amine and neuroleptics on negative vs positive symptoms in schizophrenia. Psychopharmacology 72:17-19, 1980

- Crow TJ: Positive and negative schizophrenic symptoms and the role of dopamine. Br J Psychiatry 137:383–386, 1980
- 37. Crow TJ: Positive and negative schizophrenia symptoms and the role of dopamine. Br J Psychiatry 139:251-254, 1981
- Carpenter WT Jr, Bartko JJ, Carpenter CL, et al: Another view of schizophrenia subtypes: a report from the International Pilot Study of Schizophrenia. Arch Gen Psychiatry 33:508-516, 1976
- Pfohl B, Winokur G: The evolution of symptoms in institutionalized hebephrenic/catatonic schizophrenics. Br J Psychiatry 141:567-572, 1982
- 40. Abrams R, Taylor MA: A rating scale for emotional blunting. Am J Psychiatry 135:226-229, 1978
- Andreasen NC: Affective flattening and the criteria for schizophrenia. Am J Psychiatry 136:944–947, 1979
- 42. Boeringa JA, Castellani S: Reliability and validity of emotional blunting as a criterion for diagnosis of schizophrenia. Am J Psychiatry 139:1131-1135, 1982

Is Homelessness a Mental Health Problem?

Ellen L. Bassuk, M.D., Lenore Rubin, Ph.D., and Alison Lauriat, M.A.

Seventy-eight homeless men, women, and children staying at an emergency shelter were interviewed. The vast majority were found to have severe psychological illnesses that largely remained untreated. Approximately 91% were given primary psychiatric diagnoses: About 40% had psychoses, 29% were chronic alcoholics, and 21% had personality disorders. Approximately one-third had been hospitalized for psychiatric care. The authors discuss the relationship of mental health policy to the homeless and suggest that shelters have become alternative institutions to meet the needs of mentally ill people who are no longer cared for by departments of mental health.

(Am J Psychiatry 141:1546-1550, 1984)

Homeless persons are one of the most disenfranchised groups in our population. Because of the growing visibility of the homeless on our city streets, media coverage has escalated and public concern has intensified. Explanations for the marked increase in

· Copyright [©] 1984 American Psychiatric Association.

the numbers of homeless people include unemployment and the economic recession, deinstitutionalization of mental patients, unavailability of lowcost housing, reduced disability benefits, and cutbacks to social service agencies (1, 2). To deal with the problem of homelessness, regardless of its cause, many cities and states have set up emergency shelters that provide essential services at night. While this action addresses immediate and often desperate needs, it does not begin to deal with systemic ills or to provide longrange plans based on objective data (3).

Since approximately 1970, a literature has emerged from various cities suggesting that the homeless population has changed. Before that time, street people consisted primarily of single, unattached middle-aged men who were chronic alcoholics. They primarily lived in distinct urban areas known originally as hobohemias and later as skid rows (4-6). Since the late 1960s, the relative size of the skid rows has diminished in most cities, and homeless people have become less confined to specific areas. Street people are younger and now include many individuals with severe psychological difficulties who also have a drinking or drugrelated problem. About one-fifth to one-third of them have histories of psychiatric hospitalization, most in the distant past (3 and E. Bassuk, R. Freedman, unpublished data). Their current contacts with the mental health system are generally nonexistent or, at best, brief and episodic (F. Depp, V. Ackiss, 1983 unpublished paper). Despite these data, considerable controversy still exists among policymakers, academics, and department of mental health personnel over whether or not homelessness is primarily a mental health problem. Without detailed clinical information,

Received Aug. 1, 1983; revised Dec. 30, 1983, and March 5, 1984; accepted March 22, 1984. From the Department of Psychiatry, Harvard Medical School. Address reprint requests to Dr. Bassuk, 20 Randolph Rd., Chestnut Hill, MA 02167.

These data were collected as part of the Massachusetts Association for Mental Health and United Community Planning Corporation study, "Homelessness: Organizing a Community Response." The authors thank S.C. Schoonover, M.D., M. Kelly, M.D., W. Kanter, M.D., J. Donovan, Ph.D., J. Eckert, M.S.W., S. Washburn, M.D., and B. Carey, M.S.W., for their help in collecting data.

it is difficult to define the unique needs of the homeless and to design a service system that effectively protects and cares for these people. Because few studies have been conducted by experienced clinicians and because of the lack of data from New England, we designed and implemented the following clinical study.

