Psychiatric Problems of AIDS Inpatients at the New York Hospital: Preliminary Report

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Synopsis

A retrospective review of the charts of 52 patients with acquired immune deficiency syndrome (AIDS) in the New York Hospital was conducted to determine the prevalence of recorded psychiatric complications and the use of psychiatric consultation.

Neuropsychiatric complications were found to be pervasive clinical features in AIDS patients hospitalized during acute illness. Mood disturbance was identified in an overwhelming majority of the patients (82.7 percent), and signs of organic mental syndrome (DSM III) were noted in 65.4 percent; references to neuropsychiatric complications appeared in every patient's chart.

Neurological complications were seldom explicitly diagnosed or treated. Psychiatric consultation was requested for 10 patients (19.2 percent) because of management problems, for diagnostic assessment, or by self-referral. Only one patient was given a psychiatric diagnosis at discharge. The results suggest that the neuropsychiatric complications of AIDS are underdiagnosed during acute medical illness and that psychiatric consultation is underutilized.

AIDS patients have a heightened risk of psychological problems. Contributing factors may include the threat to life, severe physical debilitation, central nervous system involvement, fear of contagion, disclosure of homosexuality or drug abuse, and guilt associated with sexual transmission.

SINCE THE FIRST REPORTED CASES IN 1981 (*1*), *acquired immune deficiency syndrome (AIDS) has been identified as a public health emergency. As of December 12, 1983, a total of 2,952 cases had been reported to the Centers for Disease Control (CDC), and 1,225 of these patients (42 percent) had died (2).* Among high-risk groups, the mean number of cases was doubling every 6 months, but may now be increasing at a lower rate. These groups are homosexual or bisexual men, especially those with multiple sexual partners—71 percent of the cases (*1,3–5*); intravenous drug users—17 percent (*6*); and hemophilia A patients treated with Factor VIII—1 percent (*7*). The Public Health Service regards recent Haitian immigrants (less than 7 percent) as a high-risk group. However, there has been controversy about this categorization (*8,9*).

The current definition of AIDS used in CDC's surveillance activities requires the presence of a disease at least moderately indicative of defective cell-mediated immunity in a person who has no known underlying cause for such a defect or any other reason for diminished resistance to disease (*10*). Diseases that are indicative of AIDS include *Pneumocystis carinii* pneumonia (PCP) with or without other opportunistic infections, 51 percent of the cases; Kaposi's sarcoma (KS) with or without opportunistic infection, 26 percent; other opportunistic infections alone, 15 percent; or KS and PCP with or without other opportunistic infection, 8 percent (*2*). Although the cause of AIDS is not known, a major current theory favors exposure to an unidentified viral agent to which the immunosuppressed individual is more vulnerable (*11–15*). The treatment of opportunistic infections has included trimethoprim-sulfamethoxazole, ketoconazole, acyclovir, and pentamidine. Treatment for KS has included recombinant leukocyte A interferon, radiotherapy to the skin, and systemic chemotherapy (doxorubicin, vinblastine, bleomycin). These treatments for opportunistic infections or KS may provide transient relief of symptoms, but there is no evidence that they improve the overall survival rate (*16*).

The psychiatric aspects of AIDS await systematic documentation. Although writers in the media (*17,18*), psychotherapists (*19,20*), and authors in medical journals

(*21–23*) have suggested that emotional reactions to the illness can be quite pronounced, these observations have often been based on impressions and not on scientific data. This problem has been compounded by a lack of specificity in published reports and a failure to distinguish different kinds of psychiatric complications during different phases of the illness.

These psychiatric complications may include (*a*) adjustment reactions at time of confirmed diagnosis (for example, numbness, shock, and denial); (*b*) adjustment reactions during progression of the illness (for example, depression, self-imposed or peer-inflicted isolation, and guilt about sexual or drug-related behavior; (*c*) intense emotional reactions in members of high-risk groups with no evidence of the disease (for example, anxiety about contracting AIDS, somatic preoccupation, convictions of discrimination, forced attempts to change sexual preference, and anger at the perceived insensitivity and impotence of the medical establishment); and (*d*) exaggerated emotional reactions in individuals who are not members of high-risk groups (for example, homophobia or unreasonable fears of contagion).

