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HIV Infection in State Hospitals: Case Reports and Long-Term Management Strategies

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Issues facing state psychiatric hospitals as a result of the epidemic of human immunodeficiency virus (HIV) are illustrated by five cases. These issues include use of universal precautions to prevent transmission of HIV, medical diagnosis and management of HIV-infected patients, management of threaten-

ing behavior by infected patients, management of patients' sexual behavior, and discharge planning. The authors suggest that institutions will be required to ensure that sexual behavior between patients does not occur or to offer patients condoms or other means to protect themselves from infection. They recommend upgrading the medical capabilities of state hospitals so that they can competently provide long-term combined medical and psychiatric care to HIV-infected patients.

the more than 45 cases of known HIV infection at two state hospitals in New York City. The five cases have been selected because they best represent issues that are relevant to the state hospital setting. These issues include use of universal precautions against HIV infection, medical diagnosis and management of HIV-infected patients, managing threatening behavior by HIV-infected patients, managing patients' sexual behavior, and discharge planning. Long-term strategies for addressing these issues are also discussed.

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Principles and policies have been evolving in various settings to guide staff in addressing the unique treatment and management problems posed by severely ill psychiatric patients who are also infected with human immunodeficiency virus (HIV) (1,2). We have previously described an approach to these problems taken by senior clinical administrative staff of state hospitals in New York City (2).

In this paper, we present five of

Universal precautions

Patients with no obvious signs of HIV infection or AIDS may be admitted to psychiatric units. Staff are sometimes exposed to blood and body fluids with no knowledge of the patient's HIV serology. Use of universal precautions for handling the blood and body fluids of all patients may help reduce staff's uncertainty about their risk of infection in situations like those in the following case.

Case 1. Mr. O was a 27-year-old Cuban man with a ten-year history of schizoaffective disorder with recurrent psychotic episodes. He was admitted after he stopped his medication and felt impulses to kill his girlfriend.

After admission, Mr. O revealed that he had been involved in a homosexual relationship with a sexually promiscuous man. He requested HIV testing. Four days after admission, he became agitated and punched a window. He lacerated his hand and left a trail of blood on the floor of the ward. Two weeks after admission, he punched a window in the seclusion room, again lacerating his hand. Serologic test results, received three weeks after admission, were positive for HIV. Although staff had been trained in universal precautions and gloves were available, several staff members recalled contact with the patient's blood on their intact skin. One staff member had cut himself on a piece of broken glass from the window of the seclusion room, although whether the glass was contaminated with the patient's blood was not known.

As the case illustrates, it is not sufficient to depend on staff's independent ability to follow new procedures, such as universal precautions (3). Training must be provided as part of the initial orientation of all new employees. Incidents involving breaches of universal precautions must be monitored, and staff who violate the guidelines must be counseled and disciplined.

Medical diagnosis and management

Staff need to consider the possibility of HIV infection in patients who appear medically well on admission but who later develop physical symptoms such as oral and cutaneous conditions, diarrhea, weight loss, and lymphadenopathy (4). HIV-infected patients may undergo rapid and severe physical deterioration. They may require extensive medical and nursing care, as the following case illustrates.

Case 2. Ms. J was a 31-year-old black woman admitted to the state hospital for a psychotic decompensa-

tion. Her psychiatric history dated to age 15 and included a chaotic adolescence, recurrent psychotic episodes, a diagnosis of chronic paranoid schizophrenia, a history of multiple substance abuse including "skin popping" of cocaine and heroin (injecting the drug under the skin), and a history of prostitution.

At admission the patient appeared physically healthy, but several months later she began to lose weight and developed a low-grade fever and chronic anemia. Staff suspected HIV infection. An antibody test was performed, and the result was positive.

Except for brief periods when she was transferred to a general hospital for treatment of medical crises, Ms. J remained at the state hospital. Over the next year and a half her medical problems included non-Hodgkin's lymphoma, recurrent pneumonias, septicemia, urinary tract infection, and decubitus ulcers. She required extensive help with activities of daily living, around-the-clock nursing care, and daily visits by the hospital's internists. Hospital staff were required to accompany her to the general hospital on numerous clinic appointments. She became progressively weaker and more debilitated and died in the general hospital of *pneumocystis carinii* pneumonia.