METHOD

This study is an outgrowth of a 1-day census conducted in Boston and Cambridge, Mass., on February 25, 1983. The purpose of the census was to obtain demographic data and information about the basic needs of homeless people receiving shelter on a typical winter night. On that day, 1,032 individuals and 44 families were sheltered in 27 public and private facilities in Boston and Cambridge (1).

To choose a representative shelter for our clinical study, we matched demographic factors, patterns of shelter use, and staff assessment of psychological problems in a single shelter with the overall findings from the 1-day census. We found that the population of the Shattuck Shelter in Boston closely mirrored the description of the 1,032 persons sheltered on that day (1). Although the clinical study was completed when the weather was warmer, the demographic characteristics, information on basic needs, and patterns of shelter use did not change. We therefore concluded that the guests at the Shattuck Shelter were representative of shelter users in Boston and Cambridge.

After receiving permission from the institutional review board, we conducted the study at the shelter during the week of April 25, 1983. Nine experienced mental health professionals (five psychiatrists, two psychologists, two social workers) interviewed all available guests—a total of 78 homeless men, women, and children. Although eight of the 78 guests were too severely mentally ill to answer the majority of questions, they were still included in the study. Therefore, unless otherwise specified, the total number of respondents to each question is not less than 63. At the end of each interview, the clinician completed a questionnaire that included items on demographic and clinical variables and standard psychiatric diagnoses from DSM-III.

RESULTS

The median age of the 78 shelter guests was 33.8 years, with a range from 4 to 68 years. Eighty-three percent were male and 17% were female. In race they reflected the population of Boston—77% were white, 22% were black, and 1% were Hispanic. Only 11% were married; 41% were single and 48% were divorced, widowed, or separated. Twenty percent of this last subgroup became homeless after their marriages dissolved. The shelter group as a whole were well educated; 31% said they had a partial high school

education or less, 38% reported graduating from high school, and 31% said they had some years of college or were college graduates.

Seventy percent of the guests used the shelter virtually every night, whereas 24% slept at the Shattuck Shelter intermittently. Only 6% were first-time users. Forty percent had been on the streets for 6 months or longer, and half of this subgroup had been homeless for more than 2 years. Of the entire sample, 85% frequented other shelters, particularly Pine Street Inn, the largest and best-known shelter in Boston.

As expected of any population that lives on the streets, many subjects interviewed were medically ill. About 44% reported having major medical disorders such as heart disease, high blood pressure, ulcers, emphysema, asthma, or severe cellulitis. We estimated that seven of the guests had potentially life-threatening medical illnesses. Of the group with medical problems (N=28), only 17 (61%) reported that they had received appropriate medical care. Many guests had difficulty following medical instructions and keeping follow-up appointments. Although the staff was aware of some of their problems, medical screening was not mandatory, which meant that some people received no care at all.

The majority of shelter guests also had severe and chronic psychological difficulties. At least 40% had major mental illnesses of psychotic proportions, including 23 individuals with schizophrenia, four with bipolar affective disorder, and three with major depressive disorder. These statistics, however, tell only part of the story. Many of the schizophrenic guests were so disorganized that they were unable to phrase even a few sentences coherently; their stories were disjointed, rambling, unreal, at times grandiose, and almost always difficult to follow. Their general confusion most certainly interfered with their ability to work or to participate in even the most routine daily activities.

Twenty-nine percent of the guests were chronic alcoholics. Of this subgroup, five also had a secondary diagnosis of psychosis, which raises the percentage with major mental illness to 46%. Two of the alcoholics also were addicted to drugs.

In addition, 21% of the guests had very severe personality or character disorders. Although not psychotic, these people had major difficulties in forming and maintaining relationships and holding steady jobs. Many members of this group had problems with the law. One guest was severely mentally retarded.

Nine percent of the guests were not given any psychiatric diagnosis. They included children and adolescents who were in the shelter with their parents and a few men who had just arrived in Boston and were expecting to begin work within several days.

Demographically, the diagnostic groups differed in several important ways. Guests with major mental illness or alcoholism were older than those with character disorders or no diagnosis. Most important, 85% of the female guests had major mental illness but only a very few female guests fell into the other diagnostic categories.

Of 68 respondents, 19 (28%) had been hospitalized previously for psychiatric reasons. They included both individuals with major mental illness and those with chronic alcoholism. Of the 68, nine (13%) had been hospitalized for psychiatric care more than once. Of those guests who said they had been hospitalized, 25% had been in state facilities. About 7% had been hospitalized for a total of more than 1 year.

