

Mental Disorders Among Homeless People Admitted to a French Psychiatric Emergency Service

Jean-Marc Henry, M.D.

Laurent Boyer, M.D., Ph.D.

Raoul Belzeaux, M.D.

Karine Baumstarck-Barrau, M.D.

Jean-Claude Samuelian, M.D.

Objective: The aim of this study was to identify factors associated with homelessness status among patients admitted to the psychiatric emergency ward of a French public teaching hospital over a six-year study period (2001–2006). **Methods:** The study was based on a retrospective review of the psychiatric emergency ward's administrative and medical computer databases. Each emergency care episode had accompanying data that included demographic, financial, clinical, and management information. **Results:** During this six-year study, the psychiatric service recorded 16,754 care episodes for 8,860 different patients, of which 591 were homeless (6.7%) and 8,269 were nonhomeless (93.3%). The mean±SD number of visits to the psychiatric emergency service was higher for homeless patients (4.9±12.3) than for nonhomeless patients (1.7±2.4) ($p<.001$). A total of 331 homeless patients (56.0%) had more than one care episode, whereas 2,180 (26.4%) of nonhomeless patients had more than one care episode. Factors associated with homelessness included being male, being single, and receiving financial assistance through government social programs. Schizophrenia (43.7%) and substance use disorders (31.0%) were the most common disorders among homeless patients. Aggressive behavior and violence were reported equally among homeless patients (3.5%) and nonhomeless patients (3.2%). Homeless patients were less likely than nonhomeless patients to be hospitalized after receiving care in the emergency ward (47.8% versus 51.1%) ($p=.002$). **Conclusions:** Although there is near-universal access to free mental health care in France, study findings suggest that the quality and adequacy of subsequent care are not guaranteed. Multidisciplinary and collaborative solutions are needed to improve the management of mental health care for homeless patients. (*Psychiatric Services* 61:264–271, 2010)

Homelessness, defined as the absence of customary and regular access to a conventional dwelling or residence (1), is a growing social and public health problem in developed countries. The number of homeless people living in the United States, the United Kingdom, and France has been estimated to be at least 740,000, 120,000, and 100,000, respectively (1–3), and these numbers are expected to rise in the current economic context. Between one-fourth and one-third of homeless people have a serious mental illness such as schizophrenia, bipolar disorder, or major depression (4–7). Management of these conditions remains challenging. Homeless people are often unable to pay for their treatment; their adherence to treatment and the continuity of the care they receive are often poor, and their already limited access to care is exacerbated by transport problems, self-neglect, and fear of being institutionalized (8–11). Homeless people with mental illness primarily use the emergency departments of general or psychiatric hospitals (12). A recent study found that 30% of the care episodes in psychiatric emergency wards in the United States are provided to homeless patients and that homeless patients use psychiatric emergency services repeatedly (13). Homeless people also have lower hospital admission rates than nonhomeless people (14). These factors contribute to the severity of their diseases and thus to their high

Dr. Henry, Dr. Belzeaux, and Dr. Samuelian are affiliated with the Department of Psychiatry, La Conception Hospital, Marseille, France. Dr. Boyer is with the Department of Public Health, La Timone Hospital, Marseille, France. Dr. Baumstarck-Barrau is with the Department of Clinical Research, Nord Hospital, Marseille, France. Send correspondence to Dr. Boyer at the Department of Public Health, La Timone Hospital, 264 Rue Saint-Pierre, 13385 Marseille Cedex 5, Marseille, France (e-mail: laurent.boyer@ap-hm.fr).

management costs (15). This information should be used to plan appropriate intervention measures for identifying and managing various mental disorders among homeless people. Addressing the problem of homelessness requires a proper understanding of its size and association with psychiatric disorders, as well as factors such as homeless people's access to care, adherence to treatment, and follow-up.

Homelessness among people with a serious mental illness has received significant attention. However, because most studies have been conducted in countries where homeless people do not have universal health coverage, results may be subject to selection bias. The evaluation and management of homeless people in the French health care system, especially psychiatric emergency services, may contribute to a better analysis of their needs. The French health care system combines near-universal coverage with a public-private mix of hospital care and ambulatory care, as well as a higher volume of service provision than the American health care system (16). Patients are free to move between the different services. National Health Insurance (NHI) reimburses 70%–80% of medical care costs, and residents are able to purchase private complementary insurance, which can reimburse the remaining 20%–30% of costs. All residents are automatically enrolled within the NHI fund, and 90% of them subscribe to supplementary private health insurance. However, for socially disadvantaged persons who cannot subscribe to private insurance or for severely ill persons with high medical costs, the French health care system guarantees totally free health care and hence access to the most appropriate treatment, regardless of costs (17–19).