In addition to these emotional reactions, organic symptoms arising from AIDS itself or from its therapy may present psychiatric complications. Fatigue and weight loss may signal the prodromal phase of AIDS and may mimic major depression. A "flu-like" complex of lethargy, fever, and depressed mood has been associated with recombinant leukocyte A interferon (*24*). Central nervous system diseases, especially encephalitis (*25*) and primary lymphoma (*26*), frequently produce cognitive deficits, mood disturbance, vegetative signs, personality change, and impulsive behavior that mimic psychogenic disorders.

Methods

To provide effective care, physicians must be able to anticipate the frequency, nature, and severity of neuropsychiatric problems in the AIDS population and recommend useful psychological interventions. We reviewed the medical charts of all adults meeting CDC criteria for AIDS (*10*) who were admitted to the New York Hospital, New York City, between September 1, 1981, and September 1, 1983.

We reviewed the notes of physicians, nurses, social workers, and medical students, and we recorded neuropsychiatric symptoms and adjustment problems on the basis of face validity. When a psychiatric consultation had been requested, the reasons for consultation, diagnostic impression and recommendations for treatment were noted. The senior author (S.W.P.) interviewed the psychiatrists, physicians, and other personnel familiar with the patients to obtain more detailed information about the nature and resolution of the presenting problem. All references to adjustment problems and psychiatric symptoms were noted. In addition to this review, we explored the implications of the detection and management of psychological problems of AIDS patients.

Results

During the 2-year period, 83 adult patients with AIDS were admitted to the New York Hospital. Complete medical records were available for 52 of these patients (62.6 percent).

Table 1 lists relevant sociodemographic and medical characteristics of the population studied. The majority of patients were middle-class homosexual men in their 30s, a small portion of whom also infrequently used intravenous drugs. Only two patients (including the woman) denied belonging to any high-risk group. Opportunistic infection (primarily PCP, mucosal candidiasis, and disseminated cytomegalovirus) occurred in 43 patients (82.7 percent) and was regarded as the most critical medical problem. A large portion of the study population was terminally ill: at least 19 patients (36.5 percent) died during hospitalization or within 6 weeks after discharge.

Psychiatric diagnosis detected by chart review are summarized in table 2. Thirty-one patients (59.6 percent) met criteria in the Diagnostic and Statistical Manual of Mental Disorders, third edition (DSM III) for one or more psychiatric diagnoses (*27*). The most common DSM III diagnosis was organic mental syndrome (OMS) with or without a major depression, which was present in 21 patients (40.4 percent). Major depression was present in nine patients (17.3 percent). However, only the patient

Table 1. Sociodemographic and medical characteristics of 52 hospitalized AIDS patients[1]

Characteristic	*Number*	*Percent*
Sex:		
Male	51	98.1
Female	1	1.9
Risk group:		
Homosexual-bisexual	41	78.8
Homosexual-intravenous drug user	5	9.6
Haitian immigrant	3	5.8
Intravenous drug user	1	1.9
Undetermined	2	3.8
Primary medical illness:		
Opportunistic infection	37	71.2
Kaposi's sarcoma	9	17.3
Both opportunistic infection and Kaposi's sarcoma	6	11.5
Mortality:		
During hospitalization	11	21.2
Known following discharge	8	15.4

[1] Mean age: 36 ± 2.1 years (range: 20–69).

