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Christoph Lauber · Barbara Lay · Wulf Rössler

Homeless people at disadvantage in mental health services

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Abstract Objective The aims of this study are threefold: to depict characteristics of homeless at discharge from a psychiatric hospital; to describe the utilisation of inpatient care and treatment measures during hospitalisation; and to analyse to what extent psychiatric disorders and clinical variables contribute to the risk for homelessness at discharge. Methods Based on case register data we analysed all 28,204 people consecutively referred in 1996–2001 to psychiatric hospitals of a well-defined catchment area in Switzerland. Results 1% (N = 269) of all admissions were homeless at discharge (mean age: 32.0 years; women: 27.9%). Compared to other psychiatric inpatients, we found among the homeless more males, more people with younger age and lower education. Regarding treatment measures during the inpatient stay, homeless received less often psychopharmacotherapy, ergotherapy and physiotherapy, but more vocational training, occupational therapy and support by social workers. There was no difference between homeless and others regarding compulsory medication or seclusion. Homeless had a shorter length of inpatient stay. Risk factors for being homeless at discharge were: being homeless at admission, not living in a relationship, having a multiple substance abuse or a dual diagnosis, low clinical improvement during inpatient treatment and discharge against medical advice. Discussion To prevent homelessness at discharge, it is important to consider all independent contributors, i. e. the living situation before admission, health care inequalities during inpatient treatment (care received, low clinical improvement, discharge planning) and psychopathology.

Ch. Lauber, MD (☒) · B. Lay, PhD · W. Rössler, MD, MA Psychiatric University Hospital Research Unit for Clinical and Social Psychiatry Militärstrasse 8 PO Box 1930 8021 Zurich/Switzerland Tel.: +41-44/296-7300 Fax: +41-44/296-7309

E-Mail: christoph.lauber@puk.zh.ch

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Introduction

Homelessness has become a serious public health problem over the last few decades, especially due to the high prevalence of psychiatric and somatic morbidity and the subsequently increased mortality of those affected (Fichter and Quadflieg 2003; Munoz et al. 2002; Salize et al. 2002). Nevertheless, health care provision for homeless people has been repeatedly regarded as inadequate (Rössler et al. 1994; Snyder and Eisner 2004). Despite the considerable range of somatic and psychiatric problems, homeless people do not undergo regular medical treatment. If they use the health care system, they mostly turn up in emergency rooms of general or psychiatric hospitals (Herrman et al. 1989). Thus, it is recommended to scrutinize health care utilisation of homeless people in either setting.

Studies on homeless people have some limitations so far: they focused either on the prevalence of mental disorders including the assessment of conspicuous behaviour, e.g. violence, or the needs for care of these people (Koffman and Fulop 1999; Kovess and Mangin 1999; Lovisi et al. 2003; Rosenheck and Seibyl 1998; Salize et al. 2001a, 2001b). The largest part of research is provided by Anglo-American countries whose results may not be entirely relevant for European countries due to different contextual backgrounds, e.g. incomparable (mental) health care systems. Most health care systems in Europe are based on societal solidarity for the ill and disabled. Furthermore, most studies do not describe an entire catchment area, but one particular in- or outpatient service mostly in an urban area (e.g. Caton et al. 2000; Fichter et al. 1996; Jenkins et al. 2003; Kovess, Mangin 1999; Munoz et al. 2002; Salize et al. 2002). Moreover, the majority of these analyses focus a limited time period, e.g. one single day (Koffman, Fulop 1999; Rosenheck, Seibyl 1998). Some of them give exclusive attention to men (e. g. Fichter et al. 1996; Fichter and Quadflieg 2001; Fichter, Quadflieg 2003) or women (Greifenhagen and Fichter 1997).

Only few studies have investigated psychiatric inpatient treatment of homeless people (Ash et al. 2003; Herman et al. 1998; Koffman, Fulop 1999; Rosenheck, Seibyl 1998). This is surprising because inpatient treatment is one of the rare occasions when homeless people are in contact with the health care system (Herrman et al. 1989). Although most of these analyses focus on inpatient utilisation, none of them describes the type of inpatient care or the living situation of these people at discharge. Finally, none of them concentrates on gender differences.

