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Symptoms of Psychological Distress among African Americans Seeking HIV-Related Mental Health Care

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ABSTRACT

The purpose of this study was to examine the prevalence of symptoms of psychological distress experienced by African Americans upon self-enrollment in HIV-related mental health care and to compare the symptoms in this sample to the Brief Symptom Inventory (BSI) normative sample, the instrument used in this study to assess symptoms of psychological distress. Data were collected from 575 African Americans living with HIV who self-enrolled at an HIV-related mental health clinic located in a large city in the southeastern United States. Nearly 20% of the sample reported a t score ≥ 63 for both somatization and paranoid ideation, a level indicative of a need for further psychological evaluation. Compared to the normative sample, this sample had significantly lower levels (p < 0.05) of anxiety, depression, phobic anxiety, interpersonal sensitivity, and global severity index than the normative sample and had significantly higher levels of paranoid ideation and somatization than the normative sample. These results indicate that, overall, African Americans presented for mental health services with lower levels of symptoms of psychological distress than the normative sample. To that end, it is possible that African Americans living with HIV may underreport symptoms of psychological distress or may experience symptoms of psychological distress differently than other individuals. As a result, it is important that HIV-related service providers recognize these patterns of psychological distress and provide appropriate referrals to HIV-related mental health providers.

INTRODUCTION

As an integral component of the continuum of care for individuals living with HIV/AIDS, mental health care has been associated with improved quality of life and overall well-being among this population.1,2 HIV care providers have increased their attention to mental health issues among those living with HIV given that higher levels of depression, anxiety and other mood disorders have been associated with decreased levels of HIV care and medication adherence.3–7 Within the United States, HIV infrastructures have developed to incorporate HIV-related mental health care for individuals engaged with the publicly funded systems of HIV-related care that are present in most large metropolitan areas with disproportionate rates of HIV/AIDS.8–11

African Americans have disproportionately been affected by HIV/AIDS in the United States

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accounting for 50% of the AIDS cases. The rate of AIDS diagnoses in African American men is 7 times higher than the rate for Caucasian men and 21 times higher for African American women than their Caucasian counterparts. Furthermore, among states with confidential name-based reporting, 64% of the women and 41% of men who are infected with HIV are African American.12,13 Modes of HIV transmission differ for African American men and women, as approximately 50% of infections among men have resulted from unprotected sex with another man. The majority of HIV infections among African American women have resulted from unprotected sex with a man.12 As a result, there is a need for a deeper understanding in the manner in which this epidemic is impacting the mental health of African Americans.

A growing body of literature has documented elevated levels of psychological distress among African Americans with HIV/AIDS. Specifically, in a clinic-based sample, HIV-infected African Americans were found to have high levels of depression with little treatment;14 African Americans in a VA HIV-infected sample were found to have higher levels of depression than their Caucasian counterparts;4 HIV-infected African American women in a Medicaid sample had higher rates of depression than Caucasian women, either Caucasian or African American men;15 and African American HIV-uninfected, homosexual women had similarly elevated levels of depression as their HIV-infected male homosexual counterparts.16 Furthermore, these findings indicated that HIV-infected African Americans were less likely to be diagnosed and treated for their depression as well as were less likely to be adherent to their HIV medications.1,4,14,17,18 When treated for depression, African American patients reported higher rates of medication adherence and viral load suppression, similar to other study findings.14,15,18 These studies signify the extent that psychological distress is complex and rooted in multiple factors including race, gender, sexual orientation, and HIV serostatus. These findings indicate a need to better understand the nature and breadth of psychological distress symptoms among those who self-enroll in HIV-related mental health clinic.

