

A systematic study of mental health services utilization by homeless men and women

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Summary. Psychiatric illness is overrepresented among the homeless, but mental health services are underutilized in this population in proportion to their needs. The current study was concerned with 900 homeless men and women randomly sampled and systematically interviewed with the Diagnostic Interview Schedule; it focuses on psychiatric and substance abuse rehabilitation service patterns and stated needs of this population in relation to specific psychiatric disorders. Although rates of lifetime treatment utilization were fairly high in comparison with general population utilization patterns, rates of treatment in the current year were low. In particular, outpatient services have been neglected for reliance upon inpatient services. Although the major reason cited for not obtaining treatment by homeless persons with mental illness was lack of insurance and inability to pay for it, having health insurance was not associated with mental health services utilization, nor were other important predictors apparent. Mental health professionals serving mentally ill homeless populations would best serve them by focusing on creative and innovative ways to improve the availability and attractiveness of ambulatory care services.

The erroneous notion that homelessness is primarily a result of major mental illness and the deinstitutionalization movement has been abandoned in the face of accumulating systematically collected data indicating otherwise (Cohen and Thompson 1992; Bassuk et al. 1986; Bassuk and Rosenberg 1988; Breakey et al. 1989; Fischer et al. 1986; Snow et al. 1986). Still, mental illness and the need for psychiatric services remain serious issues for a significant segment of the homeless population (Fischer and Breakey 1986). We know very little about why psychiatric services have been so apparently difficult to access for this population, among whom psychiatric illness is overrepresented.

Very little investigation has been devoted to understanding the utilization of mental health services by homeless individuals (Padgett et al. 1990). Padgett's group (1990) found that in spite of high needs assessed for men-

tal health services among the homeless, they did not often use services for psychiatric and substance abuse treatment. A number of other investigators have reported similar observations (Breakey et al. 1989; Fischer and Breakey 1986; Fischer et al. 1986; Drake et al. 1991; Bassuk et al. 1984).

In their investigation of factors related to utilization of mental health services by the homeless, Padgett et al. (1990) found few associations. Level of education was positively associated with utilization of mental health services in the previous 3 months. Blacks were less likely than other ethnic groups to obtain alcohol treatment services. Medicaid/Medicare insurance was associated with utilization of services for drug problems, but not of other mental health services. Aside from these variables, no other factors were found to be associated with psychiatric and substance abuse rehabilitation services. Seven out of eight studies reviewed by Robertson (1986) reported higher rates of psychiatric hospitalization for homeless women than for men. Age differences in hospitalization rates have been variably reported (Robertson 1986). Padgett's group concluded that factors related to services utilization are diffuse and in need of further investigation.

Part of the underutilization of mental health services by the homeless may relate to the lack of a perceived need. Subjects interviewed by Padgett's group indicated awareness of a need for services only half as often as interviewers perceived a need. Bassuk et al. (1984) have also observed an underrecognition by homeless persons of their mental health needs.

While many persons with serious psychiatric illness may lack insight into their problems, on the other hand, Cohen and Thompson (1992) have demonstrated that considerable psychological distress and psychiatric morbidity can also be elicited among homeless individuals with no detectable psychiatric disorder. This distress may be incorrectly equated with need for professional psychiatric attention. It remains to be determined to what degree the distress expressed by homeless persons not meeting criteria for a psychiatric diagnosis would benefit from psychiatric attention. This nondiagnostic psychological

distress may also contaminate efforts to measure psychiatric illness among the homeless (Susser et al. 1990), resulting in overestimates (e. g. Arce et al. 1983; Reich and Siegel 1978; Baxter and Hopper 1982; Bassuk et al. 1984).

Fischer's group (1986) found that homeless respondents were far more likely than household respondents from the Epidemiologic Catchment Area (ECA) survey to report utilization of mental health services ever and within the year prior to interview. In part this may reflect the higher rates of psychiatric illness in the homeless population. To make observed differences in treatment utilization contextually meaningful, populations must be systematically assessed for rates of specific psychiatric illnesses to be used in comparing with their rates of mental health services utilization. This must also be done before reasonable conclusions about their mental health needs can be drawn.

Many studies assessing psychiatric treatment histories of homeless people have inadvertently included substance abuse statistics with other psychiatric treatment statistics (see Susser et al. 1989, 1990; see Gelberg et al. 1988). Bassuk et al. (1984) found much higher rates of utilization of substance abuse treatment than of other mental health services by the homeless, and therefore to avoid inflation of mental health care statistics these different kinds of services need to be assessed separately.