Few studies have examined the use of psychiatric emergency services by homeless people (13,20,21), although emergency services can be considered an interesting place of observation and intervention in studies of homeless persons.

Moreover, the majority of studies focused on a limited time period (cross-sectional studies ranging

from a single day to several months). This may introduce bias to the representativeness of results, mainly because of the homeless population's heterogeneity (13,20–23). These studies also analyzed single episodes of care (21,23,24), rather than taking longitudinal approaches to homeless patients and their global management (including adherence to treatment and follow-up).

The aim of this work was to identify factors associated with homelessness status among patients admitted to the psychiatric emergency ward of a French public teaching hospital over a six-year study period (2001–2006).

Methods

Setting

Marseille, located in the southeastern part of France, is the second largest city in France, with a population of nearly one million inhabitants, of which an estimated 1,500 are homeless (25). Of these, about 800 sleep on the streets, 600 live in the two established shelters, and the remainder sleep in different hospitals in and around Marseille (25).

This study was conducted in the psychiatric emergency ward of a large French public teaching hospital in Marseille (Assistance Publique–Hôpitaux de Marseille), which is responsible for evaluating and treating persons with psychiatric disorders. Annual visits to this ward number approximately 3,500. It provides services to 95% of individuals living in Middletown Marseille who present with psychiatric emergencies or face involuntary admission. The ward also guarantees free medical service 24 hours a day, seven days a week to natives and immigrants, regardless of legal, social, or economic status.

Population

We retrospectively analyzed data for all episodes of care in the psychiatric emergency ward from January 1, 2001, to December 31, 2006, delivered to persons aged at least 15 years. Living situation and homelessness were assessed at each admission by a health care professional by using the French National Institute (Institut National de la Statistique et des Etudes Economiques) definition of

homeless: “an individual who, the night preceding emergency admission: 1) Slept in a place not intended for housing, or 2) Used a hosting service” (26) (a hosting service is a service that provides individuals with meals and a place to sleep for one or several nights). On the basis of these criteria, homelessness status during our six-year study period was defined in two different ways: if the person received health care at least once while homeless (8) or if homelessness was the living situation most frequently reported during various contacts with the psychiatric emergency department.

Data collection

The study involved a retrospective review of administrative and medical databases from the psychiatric emergency ward. For each episode of care, data on the patient's demographic, financial, clinical, and therapeutic characteristics were available.

The French National Commission for Data Protection (CNIL) approved this study. Founded in 1978, the CNIL is an independent administrative authority protecting privacy and personal data (27). Because the project involved the retrospective analysis of anonymous administrative data sets—patient names were replaced by a unique identification number—informed consent was not necessary. Principles outlined in the Declaration of Helsinki were followed (28).

Units of analysis and definition of parameters

Because some individuals received multiple episodes of care during the study period, two analysis sets were used: episodes of emergency care and individual patients. If readmission rates varied significantly between patients, the exclusive use of episode data could bias the results.

The episode approach involved the comparison of care episodes for homeless and nonhomeless patients, and the individual approach involved the comparison of individual homeless and nonhomeless patients.

For emergency care episodes, the following data were examined: reasons for referral, referral source (self-referral, referred by a health care

professional, or referred by a non-health care professional), nature of therapeutic crisis management, and whether the care episode was followed by psychiatric hospitalization.

For individual patients, the following data were examined: demographic and financial information and diagnosis. Demographic information consisted of age (defined as the mean age during the various contacts), gender, living situation, marital status (defined as the most frequently reported status), and dependent children (yes or no). Financial information included whether the patient received unemployment benefits or financial assistance payments of 600 to 900 Euros per month through government social programs. Clinical information included psychiatric diagnosis. Because patients may present with more than one psychiatric diagnosis in one or several care episodes, we described the diagnostic characteristics only for the individual patients. Diagnoses were based on the *ICD-10* sections (29): mental and behavioral disorders

resulting from psychoactive substance use (F1); schizophrenia and schizotypal and delusional disorders (F2); mood (affective) disorders (F3); neurotic, stress-related, and somatoform disorders (F4); and disorders of adult personality and behavior (F6). Personality disorders were also considered on the basis of the *DSM-IV* (30) concerning three clusters: A (odd or eccentric disorders), B (dramatic, emotional, or erratic disorders), and C (anxious or fearful disorders). Dual diagnosis was defined as the co-occurrence of a mental disorder and a substance-related disorder (31,32).