A most distressing figure is the number of mentally ill guests who were not receiving psychiatric treatment. Of the total of 30 psychotic patients, only four were receiving medications: Two were taking lithium and two were taking antidepressants. Only four guests were currently receiving supportive psychotherapy and three were receiving aftercare.

The chronic alcoholics, in contrast to the psychotic patients, were more involved in various treatment programs. They rotated rapidly through detoxification centers, into the shelters, and back to detoxification again. More than 50% of the total number of alcoholics had been detoxified at some point in their careers as alcoholics and one-half of this group had undergone detoxification during the previous year. The average alcoholic in this group reported that he or she had been detoxified six times. Forty percent of the total number of alcoholics were currently attending meetings of Alcoholics Anonymous.

Another expression of the troubled existence of the homeless is their antisocial behavior. About 44% of those interviewed said that they had been in jail. Somewhat more than two-thirds of those who had been in jail had been charged with minor offenses such as drunk and disorderly conduct, disturbing the peace, and misdemeanors that probably were related to alcoholism. However, the remaining one-third said they had been incarcerated for dangerous crimes such as armed robbery, assault and battery, or murder. Of those who had been in jail for any offense, 56% were chronic alcoholics and 26% had major mental illness.

Diagnostic groupings and symptom constellations reflect only two dimensions of the guests' difficulties. To determine how troubled and disabled these people really are, we evaluated their degree of isolation and disconnection from support networks.

A remarkable finding was that 74% of the overall sample had no family relationships and 73% had no friends to provide support. Forty percent of the total shelter sample claimed they had no relationship with anyone—not even with someone working for a social agency or with a shelter friend. Those with a history of psychiatric hospitalization were even more disconnected; more than 90% had neither friends nor family. Despite the neediness of this population, only 28.6% were involved with or had had single contacts with a social agency.

The work situations of the shelter guests were equally bleak. Seventy-four percent of the total were

unemployed. Of the remainder, 18% had temporary or odd jobs and 3% sold their blood or became subjects in medical studies. Only 6% of the guests worked steadily. Within the previous 2 years, onethird of the guests had never worked; of those who had, most worked at odd jobs that they changed frequently. These jobs were generally unskilled and included delivery work, construction, dishwashing, factory work, and washing cars.

Given the high rate of unemployment among this sample, it is not surprising that 37% of the guests had no source of income. Twenty-nine percent earned pocket money from odd jobs, particularly from the labor pool, or from participation in medical studies. Only 22% of the total were receiving financial assistance: 12% were receiving general relief, 4% Social Security, 3% Social Security Disability Insurance, and 3% Aid to Families With Dependent Children. The remaining 13% had other sources of income such as family. Paralleling these figures, 72% had no medical insurance, 20% had Medicaid, 1% had Medicare, 4% had private insurance, and the remaining 1% had Veterans Administration benefits.

We expected to be able to differentiate various shelter subgroups according to how effectively they used supports such as family, friends, and social agencies. We examined guests by patterns of shelter use, demographics, diagnoses, state hospital experience, treatment histories, symptoms, and criminal status. Contrary to our original hypotheses, however, these groups were not significantly different; guests lacked involvement with support networks, with a few exceptions.

Guests with no family or friends tended to use the shelter more reguarly than did those with some relationships. Similarly, the chronically unemployed reported having less support available from family or friends than did persons who had steady or even changing employment (p<.02). Guests with a criminal record also reported having no family or friends more often than did those without a criminal record (p<.01).

DISCUSSION

Our data indicate that in a representative shelter in Boston, the vast majority of homeless persons suffered from severe psychiatric disorders. Approximately 91% of the homeless individuals that we interviewed were given a diagnosis suggesting serious emotional difficulties. These figures are consistent with recent descriptive reports from various other cities: 1) A study of 193 guests of a Philadelphia shelter showed that, overall, 84.4% were mentally ill (7); 2) a study of homeless persons living on a skid row in Los Angeles showed that 75% of the males and 90% of the females were suffering from chronic, incapacitating psychiatric illness (8); and 3) several studies carried out at shelters for men in New York City reported that 50% were overtly mentally ill and more than 80% had some combination of severe physical disability, mental illness, and alcoholism (9–11). Other researchers from New York City, however, found that the percentage of mentally ill homeless persons in need of psychiatric serivces ranges from about 20% to 35% (12 and S.P. Hoffman, unpublished 1983 report). Some of the discrepancy in numbers can be accounted for by methodological shortcomings, particularly in definitions of mental illness, sampling problems, theoretical biases, and difficulties applying standardized scales to this population. Despite limitations in current research, it is becoming increasingly clear that many homeless people are severely mentally ill and in need of mental health services.