The current paper seeks to replicate the findings of Padgett et al. and further explore factors related to mental health services utilization among the homeless in relation to systematically measured psychiatric diagnoses. Findings are reported from a study of 900 homeless men and women in St. Louis who were randomly sampled and interviewed with the Diagnostic Interview Schedule, with specific focus on the psychiatric and substance abuse rehabilitation services patterns and stated needs of homeless people in relation to specific psychiatric disorders.

Methods

Sampling

The sample was drawn from all overnight and daytime shelters located in the city of St. Louis that serve the homeless, as well as from locations on the street or other public areas where the homeless are known to congregate. For this study, subjects were considered homeless if they had no stable residence and were living in a public shelter or in an unsheltered location without a personal mailing address, such as on the streets, in a car, in an abandoned building, or in a bus station. Subjects staying in cheap motels were also included if they had been there for less than 30 days. Marginally housed persons, such as those doubled up with friends or relatives or living in single room occupancy facilities, were not included in the sample.

All 14 of the night shelters for men and all but 2 of the 13 night shelters for women, all day centers, and both rehabilitation programs agreed to cooperate with the project. Participating programs included temporary shelters open only during winter months, drop-in centers and day-

time programs, several long-term programs designed to provide rehabilitation for homeless men with substance abuse or other emotional or physical problems, and general overnight shelter programs. Women's shelters specializing in serving particular subgroups of women, such as pregnant women or abused women, were not included. We attempted to sample from street locations, and although we found plenty of homeless men on the streets we were unable to find homeless women to interview from these locations.

Because each night shelter and day center tended to attract a slightly different subpopulation of the homeless, sampling was conducted proportionally to the numbers of persons in the various programs. The list of shelters and day centers was randomized, and a set of random numbers was generated by computer to select subjects from the daily log of residents occupying beds in the night shelters or attending the day centers. This random sampling procedure provided this study with a sample that is believed to be truly representative of homeless men and women in St. Louis who utilize shelters and day centers. Interviewing was conducted at the various sites at different times during each month of interviews.

The majority (85 %) of the 600 male subjects and all of the 300 women were sampled from shelters. From overnight shelters, 195 men and 251 women were interviewed; 150 men and 29 women were interviewed from day centers; 76 men were sampled from specialized rehabilitation programs; and 20 women were sampled from 24-hour emergency shelters.

The remaining male subjects ($n = 179$) were drawn from the streets, parks, and other public areas. Sampling of this "street" population required different techniques. As a first step, key informants, including shelter staff, case managers, and staff of outreach to the homeless programs provided information about which areas in the inner city are frequented by homeless persons. These areas were then surveyed at various times to determine the number of individuals who might be found these locations. From this information, four street sampling routes (both walking and driving) were developed. Each route was a loop circuit with characteristic places along the route identified for inclusion, e.g. bus station, library, parks, alleys, parking lots, benches, etc. All routes were fully contained within the St. Louis city limits. Three of the four routes were close to the central downtown area and in the vicinity of a number of parks frequented by homeless persons and near a variety of shelters for the homeless.

Routes and starting points were randomized, using a computer program that randomized the order of routes and the block of a particular route where screening for potential subjects was to commence, and the routes were always covered in a clockwise direction. More detail on the street sampling methods utilized in this study is provided elsewhere (Smith et al. 1991).

In the interest of safety, an escort accompanied interviewers when they were walking the street routes, and interviewing was conducted only during daylight hours. Interviewers identified homeless men on the street by approaching men who appeared as though they could be

homeless and asking them a few questions about where they stayed last night and whether they had a regular address and place to live. Fifty-eight percent of those approached were determined to be homeless by our definition and were thus considered eligible for our study. Interviewers reported that as the study progressed they became more skilled at predicting which men on the street were homeless by their physical appearance. To assure that we were not overlooking homeless men on the streets whose appearance belied their undomiciled condition, a substudy was conducted to determine the "false negative" rates of their predictions. For this effort, interviewers systematically approached all men, even those who clearly appeared not to be homeless, whom they encountered on the streets and screened them after having made a formal guess regarding their homeless status. No man in 50 that they approached was determined to be homeless who was not identified from his initial appearance as homeless by the interviewers.

Interviewing proceeded to completion in 12 months, which allowed sampling of study subjects throughout all four seasons. All interviewing was conducted by professional trained interviewers, and interviews lasted 2 hours on average. Subjects received \$ 10.00 for their participation. The completion rate for the men was 91 % and that for the women was 96 %.