Other data regarding the emergency psychiatric ward analyzed during the study period included number of emergency care episodes, interval between discharge and readmission (days), and number of emergency care episodes followed by psychiatric hospitalization.

Statistical analysis

The demographic and clinical characteristics of homeless and nonhomeless patients were compared using

Student's *t* test for continuous variables and chi square analysis for categorical variables. The comparisons were made first for care episodes and then for individual patients.

A logistic regression analysis was used to estimate odds ratios for the association of sociodemographic or diagnosis factors with homelessness, after adjustment for confounding factors. Models were developed with backward selection procedure. Variables relevant to the model were selected on the basis of their clinical interest or a threshold *p* value ($\leq .005$) during univariate analysis. The following variables were included in the analysis, with the respective reference groups listed in parentheses: age, male (female), married (single), children (none), unemployment benefits (none), social financial assistance payments (none), psychiatric diagnosis with no dual diagnosis (none), and dual diagnosis (none). The final model included odds ratios and 95% confidence intervals.

All the tests were two-tailed, and the alpha value was set at $< .005$ to correct for multiple comparisons (8,24,33). Data were analyzed using the SPSS, version 15.0, software package.

Results

Only the results based on the first definition of homelessness (having received care in the psychiatric emergency ward at least once while homeless) are reported here. The analysis of the results using the second definition (homelessness was the living situation most frequently reported during various contacts) did not change our findings (data not shown).

During the six-year study period (2001–2006), 16,754 episodes of care in the psychiatric emergency ward were experienced by 8,860 different persons, including 591 homeless patients (6.7%) and 8,269 nonhomeless patients (93.3%). Homeless patients accounted for 2,886 of the 16,754 care episodes (17.2%).

Episode of emergency care

As shown in Table 1, self-referral to the psychiatric emergency ward was more frequent in care episodes for homeless patients than in those for nonhomeless patients (68.3% versus 53.3%) ($p < .001$). Homeless patients

Table 1

Characteristics associated with episodes of care provided by a psychiatric emergency ward of a French public hospital (2001–2006), by homelessness status^a

Episode measure	Nonhomeless (N=13,868 episodes of care)		Homeless (N=2,886 episodes of care)		P
	N	%	N	%	
Reason for referral					
Agitation	641	4.6	80	2.8	.001
Anxiety	4,726	34.1	853	29.6	<.001
Aggressive behavior	437	3.2	100	3.5	.384
Disruptive behavior	1,758	12.7	242	8.4	<.001
Mental confusion	83	.6	5	.2	.004
Psychotic symptoms	1,189	8.6	238	8.2	.567
Depressive symptoms	2,265	16.3	285	9.9	<.001
Manic symptoms	145	1.0	13	.5	.003
Suicide attempt	1,489	10.7	143	5.0	<.001
Cognitive disorder	26	.2	5	.2	.871
Alcohol use related	792	5.7	280	9.7	<.001
Drug use related	259	1.9	79	2.7	.002
Somatic problem	632	4.6	140	4.9	.493
Relational problem	431	3.1	85	2.9	.645
Social problem	337	2.4	203	7.0	<.001
Crisis management: referral source for admission					
Self-referral	7,385	53.3	1,972	68.3	<.001
Health care professional	5,330	38.4	726	25.2	
Non-health care professional ^b	1,153	8.3	188	6.5	
Hospitalization after emergency stay	7,080	51.1	1,380	47.8	.002

^a Homeless patients were those who had at least one service encounter while homeless.

^b Police, social worker, and others

were more likely than nonhomeless patients to have substance use disorders (12.4% versus 7.6%) and social problems (7.0% versus 2.4%). Agitation, anxiety, disruptive behavior, depressive symptoms, and suicide attempts were less frequent in care episodes for homeless patients than in those for nonhomeless patients. Also, aggressive behavior, mental confusion, psychotic symptoms, manic symptoms, cognitive disorders, and somatic and relational problems did not differ statistically between the two groups. Homeless patients were less likely than nonhomeless patients to have a psychiatric hospitalization after an emergency care episode (47.8% versus 51.1%; $p=.002$).