Barriers to enrolling ethnic minority populations into mental health care have been well documented. Some of these documented barriers to seeking mental health care among African Americans include the costs of mental health care, little known treatment options, and limited providers both in urban and rural areas.19–21 Higher levels of cultural mistrust among African Americans have also been found to contribute to more negative views and expectations of psychotherapy.22–28 An assessment of the role of mistrust in the government and medical care among an HIV-infected population found more positive health outcomes among individuals who had higher levels of trust in their health care providers. Specifically, mistrust was found to be a barrier to service use, and therefore, those with higher levels of mistrust in their health care providers had lower levels of physical and mental health, more emergency room visits, and less likely to take their medications.29,30 These barriers may have had a negative impact on health outcomes because elevated levels of psychological distress have been documented as predictors of medication nonadherence and higher viral loads.3–6,14

Research has shown that those who report higher levels of stigma-related barriers are in more need of mental health care with higher rates of mood disorders.31–34 Populations that are typically unlikely to seek mental health care have more commonly presented with symptoms of somatization, therefore presenting with these symptoms may offer insight to other psychological distress that may be occurring.35,36 Additionally, recent findings described levels of perceived stigma from health care providers among HIV-infected patients as a barrier to access health care.37 These findings suggest that stigma-related barriers continue to exist and prevent proper and comprehensive HIV-related care. In addition to other barriers, research has also found that African Americans are more often diagnosed with psychoticism and paranoid ideation.28,38–40 This demands further attention to understand how psychological distress symptoms are operationalized and diagnosed. These studies suggest elevated levels of psychological distress and perceived stigma surrounding HIV, race, sexual orientation, and gender are complex and interfere with self-care and help-seeking behaviors such as
engaging in medical care, medication adherence, HIV serostatus disclosure, and using safer sex techniques.

This study was conducted in collaboration with a community-based organization in the southeastern United States that provides mental health services to low-income individuals living with HIV. This study was designed to document the range of psychological distress symptoms that African Americans were presenting with at a HIV-related mental health clinic and to compare the symptoms of psychological distress in this sample to the normative sample for the instrument used to assess psychological distress. Results of this exploratory study will assist clinicians in recognizing symptoms that African Americans may be likely to present with at hospitals, clinics, or HIV-related organizations and highlight those issues that may be among those for which referrals to mental health care may be beneficial.

METHODS

Data collection

Data were collected from individuals living with HIV who self-identified as African-American or black upon their self-enrollment into mental health care at an HIV-focused, community-based mental health clinic in a large southeastern city between January 2001 and May 2006. All data were collected during the routine mental health assessment process and participants had the option of completing the study instruments in either English or Spanish. Those who were unable to read the instruments were able to have a clinician assist them with completion of the instrument. All participants provided their consent for data from their assessment to be used for research and evaluation purposes, and the response rate for those included in the analyses presented in this paper was 100%. This study was approved by Institutional Review Board of Indiana University-Bloomington.

Measures

During the assessment, participants completed measures related to demographics (gender, age, ethnicity, sexual orientation, educational level, and income) and those related to physical health status (HIV serostatus, presence of AIDS diagnosis, and CD4 count).

Psychological health status was assessed using the BSI, a 53-item self-report inventory that measures symptoms associated with psychological distress. Research suggests that the BSI is a valid and reliable instrument for obtaining psychological health status data from adult populations, with internal consistency ranging from a low of 0.71 on the psychoticism dimension to a high of 0.85 on the depression dimension. The BSI has also been used in previous studies focusing on HIV and AIDS and is considered a reliable measure for assessing distress in this population. The normative sample, used as a comparison of levels of psychological distress among differing populations, for this study consisted of the adult psychiatric outpatient sample (n = 1002). The normative sample was 58% (n = 577) female, 33% (n = 327) African American; and based on a compilation of socioeconomic status, this sample was skewed toward lower levels of economic status (n = 636).

Data analysis

Descriptive statistical tests were conducted to assess the demographic and health status characteristics of the sample and univariate tests were conducted to make comparisons between the BSI scores of the study sample and the BSI normative sample. BSI scores were transformed to t scores so that each of the psychological distress symptoms could be compared. All other statistical analyses were computed using the BSI raw scores because the t-score transformation changes the distribution of scores and can alter the results of the study. All univariate tests were analyzed at a 95% confidence interval and all analyses were conducted with SPSS version 14.0 (Statistical Package for the Social Sciences, SPSS Inc., Chicago, IL).