Table 2. DSM III and presumptive diagnoses of 52 hospitalized AIDS patients

Diagnoses	Number	Percent
Mood disturbance:		
DSM III major depression	9	17.3
Presumptive depression	34	65.4
Total	43	82.7
Organic mental syndrome:		
DSM III delirium	15	28.8
DSM III dementia	6	11.5
Presumptive organic mental syndrome	13	25.0
Total	34	65.4
Other diagnoses:		
Substance abuse disorder	6	11.5
Schizophrenia	1	1.9

with chronic undifferentiated schizophrenia actually received a psychiatric diagnosis at discharge.

References to neuropsychiatric complications—such as being depressed, anxious, lethargic, or withdrawn—appeared in the charts of all 52 patients. These references indicated neuropsychiatric problems in some patients whose medical records did not supply sufficient information to make a DSM III diagnosis. In addition to 21 diagnoses of DSM III delirium or dementia, a presumptive diagnosis of OMS was strongly suggested for 13 patients (for example, repeated nurses' notes stating that the patient was "confused" or "disoriented"). Nine patients met DSM III criteria for major depression; mood disturbance was strongly suggested in 34 other patients but the recorded information was not sufficient to distinguish a primary affective disorder from a normal grief response or a mood impairment secondary to neurological or systemic disease. Five patients had suicidal ideation (9.6 percent), but only one patient was considered a suicidal risk (1.9 percent). Forty-three patients (82.7 percent) were noted to have an aberrant lifestyle (for example, antisocial behavior or chaotic interpersonal relationships), but no record provided sufficient detail to meet DSM III criteria for a personality disorder.

Management problems were encountered in seven patients (13.5 percent). Three of these patients left the hospital against medical advice; one was subsequently readmitted and another was followed as an outpatient. Two patients refused to comply with medication or a diagnostic procedure; a few days later, both of these developed a delirium and died. Two patients were considered belligerent or abusive to staff when their demands for more narcotic analgesics were not met.

Psychiatric consultation was requested for 10 patients (19.2 percent) because of the management problems described previously, for diagnostic assessment, or by self-referral. The six management problems occurred when patients refused procedures, had explosive episodes on the ward, or signed out against medical advice; two patients in this group left abruptly before consultation. (The number of patients actually seen by a psychiatrist therefore differs from the number of requests for consultation.) In the two patients seen for diagnostic assessment, the psychiatrist was asked to help distinguish organic from psychogenic pathology. Two consultations were performed at the patients' initiative because of "depression."

Case vignettes. The following case vignettes illustrate the three major reasons for psychiatric consultation:

1. *Management problems.* Mr. A., a 30-year-old homosexual musician, had been hospitalized for several weeks because of gastrointestinal infections and renal failure. Psychiatric consultation was sought after a nurse observed that he was not taking his prescribed medicine. During the first two interviews, the psychiatrist was not certain whether noncompliance stemmed from hopelessness or from a chronic tendency to be manipulative and passive-aggressive. During the third interview, the consultant observed how the patient fluctuated between hypervigilance and indifference and how he avoided formal testing of cognitive functions. The psychiatrist suspected that a mild OMS was exaggerating personality problems; she therefore recommended that the staff appreciate the patient's confusion and that a neurological evaluation be made. The patient immediately responded to less complicated explanations and began taking his medications; he had a grand mal seizure 4 days later and soon died from encephalitis.

2. *Diagnostic assessment.* Mr. B., a 49-year-old married bisexual executive, was referred for psychiatric consultation 18 months after AIDS was first diagnosed (PCP). During the early stages of his illness—both because of an unrecognized mild OMS and because of depression causing him to drink alcohol—he had driven his successful business to financial collapse and destroyed his family life. By the time of his second hospitalization for disseminated cytomegalovirus, he had lost 70 pounds, was going blind, and was living a marginal existence in his elderly mother's apartment.

The manifest reason for psychiatric referral was to determine the role depression was playing in a man with a now well-documented case of dementing encephalitis. After the first interview, the consultant suspected a latent reason for the referral because at that point the diagnostic distinctions between psychogenic and organic causes appeared academic: Mr. B. was so cachectic and debilitated

he could not lift his head from the pillow and could not maintain the most superficial conversation before drifting back to sleep. He was not oriented to time or place, could not name any President, and had neither immediate nor short-term recall.