Individual patients

As shown in Table 2, univariate analysis showed that age was not associated with homelessness. Compared with nonhomeless patients, homeless patients were significantly more likely to be male and single and less likely to have dependent children. Homeless patients were more likely than nonhomeless patients to be beneficiaries of financial assistance from government social programs, but no statistical difference was found between the groups for unemployment benefits. Mental and behavioral disorders due to psychoactive substance use (*ICD-10* section F1), schizophrenia and schizotypal and delusional disorders (*ICD-10* section F2), disorders of adult personality and behavior (*ICD-10* section F6), and dual diagnosis were more frequent in the homeless group than in the nonhomeless group. In the personality and behavior disorder category (*ICD-10* section F6), only cluster B—dramatic, emotional, or erratic disorders—was associated with homeless patients.

The mean±SD number of visits to the psychiatric emergency ward was higher for homeless patients (4.9±12.3) than for nonhomeless patients (1.7±2.4) ($p<.001$). Readmission to the emergency psychiatric ward was higher for homeless patients than for nonhomeless patients. A total of 331 homeless patients (56.0%) compared with 2,180 (26.3%) nonhomeless patients benefited from more than one

Table 2

Characteristics associated with patients' receiving care in a psychiatric emergency ward of a French public hospital (2001–2006), by homelessness status^a

Characteristic	Nonhomeless (N=8,269 patients)		Homeless (N=591 patients)		p
	N	%	N	%	
Sociodemographic					
Age (mean±SD years)	40.1±15.1		38.5±10.8		.029
Male	4,102	49.6	469	79.6	<.001
Marital status ^b					<.001
Married	1,815	25.2	29	6.3	
Single	5,374	74.8	431	93.7	
Children	3,438	41.6	202	34.2	<.001
Financial issues					
Unemployment benefits	543	6.6	28	4.7	.083
Financial assistance through social government programs	1,005	12.2	149	25.2	<.001
Psychiatric diagnosis					
Mental and behavioral disorders due to psychoactive substance use (<i>ICD-10</i> section F1)	978	11.8	183	31.0	<.001
Schizophrenia, schizotypal, and delusional disorders (<i>ICD-10</i> section F2)	1,971	23.8	258	43.7	<.001
Mood (affective) disorders (<i>ICD-10</i> section F3)	2,088	25.3	142	24.0	.508
Bipolar	576	7.0	28	4.7	.038
Neurotic, stress-related, and somatoform disorders (<i>ICD-10</i> section F4)	2,615	31.6	160	27.1	.021
Disorders of adult personality and behavior (<i>ICD-10</i> section F6) ^c	754	9.1	126	21.3	<.001
Cluster A	136	1.6	19	3.2	.005
Cluster B	513	6.2	104	17.6	<.001
Cluster C	120	1.5	12	2.0	.261
Other psychiatric diagnosis (<i>ICD-10</i> sections F5, F7–F9)	392	4.7	50	8.5	<.001
Dual diagnosis ^d	308	3.7	98	16.6	<.001
Number of admissions (2001–2006)					
1	6,089	73.6	260	44.0	
2–3	1,622	19.6	154	26.1	
≥4	558	6.7	177	29.9	
Interval between discharge and readmission to an emergency ward (median days)	59		28		<.001

^a Homeless patients were those who had at least one service encounter while homeless

^b Data were available for 7,189 nonhomeless persons and 460 homeless persons

^c Personality disorders defined by the *DSM-IV*. The *DSM-IV* lists ten personality disorders, grouped into three clusters: A (odd or eccentric disorders), B (dramatic, emotional, or erratic disorders), and C (anxious or fearful disorders)

^d Substance use disorder plus any other diagnosis listed above

episode of care ($p<.001$); 29.9% of homeless patients versus 6.7% of nonhomeless patients had four or more visits during the study period ($p<.001$). Readmission also occurred earlier for homeless patients (28 versus 59 days) ($p<.001$).

As shown in Table 3, in multivariable analyses, being male, being single, and having financial assistance provided by government social programs were associated with homelessness. Substance use, schizophrenia

and related disorders, personality and behavioral disorders, and dual diagnosis were also associated with homelessness.