Instruments

The Diagnostic Interview Schedule/Homeless Supplement (DIS/HS) was used in this study. The DIS (Robins et al. 1981) permitted us to make DSM-III-R diagnoses including schizophrenia, bipolar affective disorder, major depression, panic disorder, generalized anxiety disorder, posttraumatic stress disorder (PTSD), alcohol abuse/dependence, drug abuse/dependence, and antisocial personality disorder. Onset and recency information as well as lifetime symptoms and diagnoses were elicited. The Homeless Supplement was designed for use in this study and it included questions about the subjects' homeless experience. In particular, they were asked about how long they had been homeless, the places where they had stayed since becoming homeless, and their perceptions regarding the cause of their homelessness. In addition, they were asked to describe their difficulties with employment, their insight into their mental health or substance abuse problems, and their histories of mental health treatment and problems obtaining it. This was accomplished with a series of multiple-choice questions.

Data analysis

Rates are reported as percentages. Chi square tests were performed in analyses comparing dichotomous variables. If expected counts in cells were 5 or less, then Fisher's exact tests were performed. Multiple regressions were performed for prediction of continuous variables.

Table 1. Selected sociodemographic characteristics

	Men (n = 600)	Women (n = 300)
Age (years)		
18-24	11.8%	32.7% **
25-44	69.8%	62.7% *
45-64	16.7%	4.0% **
> 64	1.7%	0.7%
Mean \pm SD	35.9 \pm 10.8	29.0 \pm 8.6**
Race		
White	27.5%	12.0% *
African-American	69.7%	84.0% *
Other	2.8%	4.0%
Marital status		
Ever married	45.5%	39.7%
Never married	54.5%	60.3%
Education		
< 12 years	31.9%	46.0% **
High school graduation	51.4%	42.3% *
G.E.D.	16.7%	11.8% **

* $P < 0.05$; ** $P < 0.001$ (difference from men)

Results

Table 1 shows selected demographic information. Most subjects were young, members of racial minorities, and usually with an education of high school or less. Few (22 % of the men and 11 % of the women) were employed.

Table 2 presents treatment history by diagnosis. More detail about diagnostic information on this sample is provided in other sources (Smith et al. 1992a, b). Only one-fourth of subjects had an active non-substance Axis I diagnosis in the last year, substance abuse being more prevalent than other psychiatric illness. Panic disorder was the disorder with the highest proportion of subjects receiving treatment in the last year. Only slightly more than one-third of subjects with active schizophrenia or mania in the last year had received treatment for it during that period. Major depression had less often received treatment. Alcohol abuse/dependence had even lower rates of treatment. One-third of subjects with drug use disorders had received treatment for them in the last year.

Although the numbers of persons with active disorders in the last year who received treatment were low, most had at some time received treatment. For example, 85 % of subjects with schizophrenia said they had ever received inpatient psychiatric treatment and 63 % said they had received outpatient treatment. Among persons with bipolar affective disorder, 74 % had been hospitalized and 41 % had received outpatient treatment. Inpatient treatment for substance abuse was recorded in the histories of 55 % of persons with alcohol problems and 63 % of those with drug problems.

Substantial numbers of individuals said they had desired mental health treatment in the last year but had been unable to obtain it: 35 % of those with active schizophrenia, 29 % with mania, and 23 % with major depression reported this problem. A large proportion of subjects with these active disorders had neither received nor

Table 2. Psychiatric treatment history in last year among those who had an active disorder

1-year diagnosis	<i>n</i>	% Psychiatric inpatient treatment	% Psychiatric outpatient treatment	% Any psychiatric treatment
Schizophrenia	42 (4.7%)	20.7	31.0	34.5*
Bipolar affective disorder (mania)	20 (2.2%)	35.7	28.6	35.7
Major (unipolar) depression	152 (16.9%)	17.8	21.7	26.4
Panic disorder	35 (3.9%)	40.0	47.4	47.4
Generalized anxiety disorder	50 (6.9%)	12.5	12.5	18.8
Alcohol abuse/dependence	327 (37.2%)	11.7 ^a	6.6 ^a	15.8 ^a
Drug abuse/dependence	123 (15.5%)	25.7 ^{b***}	15.3 ^b	33.3 ^{b***}
Antisocial personality disorder	159 (19.8%)	7.7	10.4	13.6
Any non-substance Axis I diagnosis	219 (24.3%)	15.7	19.3	23.4
Any Axis I diagnosis	482 (53.6%)	7.8	11.4	13.3