Recognizing that the patient was terminally ill, the psychiatrist directed his efforts toward the referring staff members who were depressed themselves. A liaison staff conference enabled them to work through the discouragement and hopelessness they felt watching AIDS patients die despite heroic efforts.

3. *Self-referral.* Mr. C., a 39-year-old homosexual artist, requested a psychiatric consultation during his second admission for PCP and KS. During the interview, though weak and sickly, he was able to maintain his flamboyant style and poignantly convey his fears of "walking alone towards death." Geographically and emotionally distant from his relatives, he had relied on support from friends and a homosexual self-help group since his first admission, but he now wanted an "insider" who was "not political" or intimidated by "the parade of doctors and the stench of specimens." In response to the patient's request, the psychiatrist met with Mr. C. frequently throughout his prolonged hospitalization to facilitate his profound grief response and to help explain the bewildering array of tests and procedures. Mr. C. met "the approaching shadow" without the panic and awesome loneliness he had feared.

Discussion

On the basis of a retrospective review of the charts of 52 hospitalized patients, mood disturbance and cognitive dysfunction were found to be a pervasive clinical feature of AIDS. Although neuropsychiatric symptoms could be identified in every record, they were rarely diagnosed or treated. Only one patient received a psychiatric discharge diagnosis, and psychiatric consultation was requested for fewer than one in five patients. Thus, AIDS patients are at high risk for psychological problems, but these problems tend to be underdiagnosed and undertreated.

Five factors may help explain these observed tendencies: sample bias, rater bias, preoccupation with severe medical complications, failure to appreciate the high incidence of OMS in AIDS patients and the benefits of palliative treatment, and avoidance of emotional issues in homosexual, "contagious," and fatally-ill patients.

1. Sample bias. The population was mainly composed of white middle-class homosexuals in their 30s. Only one patient (1.9 percent) was a heterosexual intravenous drug abuser, whereas this high-risk group accounts for 17 percent of the general AIDS population. Psychiatric complications may be more readily recognized in drug abusers or indigent patients either because their problems are more pronounced or because health personnel are less inclined to overidentify with patients who are more obviously different in their sociocultural background and lifestyle.

2. Rater bias. Because the assessments were made on the basis of face validity, the psychological orientation of the raters may have prejudiced the findings, increased the significance of references to neuropsychiatric problems, and underestimated implicit therapeutic interventions.

3. Severe medical complications. By design, this review included only those subjects requiring hospitalization. All the patients were critically ill; at least 19 (36.5 percent) died during the 2-year study period. The need for intensive medical care may have diverted attention from neuropsychiatric problems that neither the staff nor the patients considered life-threatening. Possibly more attention would have been given to psychological issues if acute medical problems were not an overwhelming preoccupation.

4. Unrecognized organic mental syndrome (OMS). Twenty-one patients (40.4 percent) met DSM III criteria for an OMS; confusion, disorientation, loss of memory, and other organic signs were described in 13 additional patients (25 percent). The high incidence of cognitive dysfunction in these patients is consistent with recent studies that have described the frequent neurological complications of AIDS (*25,26*), yet only those patients seen in psychiatric consultation were explicitly given an OMS diagnosis. More importantly, according to the medical records, palliative treatment for dementia or delirium was given to only those patients whose OMS was identified.

The general failure to diagnose and treat OMS in hospitalized medical patients has been documented (*28–31*). The cases of Mr. A. and Mr. B. illustrate that the staff may not realize that mild cognitive impairment is a factor contributing to noncompliance, depression, and altered behavior.