Discussion

Homeless people represented 6.7% of patients who visited the psychiatric emergency ward during the six-year study period, and they accounted for 17.2% of the care episodes. They were less likely than nonhomeless people to be hospitalized after receiving

Table 3

Factors associated with homelessness among 8,860 people receiving care in a psychiatric emergency ward of a French public hospital (2001–2006)^a

Factor	OR ^b	95% CI	p ^c
Age	1.0	.9–1.0	.492
Male (reference: female)	2.9	2.2–3.9	<.001
Marital status: single (reference: married)	5.0	2.5–10.0	<.001
Children (reference: none)	1.3	.9–1.7	.058
Unemployment benefits (reference: none)	.6	.4–1.1	.125
Financial assistance provided by government social programs (reference: none)	1.9	1.4–2.5	<.001
Psychiatric diagnosis (excluding persons with dual diagnosis) (reference: no diagnosis) ^d			
F1	2.5	1.5–4.0	<.001
F2	2.5	1.9–3.4	<.001
F3	1.2	.8–1.7	.326
F4	1.4	1.0–1.9	.049
F6	3.8	2.5–5.5	<.001
Dual diagnosis (reference: no dual diagnosis)	8.2	5.5–12.3	<.001

^a Homeless patients were those who had at least one service encounter while homeless.

^b Calculated using multivariate logistic regression analysis with age, gender, marital status, children, financial issues, and psychiatric diagnosis

^c Calculated with the F test to enter or remove a factor from the multivariate logistic regression model

^d ICD-10 sections: F1, mental and behavioral disorders resulting from psychoactive substance use; F2, schizophrenia and schizotypal and delusional disorders; F3, mood (affective) disorders; F4, neurotic, stress-related, and somatoform disorders; and F6, disorders of adult personality and behavior

care. Schizophrenia (43.7%) and substance use disorders (31.0%), were the most common psychiatric disorders among homeless patients, and 16.6% had a dual diagnosis.

Several crucial points related to the management of health care for homeless people with mental disorders must be discussed and clarified. Can we affirm that better health insurance coverage improves access to care for homeless people, leading to better mental health care management? Does a health care policy of universal coverage, as opposed to nonuniversal coverage, have a significant impact on the management of care for homeless people with mental disorders?

Access to mental health care for homeless people in France

One of our study's strengths was the psychiatric emergency ward's inclusion in a health care system characterized by near-universal access. This is one of the first studies conducted in this type of health care system, following a recent Spanish study (24). Our study can be considered as representative of a population with mental disorders admitted to a psychiatric emergency ward, which limited selec-

tion bias and enabled us to simultaneously accomplish two analyses often separated in previous studies (2,13, 24): first, almost all persons in the center of Marseille who were homeless with mental disorders and who visited our emergency service, and second, assessments of their care management in a psychiatric emergency ward. A total of 2,886 care episodes were provided for 591 of the estimated 1,500 homeless persons in Marseille. More than one-third (39%) of homeless people visited the emergency ward, which approximately corresponds to the prevalence of serious mental illness among homeless people (between one-fourth and one-third) (4–7). Previous studies have reported lower rates of access to care. Differences in the definition of homelessness and sample selection may account for lower rates. Folsom and colleagues (8) examined the prevalence of homelessness among patients treated for serious mental illnesses in a public mental health system (San Diego) over a one-year period, but they did not take into account the use of the emergency psychiatric ward. Among 15,000 homeless persons in the study

area, 1,569 were treated (10% of homeless patients). McNeil and Binder (13) examined the use of psychiatric emergency wards by homeless people in San Francisco: 829 episodes of care were provided to a homeless population of 15,000 (6%).

In view of our findings, we could hypothesize that access to care for homeless people seems to be higher in France, with its near-universal coverage and free mental health system. This hypothesis still needs to be explored and confirmed. Only the study of Pascual and colleagues (24), conducted in Spain on the use of psychiatric emergency wards, presented a similarly high rate of visits for homeless patients: 560 care episodes were provided to homeless patients in an area with a homeless population of 2,428 (23%). In our study, the fact that 68% of homeless people receiving treatment visited the emergency ward on their own initiative could also reflect easy access to personalized care. The emergency service seems to be considered by homeless people as more able to take care of their health problems, compared with other ambulatory or hospital services. An in-depth analysis of this finding is needed to better adapt the health care system organization to meet the expectations and needs of homeless patients, which are different from those of nonhomeless patients. However, although these results indicate that contact with psychiatric wards was easily made, they do not necessarily indicate that the homeless patients' mental health needs were being met (34).