Participant description

A total of 575 African Americans accessed care at the mental health clinic during the 5 1/2 year study period (January 2001 to May 2006). Seventy-one percent of the sample identified as male (n = 408) and 29.0% (n = 167) identified
as female. The mean age of the sample was 38.8 years (standard deviation [SD] = 7.9). Approximately half of the sample, 49.2% \((n = 283)\) identified as heterosexual, 37.7% \((n = 217)\) as homosexual, 8.7% \((n = 50)\) as bisexual, and 4.4% \((n = 25)\) were unsure or refused to answer the question. Because of the nature of the clinic, 100% of the participants were considered low-income; 71.8% \((n = 413)\) reported no annual income and an additional 10.4% \((n = 64)\) reported making less than $22,000 per year. The majority of the sample, 75.0% \((n = 143)\), had at least a high school diploma.

**Physical health status**

One hundred percent \((n = 575)\) of the participants received an HIV diagnosis prior to enrolling into care. Twenty-one percent \((n = 121)\) of the sample had also received an AIDS diagnosis. The average self-reported CD4 count for individuals living with HIV was 458.43 cells/mm\(^3\) (interquartile range \([IQR]\) = 271, 430, 580.5) and the average self-reported CD4 count for individuals living with AIDS with 213.12 cells/mm\(^3\) \((IQR = 47, 150, 335.5)\).

Regarding HIV infection, 64.7% \((n = 108)\) of the African American women reported that their HIV infection resulted from sexual intercourse with men and a 19.2% \((n = 32)\) reported that they believed that their transmission was a result of sexual interactions with other women. Fifty-three percent \((n = 217)\) of men reported acquiring HIV from other men and 25.5% \((n = 104)\) reported transmission from women. Three men \((1.8\%)\) cited injection drug use as mode of transmission and 14.4% \((n = 48)\) reported their mode of transmission as other or unknown.

**Symptoms of psychological distress**

The participants presented for care with moderate levels of psychological distress. The mean \(t\) scores on the BSI ranged from a low 46.57 (SD = 10.70) on the anxiety subscale to a high of 54.11 (SD = 9.59) on the paranoid ideation subscale. Similar findings occurred when analyzed by gender. The male and female mean scores for symptoms of anxiety were 46.85 (SD = 10.98) and 45.88 (SD = 9.87) respectively. The highest mean score for both genders was paranoid ideation with a mean of 54.49 (SD = 9.44) for males and a mean of 53.17 (SD = 9.92) for females. Table 1 presents the BSI mean scores overall as well as by gender.

With regards to caseness (an indicator of the need for further psychological evaluation), 18.4% of the African-American sample \((n = 84)\) met the criteria for somatization on the BSI, while only 7.5% met caseness for anxiety. The caseness indicator is a \(t\) score calculation \((t \geq 63)\) that is based on the normative sample for the BSI.\(^{42}\) Table 2 indicates the proportion of the sample meeting the criteria for caseness \((t \geq 63)\) for each of the BSI dimensions and the global severity index.

**Comparisons to a normative sample**

**Overall sample and normative sample.** When compared to the normative sample for the BSI \((1002\) psychiatric outpatients),\(^{41}\) the current overall study sample \((N = 575)\) had significantly lower levels of psychological distress than the normative sample for the following BSI dimensions; anxiety \((M = 1.26, CI = 1.18–1.34)\), depression \((M = 1.43, CI = 1.34–1.52)\), global severity index \((M = 1.23, CI = 1.17–1.30)\), interpersonal sensitivity \((M = 1.39, CI = 1.90–1.48)\), and phobic anxiety \((M = 0.78, CI = 0.71–0.85)\). Three psychological distress dimensions were significantly higher in this sample than the normative sample; psychoticism \((M = 1.28, CI = 1.20 to 1.36)\), paranoid ideation \((M = 1.46, CI = 1.37–1.54)\), and somatization \((M = 1.00, CI = 0.93–1.07; Table 3)\).

