduced at these clinics by the offering of specialized social services and targeted interventions for impoverished, Hispanic or LGBT persons. For example, ATN sites have assistance available for patients for obtaining

insurance. This assistance should minimize the effect of poverty or insurance status on provision of care. Targeted initiatives to engage youth in care at the ATN might be successfully engaging ethnic but not racial minorities and this discrepancy warrants further investigation. More initiatives to engage Black youth and young adults in ATN services could be needed.

There are important limitations when examining variables related to ethnicity and race. Racial or ethnic groups are not homogenous. Though the data presented in these analyses are in the form of group averages, or sample means (standard scientific practice for illustrating group differences and health disparities), the authors acknowledge that each racial or ethnic group varies on almost every social, psychological, and biological dimension. Measuring race and ethnicity can be difficult when there is overlap between groups, for example a youth could be Black and Hispanic. This overlap is not examined in our study and is a common limitation when looking at disparities in care between groups.

More specific to this study, limitations include the cross sectional and descriptive nature of the analyses. Symptoms were reported in the past 14 days and mental health care utilization in the past year, so we were not able to examine the progression of symptom expression and effectiveness of subsequent treatment. Although this study enrolled youth who received at least one medical care visit at an ATN site over 12 months the study does not provide data on potential disparities for youth and young adults living with HIV in other care settings.

Furthermore, we were unable to measure the cultural differences in patient and parental help-seeking preferences that may be responsible for racial disparities in mental health care utilization. Studies have documented racial/ethnic differences in patients' and parents' threshold for seeking care based on symptoms. (18,19, 21,35-40) Although we accounted for mental health need by assessing recent symptoms, we were unable to account for these interactive influences on receipt of care. We do not have data on the race of medical providers and how this influences patient reporting of symptoms, or patient, doctor communication and referral. Despite these limitations, our findings have implications for mental health policy and practice for HIV positive youth and young adults.

Research shows that racial and ethnic minorities experience a greater disability burden from mental illness than do Whites.(16) This higher level of burden stems from racial and ethnic minorities receiving less care and poorer quality of care, rather than from their illnesses being inherently more severe or prevalent in the community.(16,22,41) Efforts should be made within all HIV treatment sites to reduce disparities for minority patients and continued efforts should focus on educating parents, patients, and providers about common mental health conditions among HIV positive patients and their treatment options. Care environments should be culturally appropriate and inviting to the diverse populations living with HIV. This could occur through the physical structure and presentation of the clinical care setting or facility, as well as through recruitment of diverse individuals to work in these sites. Minority youth and young adults who have exposure to supportive role models and peer buddies or mentors (of the same race) in the clinic setting may feel more secure and in turn could be more likely to be open with care providers about mental health concerns. Peer initiatives could also help increase social support, which has been demonstrated to be associated with more positive health outcomes among adolescents living with HIV. (42,43)

Regardless of cause, there is a significant difference in mental health utilization for symptomatic Black adolescents and young adults living with HIV in the ATN setting compared with their peers. Care providers should be alerted to the potential disparities that exist for Black patients living with HIV and the many barriers to mental health care that these youth experience. Further investigation is needed to examine the cultural and structural

factors that may shape patients' utilization of mental health care as well as provider characteristics contributing to disparate care.

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Table 1

Comparisons based on receipt of mental health care and psychiatric medication among 727 youth in medical care living with HIV

	n	% Received Mental Health Care	Chi-squared	p	n	% Received psychiatric medications	Chi-squared	p
Male (born)	526	40.1	.158	.69	527	21.6	.064	.80
Female (born)	200	38.5			200	22.5		
Male (current)	496	39.3	1.650	.44	496	20.6	1.57	.46
Female (current)	205	39.0			206	24.8		
Transgender	25	52.0			25	24.0		
Non-Black	245	48.6	12.95	<.001	245	26.9	5.48	.019
Black	475	34.7			476	19.3		
Non-Latino	554	35.7	16.07	<.001	554	20.8	1.48	.22
Latino	170	52.9			171	25.7		
English Speaking	677	39.6	.160	.69	678	22.0	.21	.65
Non-English Speaking	47	42.6			47	19.1		
Employed	228	36.8	1.03	.31	228	18.4	2.09	.15
Unemployed	495	40.8			496	23.2		
Homeless	46	47.8	1.42	.23	46	23.9	.08	.77
Non-homeless	669	38.9			661	22.1		
Straight	229	36.7	1.08	.30	229	21.6	.04	.83
Non-Straight	481	40.7			482?	22.3		
Monthly Income \$245	437	37.4	1.38	.24	432	28.8	.13	.72
Monthly Income \$250	184	42.4			184	19.6		
Incarcerated	303	42.2	1.32	2.5	303	26.1	5.56	.018
No Incarceration	421	38.0			422	18.7		