Characteristics of homeless patients

There were several notable demographic factors associated with homelessness. As in previous studies, we found no association between age and homelessness (13,24); however, the sample of homeless patients in our study had a higher percentage of males than did other studies (8,24). This may be partly explained by the prevalence of social support structures for women and children at risk of homelessness. Recent studies in France showed that access to social care and informal support is particu-

larly developed in France and that women were more likely than men to ask for and access specific psychological care, especially if they were experiencing social deprivation and poverty (35,36). Homeless patients in our sample also tended to be single and were less likely to have dependent children. Predictably, homeless psychiatric patients were less satisfied with their social support networks than domiciled patients, and they appraised them as being less supportive, reliable, and available. Previous reports have found that homelessness predisposes individuals toward poor social relations (37). In our study, only one-fourth of homeless patients received financial support provided by social agencies, which is an indirect indication of social precariousness. This observation suggests that noneconomic barriers may prevent people who are homeless or impoverished from receiving financial help that they may legitimately ask for and obtain.

With respect to clinical factors, the most frequent mental disorders were schizophrenia and substance use disorders, and many had a dual diagnosis, in line with previous investigations (13,24). Other studies have shown that alcohol abuse, intravenous drug use, and heavy tobacco use were significantly higher among homeless persons than in the general population (10). If serious mental illness is more prevalent among homeless people, it represents just one of many important vulnerability factors for homelessness (38). For example, substance abuse is associated with weakened immunity, and it predisposes users to specific infections. This should be considered when treating mental disorders among homeless patients. The absence of any difference between homeless and nonhomeless patients regarding somatic problems indicates the lack of interest that psychiatric services take in these problems. It reflects fragmented care and a lack of coordination between general and mental health care professionals in the treatment of these patients. Homeless individuals have substantial and complex needs, requiring care management programs to improve communication, cooperation,

and understanding among health care professionals to enhanced continuity and coordination of care (39). It is also important to develop and employ specific measurements, such as quality of life or satisfaction instruments, to assess the needs of homeless people and improve their adherence to treatment (40,41).

Unlike previous investigations (13,24,42), our study did not find any difference between homeless and nonhomeless patients in aggressive behavior and violence. This may be due to the representativeness of our sample, which is higher than in other studies. Because of better care access, our study population included homeless people with only slight mental disorders, who were not involved in the criminal justice system, and who had "a more tolerable level of social disturbance." For the same reason, we recorded fewer visits for agitated and disruptive behavior among homeless patients.

Homeless patients also presented with less anxiety and fewer depressive symptoms, compared with nonhomeless patients. Although these results are concordant with literature (24), they should be considered with caution, because these symptoms are often less expressed among homeless patients and thus underdiagnosed by professionals (2,43). In the emergency context, it is difficult for health care professionals to correctly diagnose patients, notably homeless patients, who often fail to communicate emotional problems and therefore are not treated. The diagnostic validity of depression, as defined by the *ICD-10* (29) and the *DSM-IV* (30) and by means of psychometric evaluations such as the Hamilton Rating Scale for Depression (44), should be explored in these populations.

Homeless patients also presented with fewer suicide attempts than nonhomeless patients, although their social situation and precariousness can be considered a risk factor for suicide, and other studies have reported higher suicide attempt rates for homeless patients than for nonhomeless patients (43,45). In a study conducted with a large homeless sample in 2003, the prevalence of suicidal ideation was high (66.2% lifetime prevalence)

(46). One explanation for the discrepancy between our study and others could be that a significant portion of suicide attempts by homeless people are more violent than those of domiciled patients and result in nonpsychiatric emergencies (46).

