The Prevalence of Distress in Persons With Human Immunodeficiency Virus Infection

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The purpose of this study was to assess the prevalence of distress, anxiety, and depression in persons with human immunodeficiency virus (HIV) infection and determine the feasibility of screening in an urban HIV primary care setting. A convenience sample of 101 patients in the waiting room of an acquired immunodeficiency syndrome clinic completed two questionnaires, the Hospital Anxiety and Depression Scale (HADS) and the Distress Thermometer. The patient's demographic, medical, and psychiatric histories were obtained through chart review. The results of the Distress Thermometer revealed that 72.3% had a score of 5 or greater, demonstrating high distress. The results of the HADS revealed that 70.3% had high anxiety, with a score of 7 or greater. On the HADS depression questions, 45.5% had a score of 7 or greater, indicating depression. Analysis of the total HADS scores, including anxiety and depression, revealed that 53.5% had a score of greater than 15 and were experiencing significant distress. Patients with high viral loads were more likely to be distressed ($P < 0.0005$*). Patients with high viral loads were also more likely to have higher anxiety or depression scores on the HADS. Patients who had CD4 counts higher than 500/mm*^{3} *were less likely to be depressed. This study demonstrates a high prevalence of distress, anxiety, and depression among persons with HIV. The HADS and the Distress Thermometer showed a good correlation with each other (*$P < 0.0005$*), and these questionnaires can provide a simple and efficient method for rapid screening in an HIV clinic setting.*

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Persons infected with human immunodeficiency virus (HIV) are living longer and healthier lives as a result of better medical care, major advances in antiretroviral therapy, and prophylaxis of some of the initially fatal complications.[1] However, many continue to experience distress from symptoms such as pain, fatigue, insomnia, anxiety, and depression. Some people with HIV are also at increased risk for comorbid psychiatric disorders because of the high prevalence of drug dependence.[2] Patients with advanced acquired immunodeficiency syndrome (AIDS) are especially vulnerable to dementia and suicide.[3] In addition to these special vulnerabilities, persons with HIV and AIDS are also subject to family crises, financial stressors, losses, and a multiplicity of medical illnesses. Anxiety and depression may be factors in both

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quality of life and adherence to the complex regimen for HIV treatment.[4]

As AIDS continues to be the leading cause of death among Americans aged 25–44 years old, heterosexual transmission of HIV, especially from men to women, is increasing.[5] Recognition and treatment of distress, anxiety, depression, and other psychiatric symptoms in HIV-positive persons can improve care, increase adherence, and decrease the transmission of HIV.[6–8]

A study by Lyketsos et al.[9] at an HIV primary care clinic found a high prevalence of distress in HIV-infected persons. The authors identified 52% of their participants as having significant depression by using the General Health Questionnaire and the Beck Depression Inventory and found that 65.6% had a history of a substance use disorder.[9] Community samples had identified only 4%–15% of participants as having a current major depressive disorder and 20%–35% as having substance abuse.[10–12]

Patients with psychiatric morbidity are at greater risk for poor adherence to antiretroviral therapy and higher risk for treatment failure. A study by Gordillo et al.[7] found that patients who were depressed had poorer compliance with antiretroviral treatment. Adherence to antiretroviral medications is an important factor in illness outcome because most antiretroviral therapies require adherence 95% of the time for optimal effectiveness.[8] Patient compliance has become more important because advances in antiretroviral therapy have led to a shift from inpatient care to the outpatient setting. With the shift to ambulatory care and the pressure to see more patients in shorter periods of time, clinicians may have more difficulty recognizing, diagnosing, and treating distress and related psychiatric problems. To screen a large number of patients in an efficient, timely manner, many clinics have relied on assessment questionnaires. This study examines the prevalence of distress, anxiety, and depression among persons with HIV and the feasibility of using screening questionnaires in the setting of a crowded waiting room in an HIV primary care clinic.

METHODS

The subjects were a convenience sample of people in the waiting room at the AIDS Center of the Mount Sinai Hospital, New York City. This clinic provides comprehensive care for nearly 1,800 HIV-positive persons. Patients were approached while they were waiting for their appointments and were asked to complete two questionnaires. Very few patients (<10%) declined to participate. Of those who declined, most said that they did not want to participate because our study provided no financial incentive, unlike other studies conducted at that time. Two individuals declined because of language difficulties; they were unable to understand either Spanish or English and could not await translators. Two declined because of child-care concerns and time constraints. This study was approved by the Mount Sinai Hospital Institutional Review Board.

Patients completed the Hospital Anxiety and Depression Scale (HADS), which consists of 14 questions, 7 measuring anxiety and 7 measuring depression. Each question was rated on a scale of 0 to 3, with a possible score of 0–21 for depression or anxiety and a possible total score of 0– 42. Based on the work of Zigmund and Snaith,[13] HADS scores of 7 or greater for anxiety or depression, and a total score of 15 or greater, were considered significant for measuring distress. Patients were also asked to complete the Distress Thermometer, which is a vertical analogue scale with 0 representing the least distress and 10 representing the most distress experienced by the patient. The two questionnaires were read to each patient and took approximately 5 minutes to complete, which included time for explanation and reading of informed consent.

The results were analyzed using Pearson's χ^2 test and analysis of variance. The patients' demographic, medical, and psychiatric histories were obtained through a chart review. Viral loads and CD4 counts were obtained from the medical chart. The procedure for viral-load determination at Mount Sinai is by the Amplicor PCR Diagnostics HIV1 Monitor Test, Roche Commercial Kit. The viral-load range is from <400 to >750,000 copies/mL with regular assay and from <40 to >75,000 copies/mL with the ultrasensitive assay. Two of the authors reviewed the charts.

RESULTS

The demographic results are summarized in Table 1. The results of the Distress Thermometer and the HADS re-

TABLE 1. Patient characteristics

	N	%
Gender		
Women	44	43.6
Men	57	56.4
Ethnicity		
African American	45	44.5
Latino American	49	48.5
Caucasian	5	5
Other	2	2

Note. $N = 101$.