**Men and normative sample.** Compared to the BSI normative sample for men \((N = 425)\), those in this sample \((n = 407)\) had significantly lower levels of psychological distress on 3 of the 9 BSI dimensions and on the overall distress measure. Men had significantly lower levels of anxiety \((M = 1.21, CI = 1.11–1.31)\), depression \((M = 1.39, CI = 1.29–1.50)\), interpersonal sensitivity \((M = 1.37, CI = 1.26–1.47)\), and global severity index \((M = 1.19, CI = 1.12–1.27)\) than the normative sample. This sample had significantly higher levels of paranoid ideation \((M = 1.44, CI = 1.35–1.54),\) psychoticism \((M = 1.28, CI = 1.20–1.36),\) and phobic anxiety \((M = 0.78, CI = 0.71–0.85),\) and phobic anxiety \((M = 0.78, CI = 0.71–0.85),\) and phobic anxiety \((M = 0.78, CI = 0.71–0.85).\)
1.18–1.37) and somatization ($M = 0.92, CI = 0.84–1.00$) than the normative sample for males.

**Women and normative sample.** Compared to the normative sample, women in this sample ($n = 167$) had significantly lower levels of psychological distress on 4 of the 9 BSI dimensions and on the overall distress measure. Specifically, they had significantly lower levels of anxiety ($M = 1.38, CI = 1.23–1.55$), depression ($M = 1.51, CI = 1.36–1.67$), interpersonal sensitivity ($M = 1.43, CI = 1.27–1.60$), phobic anxiety ($M = 0.76, CI = 0.64–0.885$), and global severity index ($M = 1.33, CI = 1.21–1.45$). The women had significantly higher levels of paranoid ideation ($M = 1.49, CI = 1.33–1.64$) and somatization ($M = 1.19, CI = 1.05–1.33$) than the females in the normative sample (Table 4).

**DISCUSSION**

This study described the psychological distress symptoms, as measured by the BSI, of African American clients who had self-enrolled into HIV-related mental health care. Further analyses compared this sample to a normative sample that was not HIV-infected. This study found that African Americans in the sample had significantly lower rates of depression, anxiety, interpersonal sensitivity, phobic anxiety, and overall global severity. Yet, had markedly higher levels of somatization, paranoid ideation, and psychoticism than the normative sample.

The results of this study included individuals who self-enrolled into mental health care at a publicly funded HIV-related mental health care center. The findings suggest that African American clients may experience a different profile of psychological distress compared to the general population, with lower rates of depression and anxiety but higher levels of somatization and paranoid ideation. These findings highlight the importance of addressing the unique mental health needs of African American individuals living with HIV/AIDS.
care clinic, which suggests that individuals perceived themselves in need of psychological care. Eighteen percent of the sample reported high levels of somatization, which suggests perhaps African American clients are more likely to express their psychological distress through physical manifestations; which has been commonly documented.\textsuperscript{35,36,52} Symptoms of psychological distress may be difficult to express for many of the clients since this may be the first time they had interacted with a mental health professional. This also may be the first time these individuals are exploring and describing their symptoms themselves. Somatic expression of psychological distress offers an opportunity to tangibly describe thoughts and feelings of pain and discomfort in manners that may not be related to an individual’s physical health status. As a result, it may be that expressing psychological distress symptoms as physical symptoms was easier for individuals in this sample than for individuals who have routinely been involved in mental health care and are more comfortable using psychological terms to describe their distress.

The findings related to elevated levels of symptoms of paranoid ideation and psychoticism may be a reflection of cultural mistrust.