5. Avoidance of emotional issues. Although the subtle attitude of caretakers cannot be adequately substantiated by a chart review, the relatively low incidence of recorded psychopathological reactions raises the possibility that staff members consciously or unconsciously avoided emotional issues with these patients. The rate of requests for psychiatric consultation was one-third the usual rate for ward medical services that have an active consultation-liaison program. Furthermore, no consultation was requested by the staff to help patients cope with

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the psychological stresses of the illness; the requests were for management problems, for diagnostic assessment, or at the patient's request.

There are a few explanations for this lapse in psychiatric consultation. Staff members may have believed psychiatric intervention would be futile for patients who were critically ill, or they may have wished to remain detached from the difficult emotional issues in dying patients. These general tendencies have been described with other kinds of patients (*32–34*), but may be compounded with AIDS patients by fears of contagion (*35*), homophobia (*36*), or, as illustrated by the case of Mr. B., the staff's own hopelessness in treating a large series of enigmatic terminally ill patients. Additionally, patients themselves may have wished to minimize their neuropsychological problems or may have chosen to discuss these problems with their own friends and counselors because they considered the medical staff to be unsympathetic, or at least unfamiliar, with homosexual issues.

Recommendations for Psychiatric Intervention

Based on the results of this study at the New York Hospital, we recommend the following measures to deal with the neuropsychiatric complications of AIDS during medical hospitalization:

1. Document mental status. The high incidence of OMS recently associated with this population (*25,26*) provides a compelling argument for routine monitoring of the mental status of every AIDS patient. The Mini-Mental State examination (*37,38*) may help detect the mild OMS that frequently occurs early in the course of the disease. Disorders of mood, thinking, or behavior should not presumptively be viewed as psychogenic until a systematic mental status examination has ruled out possible cognitive (organic) determinants. Depression, lethargy, impulsivity, explosive episodes, and noncompliance may be secondary to the nervous system dysfunctions associated with subacute encephalitis, lymphomas of the central nervous system, vascular complications, and other neurological and systemic problems. If the diagnosis of an OMS is recognized and recorded, the staff will be alerted to provide specific palliative treatment, including neuroleptics; correction of misinterpretations; and simplified instructions and explanations (*39–41*).

2. Identify and treat avoidance of psychological issues. The limited requests for psychiatric consultation and the paucity of recorded information regarding psychological aspects suggest that the staff may be inclined to avoid emotional issues with these AIDS patients, thereby enhancing their sense of being different. Staff education can be helpful in (*a*) explaining what is known about the transmission of the disease, thus reducing unreasonable precautions and fears of contagion (*35*); (*b*) providing information about homosexual behavior to correct distortions and decrease homophobia; and (*c*) indicating (as with Mr. C.) that the psychiatric reactions of patients hospitalized with AIDS are not dissimilar to reactions of other kinds of patients who have a life-threatening illness (fears of pain, abandonment, debility, dependency, and separation). These familiar reactions can potentially respond to the same psychotherapeutic and psychopharmacological interventions proven to be effective for other medically ill patients.

3. Arrange for aftercare. Hospitalization provides an opportunity to marshal family, peer, legal, and social support. Psychological problems may surface or at least become more apparent after the acute medical crises pass. In communities where AIDS is most prevalent, homosexual organizations provide support groups, trained counselors, supervised social activities, homemakers, and a buddy system to accompany AIDS victims to outpatient appointments.

Conclusion

Neuropsychiatric complications, especially cognitive dysfunction and mood impairment, were pervasive clinical features in AIDS patients hospitalized during acute illness, but those complications were seldom explicitly diagnosed or treated. The results of any retrospective chart review must be interpreted cautiously, but there is a strong suggestion that a thorough mental status examination will detect neuropsychiatric complications in an overwhelming majority of hospitalized AIDS patients. When these complications are detected and diagnosed and when the sources of distress are appreciated, effective supportive and palliative interventions can be prescribed.

Our findings are a preliminary step in alerting clinicians to the neuropsychiatric problems of AIDS patients. To document the prevalence and severity of these problems more systematically, we are conducting a controlled prospective study of newly diagnosed AIDS patients.

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