^a Treatment specifically for alcohol abuse/dependence

^b Treatment specifically for drug abuse/dependence

* $P = 0.032$ (Fisher's exact test: men 20.0%, women 66.7%); ** $P < 0.001$, $\chi^2 = 11.56$: men 17.1%, women 48.4%); *** $P < 0.001$, $\chi^2 = 11.84$: men 23.8%, women 58.1%)

Table 3. Lifetime inpatient substance abuse treatment history

	Men		Women	
	Alcoholics (<i>n</i> = 306)	Drug abusers (<i>n</i> = 202)	Alcoholics (<i>n</i> = 42)	Drug abusers (<i>n</i> = 63)
Ever received inpatient substance abuse treatment	47.7%	50.0%	66.7%	71.4%
No. of inpatient admissions for substance abuse treatment (in subjects ever admitted):				
1	34.4%	37.6%	78.6%	72.2%
2	22.5%	25.7%	0.0%	0.0%
3	14.4%	15.8%	0.0%	0.0%
≥ 4	28.8%	20.8%	14.2%	16.8%
Mean ± S.D. for no. of admissions for substance abuse treatment (in subjects ever admitted):	5.4 ± 11.1	3.4 ± 5.4	1.6 ± 1.3	1.9 ± 2.4
Most recent inpatient admission for substance abuse treatment:				
< 1 month ago	20.6%	19.8%	8.3%	5.6%
1- < 6 months ago	26.7%	26.4%	16.7%	16.7%
6 months to < 1 year ago	8.9%	11.0%	16.7%	27.8%
≥ 1 year ago	41.1%	42.9%	58.3%	50.0%

desired treatment in the last year: 45% of those with active schizophrenia, 57% with mania, and 60% with major depression.

Subjects reporting no desire for treatment may reflect the low rates of recognition of their own psychiatric problems. Subjects were asked whether they had ever had any emotional or mental health problems or problems with drugs or alcohol that limited their ability to work or care for themselves. Only 10% of subjects with a lifetime non-

substance Axis I diagnosis acknowledged a problem with it, and 10% of alcoholics and 10% of drug abusers recognized their disability.

Additional detail about subjects' lifetime substance abuse treatment history is provided in Table 3. Around half of male substance abusers and more than half of female substance abusers had received inpatient treatment for substance abuse. Three-fourths of women with a history of inpatient substance abuse treatment had only had

Table 4. Health insurance

Type of health insurance	Men %	Women %
None	77.5	32.1
Private insurance	5.8	3.6
Medicare	2.6	0
Medicaid	8.0	62.0
Health maintenance organization (HMO)	0.4	0.7
Other	5.8	1.5

one inpatient stay for substance abuse, whereas nearly two-thirds of men had been admitted more than once. Because of statistical kurtosis attributable to a few subjects with high numbers of admissions, the means are substantially higher than the median of one admission for women and two for men. The casual eye could be led to see the mean number as evidence of repeated admissions for substance abuse, when the multiple repeaters are actually a small minority. Women with schizophrenia or with drug abuse were far more likely than were men with these disorders to have received treatment for them in the last year.

Table 4 shows health insurance statistics. The majority of men had no insurance; the majority of women had Medicaid. This difference reflects the differences in rates of women (67%) compared with men (<1%) who had children in their physical custody, which is a major avenue for qualification for Medicaid benefits. There were a few differences in insurance among subjects with certain diagnoses. Men with schizophrenia were more likely than others to have insurance (32% compared to 16%; $\chi^2 = 4.4$, $df 1$, $P = 0.036$). Women with diagnoses of major depression (68% compared with 54%; $\chi^2 = 4.26$, $df 1$, $P = 0.039$), generalized anxiety disorder (15% compared with 67%; $\chi^2 = 14.08$, $df 1$, $P < 0.001$), and alcohol abuse or dependence (50% compared with 67%; $\chi^2 = 4.36$, $df 1$, $P = 0.037$) were less likely than other women to have insurance. Insurance was not related to the proportion of subjects with any of the major psychiatric diagnoses or alcohol or drug abuse problems who had received treatment

for these problems in the last year ($P > 0.05$ in all comparisons by diagnosis).

Subjects who said they had desired psychiatric treatment in the last year but been unable to obtain it were asked why they did not receive treatment. The most frequent reason for not receiving treatment was that the subject did not have insurance or could not afford treatment (35%). Infrequent reasons were lack of transportation (9%), lack of time (6%), not knowing where to go for treatment (4%), and having to wait too long to see the doctor (3%).