Use of the psychiatric emergency ward and care management

During the six-year study period, 17.2% of the care episodes in the psychiatric emergency ward were provided to homeless patients. This result is in line with previous studies. Rosenheck and Seibyl (20) reported that 20% of veterans were homeless at the time of admission to a psychiatric ward, and McNeil and Binder (13) reported that homeless individuals accounted for approximately 30% of the care episodes in a psychiatric emergency service. In a study by Folsom and colleagues (8), homeless patients received 15% of the care episodes. Culhane and colleagues (47) reported that 10% of patients treated for schizophrenia and 7% of those treated for affective disorders used a public shelter during a three-year study period. Heterogeneity in the findings of homelessness studies is well known. It has been argued that sample selection, definition of homeless, and diagnostic criteria contribute to this heterogeneity (2).

In our study, homeless patients were less likely than nonhomeless patients to be hospitalized after receiving care in the emergency ward, even though their disorders tended to be more severe. The readmission rate to the emergency ward was higher, and readmission occurred earlier. Factors associated with early and repeated admission are now well known: living alone, poor treatment adherence, inadequate medical management, premature discharge, and poor discharge planning (48). Lauber and colleagues (22) showed that homeless people received psychotropic medication and adequate treatment less often than nonhomeless patients, although they had more severe disorders. Previous research has also reported that substance abuse predicted decreased adherence to community treatment among individuals with mental disorders (49). Although these different

factors are well known, health systems have difficulty taking them into account. The French health care system has three main problems. First, the principle stating that all psychiatric teams should have a similar and general competence in mental health care has limited the development of tertiary structures that are specialized in the assessment and treatment of specific mental disorders. Second, despite massive hospital bed closures over the past 15 years, hospital care is still predominant, while community treatment and sheltered housing for persons with the highest levels of disability are markedly underdeveloped. Hence, most French psychiatric hospitals have major difficulties finding beds for acutely ill patients (18). Finally, the French health care system tends to focus on either mental health or substance abuse treatment services. The elevated rates of co-occurring substance abuse and severe mental disorders among homeless patients in the psychiatric emergency ward may be an indication of insufficient and fragmented dual diagnosis services.

Limitations

This study has several limitations. First, the data source was an administrative database. Diagnoses made in an emergency context by a large panel of psychiatrists may not be as accurate as those made with diagnostic research instruments and structured interviews. Also, information regarding illness severity was not available.

Second, because our study was conducted in a large French teaching hospital, our findings may not be extrapolated to all of the other hospitals in France and to health care systems without universal coverage. The fact that our population included only individuals older than 15 years may also limit the scope of our results. However, these results are useful for monitoring policy and practice change in a community, because our study was conducted in a system with universal coverage, a domain that is poorly understood.

Finally, an important methodological aspect of our investigation was the definition of homelessness. Published definitions of homelessness have

ranged from living on the street or in a homeless shelter (4) to using a public homeless shelter at least once over the course of several years (47) to being homeless at the time of admission to a psychiatric unit (20). One of our definitions of homelessness—that is, at least one service encounter while homeless over a six-year period—is not within this range of definitions. We chose a definition associating homelessness and an impoverished status (precariousness) that was less restrictive than, for example, being homeless at the time of admission. However, repeating our analyses with a more restrictive definition of homelessness—as the living situation most frequently reported during various contacts—did not change our findings (data not shown).

Conclusions

Homelessness is a serious problem among people with mental illness, and it is associated with several potentially modifiable factors. The French health care system seems to provide better access to care than health care systems without universal coverage. However, its management still needs to be improved for homeless patients, as suggested by the high rate of emergency service readmissions and the low hospitalization rate following the emergency visit. Universal coverage is only one dimension; being able to provide sufficient services must also be considered.

Homeless people require careful clinical evaluation. Suicide risk and major depression are clearly underestimated. Multidisciplinary and collaborative solutions are needed between social workers, emergency physicians, psychiatrists, substance abuse health services, and other specialized professionals, such as infectiousologists, to improve the management of health care for homeless patients. Our study found that homeless patients were less likely than nonhomeless patients to be hospitalized. However, hospitalization of homeless patients should be encouraged, when appropriate. Health services currently do not take into account social welfare problems of homeless persons, and they should be encouraged to work with social services on the be-

half of clients. Homeless people are best treated as inpatients because of the lack of treatment adherence associated with outpatient treatment. Adherence to therapy may be achieved through directly observed therapy in a monitored setting. We believe that specific and multidisciplinary ambulatory systems for homeless persons, which have already been developed in some areas, should be employed in all large cities. Managed care programs associating all involved parties must be developed to optimize long-term follow-up and global management. Application of these measures would likely increase the health status of homeless people.

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