A related question is why some mentally ill persons become homeless and others do not. Although there have been no systematic investigations of the differences between mentally ill persons with a home and those without a home, our data support the likely hypothesis that the homeless mentally ill are more disconnected from support networks than are those with a home. We found that the guests at the Shattuck Shelter lacked money, insurance, steady employment, and support from family and friends and that there were only minimal differences between groups in their use of supports. Most important, only one-fourth of our subjects had any contact with a social service agency. We can conclude that the hallmark of homelessness is extreme disaffiliation and disconnection from supportive relationships and traditional systems that are designed to help.

Another aspect of the problem of homelessness that is intensely debated is its origins. Of particular interest to mental health professionals is whether deinstitutionalization has contributed substantially to the growing numbers of homeless persons. We do not have data about the homeless mentally ill that span the period of deinstitutionalization, but clinical reports suggest that the homeless population began to change in the early 1970s to include a greater number of mentally ill individuals and that a significant percentage had been hospitalized for psychiatric care. Our results, which are consistent with most other studies (7, 9, 13, 14, and S.P. Hoffman, unpublished 1983 report) indicate that one-fifth to one-third of the homeless had been psychiatric inpatients. This number is smaller than one might expect if a relationship does exist between the increasing numbers of mentally ill homeless and mental health policy. However, the median age of the current homeless population is about 34 years and is dropping; many homeless individuals became psychotic only after social policy had changed and hospital stays were shorter. Some of these individuals probably would have been institutionalized if they had become psychotic more than one decade ago. As newer members of the "permanent" street population, they now have very limited contacts with the mental health system. These individuals, referred to as "space cases," were found in other studies to be

the most marginal members of the street population, lacking even minimal supports (15). The mobility and disconnectedness of many of these young people suggest that they make up part of the "young adult chronic patient" subgroup extensively described in the literature (16, 17).

Within the last decade, the numbers of shelters in many cities have grown at an astounding rate to meet the needs of the homeless population. As recently as a few years ago, shelters were still viewed as transient facilities developed to meet the needs of individuals who had fallen through the cracks in the human service system or who were victims of the economy. Although ostensibly only emergency facilities, shelters have been burdened with the responsibility of caring for large numbers of mentally ill people. Today's economic and political climate suggests that shelters are becoming permanent institutions with their own bureaucracy and vested self-interest. We must be concerned that we are contributing to the development of new mini-institutions and community facilities that are more poorly staffed than are many of the old ones, provide minimal medical and psychological services, and in some instances exclude traditional psychiatric treatments.

The shelters have become "open asylums" to replace the institutions of several decades ago. However, just as with deinstitutionalization and the community mental health movement, the issue is less the location of care than the quality of care. All homeless people need humane living conditions, appropriate medical treatment, and extensive psychosocial services, ideally provided in the community and coordinated through case managers. However, without provision of a sophisticated combination of services that accounts for the special characteristics of this population and the relationship of shelters to the mental health system, the plight of the homeless will continue to be desperate.

REFERENCES

- Lauriat A, McGerigle P: More Than Shelter: Organizing a Community Response. Boston, Massachusetts Association for Mental Health and United Community Planning Corporation, 1983
- Cuomo M: 1933/1983—Never Again: A Report to the National Governors' Task Force on the Homeless. New York, State of New York, 1983
- 3. Bassuk E: Addressing the needs of the homeless. Boston Globe Magazine, Nov 6, 1983, pp 12, 80
- 4. Straus R: Alcohol and the homeless man. Q J Stud Alcohol 7:260-404, 1946
- 5. Blumberg L, Shipley TE, Moor JO: The skid row man and the skid row community. Q J Stud Alcohol 32:909-941, 1971
- Myerson D, Mayer J: Origins, treatment, and destiny of skidrow alcoholic men. N Engl J Med 275:419-425, 1966
- 7. Arce A, Tadlock M, Vergare M, et al: A psychiatric profile of street people admitted to an emergency shelter. Hosp Community Psychiatry 34:812-817, 1983
- 8. Farr R: Skid Row Project. Los Angeles County, Los Angeles Department of Mental Health, 1982
- 9. Men's Shelter Study Group: Report on Men Housed for One Night. New York, Human Resources Administration, 1976
- 10. Reich R, Siegel L: The emergence of the Bowery as a psychiatric