This case suggests how extensively HIV-infected patients tax the medical and nursing capabilities of state hospitals. Patients who initially meet medical clearance guidelines may later become severely physically ill. Alternative settings to which patients may be referred for long-term combined medical and psychiatric care are lacking.

One long-term strategy for management of HIV-infected patients is to improve medical care in state hospitals. The state hospital system has become smaller as its residential functions have shifted to the community. For example, between 1982 and 1987 in New York State, the number of beds in community residences increased by about 3,000 (5) and the number of state hospital beds decreased by 2,300 (6). The smaller state hospital system that is resulting from the shift of care to the

community could be medically upgraded, in part from the savings achieved by bed reduction, to serve physically and psychiatrically disabled patients who need hospital care.

This change would require an increase in the number of nurses and internists employed by state hospitals and improvement in ancillary facilities such as laboratory and radiology services. In addition, the development of do-not-resuscitate policies and staff training in the management of terminally ill patients would be needed. State hospitals with these resources could adequately treat the severely mentally ill person who also suffers from HIV infection.

Managing threatening behavior

Hostile and assaultive patients must be handled in a way that minimizes the risk of transmission of HIV infection. As the following case illustrates, this task is quite difficult, especially when staff must restrain extremely aggressive patients.

Case 3. Ms. N was a 24-year-old Hispanic woman with a history of multiple state psychiatric admissions since early adolescence. She had a diagnosis of schizophrenia and also had a history of multiple substance abuse, including use of intravenous drugs.

At the time of her current admission, the patient had auditory hallucinations and delusions and was believed to be suffering from an exacerbation of her schizophrenic illness. Because the patient had cervical lymphadenopathy and a herpes infection on her lip and face, staff were alerted to the possibility of HIV infection. An antibody test was performed, and the result was positive.

Shortly after admission, Ms. N began to show significant cognitive impairment, including confusion, poor memory, and disorientation about time and place. Her psychosis did not improve on therapeutic doses of antipsychotic drugs. She was very agitated. She screamed and cried and kicked, hit, and spit at staff and patients. She required seclusion

12 times during the next four months. On one occasion, she sustained a nosebleed during a fight with a patient. On another, a member of the nursing staff was stuck with a needle used to administer emergency medication to the patient.

During the last month of the patient's hospital stay, she became weak, incoherent, and bedridden. Because of her weakened condition, neither her psychosis nor her assaultive behavior were prominent problems any longer. After five and a half months in the state psychiatric center, she was transferred to a general hospital for more intensive medical care. She died there seven weeks later.

Ms. N's AIDS dementia was superimposed on her chronic schizophrenia. Until she became medically debilitated, the combined disorders were associated with threatening and assaultive behavior and the patient required intensive supervision.

The case illustrates that sufficient numbers of staff well trained in the use of seclusion and restraint procedures and specialized equipment such as restraining blankets and retractable needles are essential for management of severely mentally ill patients who are infected with HIV.

Managing sexual behavior

The added risk of HIV infection has made it increasingly difficult to ignore sexual activity in institutional settings (7). The following case shows one approach to this problem.

Case 4. Mr. K was a 33-year-old black man with a 13-year history of recurrent psychosis. He had a diagnosis of schizoaffective disorder and a history of multiple substance abuse, including intravenous use of heroin. He had been arrested many times, most often for larceny. During a psychiatric hospitalization in 1986, he was discovered to have active tuberculosis and herpes zoster, and an HIV antibody test was positive. Thereafter, he remained hospitalized continuously. His symptoms of severe and chronic psychosis did not improve after administration of therapeutic doses of antipsychotic drugs or lithium.

One of the important management problems in this case was the patient's lack of control over his sexual impulses. He was often regressed and disinhibited. He expressed a desire to engage in sex with both men and women. At night, he would enter the rooms of male patients and

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attempt to have sex with them. Moreover, he became preoccupied with his own death and expressed the wish to spread his infection to others. Eventually, he required continuous observation.

As this case suggests, prevention of sexual activity within a state hospital is difficult, and preventing male homosexual activity in dormitories at night may be the most difficult task of all. Although most state psychiatric hospitals prohibit sex between patients, it does occur (7). In New York state hospitals, numerous incident reports and even occurrences of pregnancy among patients attest to sexual activity between patients.