Table 5 summarizes racial differences in treatment access. White women with an active non-substance Axis I diagnosis in the last year had more often received inpatient treatment during that period than minority women, but they also significantly more often reported that they could not obtain treatment they desired. Men showed no apparent racial differences in mental health services utilization in the last year. There were no racial differences for either men or women in the proportion of active substance abusers who had received inpatient treatment in the last year.

Discussion

Our sampling strategy was unusual in that we attempted systematic sampling not just of residents of overnight and day shelters, as most other studies of the homeless have done, but also a sample of homeless men ascertained from street locations. This sampling plan was fraught with difficulties, including non-recognition of potential study subjects and undersampling of street-dwelling men who remain less accessible to public locations in daytime hours, who might be a more deviant group. The street sampling procedure may not be necessary for most studies of the homeless, however, because men ascertained in this way do not seem to have many important differences from homeless men who stay in shelters (Smith et al. 1991).

Another strength of our sampling was that we randomized the procedure, both by shelter according to size and type, and by month (for climatic reasons) and time of the month, which enabled us to sample a more repre-

Table 5. Racial differences in treatment access in last year

	Men		Women	
	White (<i>n</i> = 165)	Non-white (<i>n</i> = 435)	White (<i>n</i> = 36)	Non-white (<i>n</i> = 264)
Percentage of subjects with non-substance Axis I diagnosis in last year who:				
Had a psychiatric admission in last year	23.5	14.5	33.3	6.3*
Wanted but could not obtain treatment in last year	23.5	26.1	40.0	10.4**
Percentage of subjects with alcohol abuse/dependence in last year with an admission for alcohol treatment	17.7	10.6	0.0	4.2
Percentage of subjects with drug abuse/dependence in last year with an admission for drug treatment	33.3	15.5	0.0	50.0

* $P = 0.015$ (Fisher's exact test); ** $P = 0.008$, $\chi^2 = 6.94$, $df 1$, for difference from whites

sentative group than if we had limited ourselves in seasonal representation or shelter representation. Finally, the matter of the small payment offered to subjects turned out to be a hearty incentive, reflected in our surprisingly high response rates of greater than 90%, further enhancing the representativeness of the sample.

The rates of current (1-year) psychiatric illness in this sample are considerably higher than those in the general population, suggesting a greater need for mental health services than among domiciled groups. Most other studies reporting rates of psychiatric disorders among the homeless have also described elevated rates of psychiatric disorders in this population. Most of these studies, however, have reported data on lifetime rates of illness rather than current rates. Our lifetime rates of psychiatric disorders are within the range of rates reported in other studies of the homeless (Smith et al. 1992a). Koegel's group (1988) has also presented 6-month prevalence rates of psychiatric disorders in homeless men in Los Angeles, also using the DIS. Compared with our published 6-month prevalence rates (Smith et al. 1992a), their rates for substance abuse were lower (27% vs 47% for alcohol use disorders, 10% vs 14% for drug use disorders) and their rates for other Axis I diagnoses were higher (12% vs 5% for schizophrenia, 8% vs 2% for mania, 16% vs 13% for major depression).

This study confirms the findings of other studies that have reported major underutilization of mental health services among the homeless (Padgett et al. 1990; Breakey et al. 1989; Fischer and Breakey, 1986; Fischer et al. 1986). In part, this may reflect lack of insight by subjects into their problems, because only about 10% of subjects with substance abuse or other psychiatric illness perceived that it was a serious problem.

In spite of this lack of insight, however, the vast majority of subjects with traditionally recognized "severe and persistent" mental illness such as schizophrenia and bipolar affective disorder had at some time received treatment, and more than half of the substance abusers had received inpatient substance abuse treatment. These figures are even higher than rates of psychiatric treatment in the general population. In the ECA study, for example, only 47% of persons with schizophrenia and 22% with a manic episode had ever told a doctor about their symptoms (Robins et al. 1991). The low rates of treatment utilization in the last year in homeless subjects with active mental illness, however, indicate that the underutilization of services among homeless persons is quite evident in the current year. In particular, men with schizophrenia and men with drug abuse had significantly less often than women with these disorders received treatment for them in the last year. Because the presence of insurance was not associated with receiving treatment, the higher proportion of women than men with Medicaid does not explain this gender difference in treatment utilization. Perhaps having children to care for was a motivating factor for the women to seek help for these problems.