dumping ground. Psychiatr Q 50:191-201, 1978

- Baxter E, Hopper K: The new mendicancy: homeless in New York City. Am J Orthopsychiatry 52:393-408, 1982
- 12. Crystal S, Goldstein M: New Arrivals: First-Time Shelter Clients. New York, Human Resources Administration, 1983
- 13. Segal S, Baumohl J: Engaging the disengaged: proposals on madness and vagrancy. Social Work 25:358-365, 1980
- 14. Phoenix South Community Mental Health Center and St Vincent De Paul Society: The Homeless of Phoenix: Who Are They and What Should Be Done? Phoenix, Ariz, Phoenix South

Community Mental Health Center, 1983

- 15. Segal S, Baumohl J, Johnson E: Falling through the cracks: mental disorder and social margin in a young vagrant population. Social Problems 24:387–400, 1977
- Pepper B, Kirshner M, Ryglewicz H: The young adult chronic patient: overview of a population. Hosp Community Psychiatry 32:463-469, 1981
- 17. Sheets S, Prevost J, Reihman J: Young adult chronic patients: three hypothesized subgroups. Hosp Community Psychiatry 33:197-203, 1982

The Dexamethasone Suppression Test in Normal Control Subjects: Comparison of Two Assays and Effect of Age

Alan H. Rosenbaum, M.D., Alan F. Schatzberg, M.D., Robert A. MacLaughlin, M.S., Karen Snyder, Nai-Siang Jiang, Ph.D., Duane Ilstrup, M.S., Anthony J. Rothschild, M.D., and Bernard Kliman, M.D.

The authors used competitive protein binding assay and radioimmunoassay to measure cortisol levels in 38 normal control subjects three times before and three times after administration of 1 mg of dexamethasone. They found significant interassay differences at 11:00 p.m. before dexamethasone and at all three postdexamethasone times. Analysis of variance revealed significant overall positive relationships between age and cortisol levels measured by both techniques. Age correlated significantly with postdexamethasone cortisol levels measured by radioimmunoassay but not when measured by competitive protein binding assay. Clinicians should obtain data from their laboratories as to appropriate cutoffs for cortisol suppression on the specific assay used.

(Am J Psychiatry 141:1550-1555, 1984)

The authors thank Gary Zammit for his assistance in the data analyses and Lynnal Williams and Barbara Klinger for the preparation of the manuscript.

Copyright © 1984 American Psychiatric Association.

In recent years considerable attention has been paid L to applying the dexamethasone suppression test (DST) to the diagnosis of patients with endogenous depression or melancholia. Results from a number of laboratories have indicated that a significant portion of patients with endogenous depression fail to suppress their cortisol production when challenged with a test dose of dexamethasone (1-8). Patients with schizophrenia, neurotic depression, and alcoholism (3 weeks after withdrawal) show a relatively low incidence of nonsuppression after dexamethasone administration (2, 6, 8-10). However, the issues of specificity and the significance of test results have by no means been settled, since at least one investigator has failed to find significant differences between nonhospitalized patients and normal controls (11). In addition, a recent report from another laboratory has indicated a relatively high incidence of nonsuppression in manic patients (P.E. Stokes, P.M. Stoll, S. Koslow, et al., "Pretreatment Hypothalamic Pituitary-Adrenal Cortical Function in Affective Disease," unpublished paper, 1982), and there has been some suggestion that elderly depressed patients have a higher incidence of nonsuppression than do younger depressed patients (12, 13).

This paper addresses three important questions regarding the use of the DST in routine clinical practice: What is the incidence of nonsuppression in normal control subjects? What is the relationship of age to

Received Feb. 17, 1983; revised Aug. 3 and Oct. 31, 1983; accepted Jan. 11, 1984. From Henry Ford Hospital, Detroit; McLean Hospital, Belmont, Mass., Massachusetts General Hospital, Boston; and the Mayo Clinic, Rochester, Minn. Address reprint requests to Dr. Rosenbaum, 21415 Civic Center Dr., Suite 117, Southfield, MI 48076.