In case 4, the decision was made to prevent the patient from engaging in sexual activity by providing him with around-the-clock supervision. This solution is too expensive and restrictive for capable adult patients who are often given grounds privileges and passes to encourage increased independence. For these patients, inquiring about sexual practices, distributing condoms, and offering regular and repeated educational sessions about safer sex should take precedence over institutional prohibitions against sexual behavior.

Some observers view offering condoms to patients as condoning

behavior that is against the rules. However, the importance of these rules must be weighed against the threat of HIV infection. We believe that as the incidence of HIV infection increases, state hospitals will be forced to develop more pragmatic positions. Patients will need to be supervised sufficiently so that sex in fact does not occur, or they must be given the opportunity to protect themselves against infection and pregnancy.

In hospitals where the distribution of condoms is not expressly prohibited, an informal system of making them readily available to patients may be less controversial than creating an official hospital policy about distribution of condoms. These issues are particularly complex in forensic settings (8), where a combination of explicit rules prohibiting sex and restrictions against leaving the immediate environment may make distributing condoms even more controversial. Yet we believe that condoms should be made available in these settings as well.

Discharge planning

Once a patient has been admitted to the hospital, discharge poses a difficult problem, as case 5 illustrates. The patient may not be able to manage his medical condition and may engage in behavior that poses a threat of infection to others. Few disposition options offer appropriate supervision of such patients (9).

Case 5. Mr. H was a 37-year-old homosexual Dominican man who had a seven-year history of bipolar disorder. He was admitted for recurrent manic episodes triggered by noncompliance with medication. Biopsy of a lesion on his left arm was consistent with Kaposi's sarcoma, resulting in a diagnosis of AIDS.

When he was manic, the patient threatened to "give AIDS to the world" and became hypersexual. He sometimes denied having AIDS, and at other times he accused one of his former doctors of hypnotizing him and giving him Kaposi's sarcoma by injection. Within a few weeks after admission, his psychiatric condition stabilized and discharge was possible. However, because of his his-

tory of noncompliance with medication and his hypersexual behavior and poor judgment when he was unmedicated, he was judged to be a danger to himself and others if released to an unsupervised setting.

He was refused placement at every mental health residential program to which the hospital applied. Staff decided that regardless of how long it took to find a placement, discharging Mr. H to the community would be unethical. After six months in the hospital, he was accepted at the one small housing program in New York City that has been developed for homeless AIDS patients. He died six weeks later.

This case recalls the problems encountered by many types of dual-diagnosis patients. These patients rarely find treatment and residential settings in which both their mental illness and their other condition receive adequate attention. All involved human service agencies must collaborate and decide how to create a continuum of residential services for the severely mentally ill HIV-infected patient. Discrimination against such individuals that prevents their receiving needed services or care must be addressed by regulatory agencies.

Discussion and conclusions

These cases raise important legal and ethical issues that mental health agencies should urgently address, rather than waiting until serious incidents and external pressures on the system force policymakers to institute changes. Few clear rules of law that specifically deal with HIV-related issues currently exist (10). However, reasonable legal and ethical principles dictate that it is folly to ignore straightforward measures, such as universal precautions, that would protect patients and staff. Failure to implement obvious cautionary steps creates liability for the hospital.

Hospitals must do what is essential for patients, and funding agencies need to determine how to pay for these measures. Necessary resources include gloves and other protective barriers for carrying out universal precautions; adequate one-

to-one supervision and nursing care, even if staffing needs create significant overtime expenditures; continued hospital care as long as residential alternatives are unavailable; and medical and drug treatment services. Recent reports indicate that the drug zidovudine (AZT) can delay the progression of AIDS in asymptomatic people who are infected with HIV (11). This possibility creates a greater obligation to encourage HIV antibody testing and to ensure access to AZT for HIV-infected patients. Clinicians must act responsibly and ethically to provide HIV-infected patients with needed services, despite their cost.

Clinicians should regularly review research findings about HIV infection and treatment of AIDS. Researchers are just beginning to investigate the seroprevalence of HIV among the mentally ill (12), the sexual and risk-taking behaviors of seriously mentally ill patients and the interventions that might be useful in modifying these behaviors (13,14), and the influence of HIV infection on the therapeutic responses or side-effect profiles of psychotropic medications (15,16). State hospitals should keep informed about the results of such research in order to request resources more effectively and to organize HIV-related care.

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