Few variables in the data showed any association with services utilization. Racial differences explained very little; the only association with race was that white women with a psychiatric disorder more often desired treatment

that was unavailable to them, but they also used psychiatric services more than did women of minority groups.

A sizeable minority of subjects of any diagnostic category said they wanted but could not obtain treatment in the last year. Although more than one-third of subjects who could not access treatment perceived that lack of insurance or inability to pay was a barrier to treatment, the data on treatment utilization speak differently. Lack of insurance was not associated with lack of treatment. This apparent disparity between homeless persons' subjective perceptions and objective measures of their conclusions points to the importance of verifying by other means the reports of homeless persons' opinions on the nature of things rather than taking their reports at face value. These data support the conclusion of Padgett et al. (1992) that simply increasing the Medicaid enrollment and coverage for homeless persons is unlikely to provide a solution to mental health services underutilization. No other reason came across as a recurrent theme in subjects' inability to access services. Perhaps for many the circumstances of homelessness and the problems that go with it have displaced mental health treatment from their most pressing short-term agendas. Mental health treatment could hardly seem like a high priority item to persons currently engaged in basic survival tasks.

If this is the case, ease in accessing mental health services must be a major factor in delivery of services. Evidence supporting this recommendation may lie in the type of services utilization patterns evidenced among homeless populations. Padgett et al. found that when homeless people did obtain mental health services, they relied heavily on hospital settings while underutilizing sources of ambulatory care. Our findings echoed those of Padgett's group in the high numbers with no history of outpatient care who had been treated in inpatient settings. When ambulatory care is not obtained, untreated psychiatric illness may build up to a crisis requiring inpatient management. Therefore, improved utilization of ambulatory services by homeless populations is an area that needs addressing.

Persons with needs that they perceive as more pressing than mental health services will benefit most from an ambulatory care system that is "user-friendly", one they can access with the most ease and the least trouble (Fischer and Breakey, 1986) – before their situation demands more intensive care. A system that does not discriminate by ability to pay may help a few, but that system must also be accessible in other ways – such as by being flexible to allow patients who are very busy with a variety of social services tasks or who do not keep calendars to drop in when their schedule allows or when their situation escalates toward crisis – without having to wait long to see the doctor. Services must also be physically accessible to persons who have difficulty maneuvering transportation systems. In addition, outreach (Gelberg et al. 1988) with intensive case management supervision (Drake et al. 1991) will help improve the efficiency of psychiatric services for a population that has suboptimal insight into its mental health problems and the importance of treatment.

These data do not address the reasons for the underrecognition of homeless people of their psychiatric disabilities. In part, this underrecognition may relate to natural

psychological mechanisms, i. e., it is easier to blame external reasons for one's problems than to search within for the sources of one's own difficulty. In part, it may also reflect a lack of education of people who are homeless, as well as social services workers with whom they have contact and who might be in a position to help them recognize their problems. This speaks to potential gain from programs that could be designed to provide this information to shelter personnel and social service workers. If, indeed, lack of information or understanding of their psychiatric disability and of available options for obtaining treatment are limiting factors, significant improvement in mental health services utilization may well result with implementation of educational and psychosocial service components which stress provision of information directly to homeless persons about their psychiatric status, their insurance options, and details of local services that are open to them.

Because motivation for treatment is a key factor in outcome, especially for substance abuse disorders, providers will need to devise creative ways to motivate homeless mentally ill individuals for treatment services. Innovative suggestions have included intensification of efforts to provide engagement through attention to basic needs, and cultivation of trusting and emotionally rewarding relationships with caregivers (Drake et al. 1991). Motivation may also be enhanced by linking mental health services to other services such as supported housing, programs geared toward community and psychosocial involvement, and programs for development of independent living skills.

The underutilization of psychiatric services documented in this and other studies presents certain problems for studies estimating population prevalence of psychopathology. Because most mental illness does not receive treatment, mental health services utilization statistics represent a gross underestimation of lifetime psychopathology. Unfortunately, history of psychiatric hospitalization has traditionally been a popular measure of mental health status, particularly in earlier studies with more limited methodology. Statistics on inpatient mental health services utilization present other problems; they may be inflated through contamination with past history of inpatient treatment for substance abuse unless these factors receive careful independent evaluation. Reliance upon lifetime treatment history data will also overestimate the current psychiatric status of subjects. Future studies investigating psychiatric illness and treatment in homeless populations should not rely on psychiatric treatment history as a measure of psychiatric illness, and they should collect and report data separately on current and past substance abuse and other psychiatric treatment.

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