\begin{table}[h]
\centering
\caption{BSI Raw Score Comparisons between Study Male Sample and Normative Male Sample}
\begin{tabular}{lccc}
\hline
\multicolumn{1}{c}{} & \multicolumn{2}{c}{Normative male sample\textsuperscript{a}} & \multicolumn{1}{c}{This male sample} \\
& (n = 425) & (n = 407) & \multicolumn{1}{c}{95\% confidence interval for this sample} \\
\hline
Somatization & 0.67 & 0.71 & 0.92\textsuperscript{b} & 0.82 & 0.84 to 1.00 \\
Obsessive compulsive & 1.53 & 0.98 & 1.44 & 1.09 & 1.33 to 1.55 \\
Interpersonal sensitivity & 1.48 & 1.06 & 1.37\textsuperscript{b} & 1.08 & 1.26 to 1.47 \\
Depression & 1.65 & 1.11 & 1.39\textsuperscript{b} & 1.06 & 1.29 to 1.50 \\
Anxiety & 1.51 & 0.95 & 1.21\textsuperscript{b} & 1.02 & 1.11 to 1.31 \\
Hostility & 1.07 & 0.90 & 1.07 & 1.59 & 0.92 to 1.23 \\
Phobic anxiety & 0.79 & 0.84 & 0.79 & 0.90 & 0.70 to 0.87 \\
Paranoid ideation & 1.06 & 0.93 & 1.44\textsuperscript{b} & 1.00 & 1.34 to 1.54 \\
Psychoticism & 1.12 & 0.84 & 1.28\textsuperscript{b} & 0.97 & 1.18 to 1.37 \\
Global Severity Index & 1.20 & 0.70 & 1.19 & 0.77 & 1.12 to 1.27 \\
\hline
\end{tabular}
\medskip
\textsuperscript{a}Adult Psychiatric Outpatients.\textsuperscript{50} \\
\textsuperscript{b}p < 0.05. \\
BSI, Brief Symptom Inventory; SD, standard deviation.
\end{table}
substantial body of literature has examined the concept of cultural paranoia as a result of the experiences among African Americans in the United States. More recent explanations of the high rates of paranoid and schizophrenic diagnoses among African Americans have been attributed to how the characterization of psychopathology occurs, dimensionally rather than comprehensively. These findings suggest further research is needed to explore symptom expression and their related diagnoses.

These findings are similar to those of a study that analyzed levels of psychological distress among Latino mental health clients, who reported significantly higher levels of distress among somatization and paranoid ideation. Furthermore, the study found that Latinos reported lower levels of anxiety, depression, and interpersonal sensitivity, as did this study; lower rates of depression and anxiety were unlike previous research that have consistently reported elevated levels of depression and anxiety among HIV-infected populations. Interestingly, these studies had not been conducted in a mental health clinic environment, which may play a role in the types of distress that are presented when individuals self-select into mental health care. These findings demand further research on the expression of dimensions of psychological distress. The BSI has been used both domestically and internationally with diverse populations, which limits the challenge of these findings.

The limitations of this study include the use of self-report data, although these types of measurement are often the norm for initial assessments of psychological distress in a clinical setting. While this study reports the levels of psychological distress experienced among African Americans living with HIV at one mental health clinic in a southeastern U.S. city, this sample tends to be similar to other HIV-related care seeking populations in other major cities of the United States.

In summary, these findings suggest that symptoms of psychological distress among African American clients living with HIV, who self-enroll into mental health care, are more elevated across the paranoid ideation, somatization, and psychoticism dimensions at baseline measures. These findings offer other care providers, and those providing other HIV-related services, with insights into the types of psychological distress experienced by individuals from this community. For example, an understanding of the likelihood that these clients will express distress in somatic terms may be helpful to those working in other HIV-related programs. While the physiological spectrum of HIV disease is complex, the expression of these issues may serve as indicator for referrals to mental health care in addition to recommendations for discussing these issues with one’s primary

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<th>Normative female samplea (n = 577)</th>
<th>This female sample (n = 167)</th>
<th>95% confidence interval for this female sample</th>
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<tr>
<td></td>
<td>Mean</td>
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<td>Mean</td>
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<tr>
<td>Somatization</td>
<td>0.94</td>
<td>0.84</td>
<td>1.19b</td>
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<td>1.60</td>
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<td>1.04</td>
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<td>0.72</td>
<td>1.33b</td>
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aAdult Psychiatric Outpatients.50
b\( p < 0.05.\)

BSI, Brief Symptom Inventory; SD, standard deviation.
care provider. More research is necessary to further our understanding of the manner in which HIV impacts one’s psychological well-being, but the results of this study offer valuable insights to those working to reduce the disparities in access to such care and who are committed to the further development of a comprehensive and holistic system of HIV-related services in their community.

ACKNOWLEDGMENT

This investigation was partially supported by the National Institutes of Health from National Research Service Award (T32 DA07313) from the National Institute of Drug Abuse.

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