To overcome some of these shortcomings we analysed data from a psychiatric case register. We used these inpatient data because hospitalisation is generally seen as an indicator of a serious illness. The sample includes all psychiatric inpatient admissions in 1996–2001 in the Canton of Zurich/Switzerland. This catchment area covers a mixed urban-rural area of 1.2m population comprising one sixth of the Swiss general population. Homelessness at discharge was defined as being without a permanent accommodation at discharge. Based on this inpatient sample over an extended time period we want

- Depict socio-demographic and clinical characteristics of homeless at discharge from a psychiatric hospital as compared to people with permanent accommodation, focusing on gender differences;
- Describe the utilisation of inpatient care and treatment measures during hospitalisation provided to these people;
- Analyse to what extent psychiatric disorders and clinical characteristics contribute to the risk factors for homelessness at discharge.

Methods

Catchment area and central psychiatric register

The Canton Zurich covers a mixed urban-rural area with a population of 1.2m, which is about one sixth of the Swiss general population. All mental health services in the Canton report detailed information about diagnostic, treatment-related and socio-demographic characteristics of all their patients to the central psychiatric register (PSYREC 2004a). The hospital physicians in charge are responsible for the documentation on their respective patients. Data are collected by means of a basic documentation system. This assesses information based on standard forms to be completed at admission and discharge. All measures are defined in a comprehensive manual that is provided to the hospital physicians responsible for the documentation (for further details including instructions to clinicians: see PSYREC 2004b). All data of this analysis derive from this central psychiatric register (PSYREC 2004a). The measures below are part of this documentation system.

The sample includes all 28,204 patients aged 18 years and over who were admitted to a psychiatric hospital between January 1, 1996 and December 31, 2001 in the Canton Zurich/Switzerland. Of these consecutive referrals, all first inpatient admissions within the time interval studied were included in this analysis. 21,390 (75.8%) of the patients had not been previously admitted. First admissions were di-

vided from readmissions by means of computerised record linkage on the basis of 18 defined match criteria (for more details, see Christen et al. 2003).

Measures

Socio-demographic characteristics (gender, age, marital status, education, main source of income, nationality) were analysed. To refer to the patients' current place of residence, postal codes were aggregated into three broad categories: urban (large cities with > 100,000 inhabitants), suburban (> 10,000 inhabitants) and rural (< 10,000 inhabitants) communities (Lay et al. 2005). Living situation at admission and at discharge was assessed as follows: Homelessness at admission was defined as 'being without own accommodation in the half year previous to psychiatric inpatient admission'. All those were classified as homeless at discharge who were neither discharged home nor referred to another institution, but stated to live rough after inpatient treatment.

Clinical variables included psychiatric diagnosis based on ICD-10 diagnostic criteria (World Health Organisation 1993). For the regression analysis, we considered whether a given patient has had one or more diagnoses. To be classified in the dual diagnosis group, a patient had to be diagnosed as suffering from both a substance use disorder (ICD-10, F1) and any other psychiatric disorder. Furthermore, the severity of the disorder at admission (ratings included in the documentation system, ranging from 0 (no disorder) to 6 (very serious disorder)), the legal basis of admission (voluntary vs. compulsory) and the number of previous admissions (first vs. readmission, lifetime) were analysed. Furthermore, a variety of therapeutic measures during inpatient stay (e.g. psychotherapy, psychopharmacotherapy including compulsory medication, seclusion, vocational training etc.; see Table 1) was assessed. The length of inpatient stay (index episode), the improvement of clinical symptomatology during inpatient treatment (7-point scale ranging from +3 (markedly improved) to -3 (markedly deteriorated)) and the discharge situation (i. e. regular discharge, discharge against medical advise, absconding from the ward etc.) were examined. Finally, the intervals between discharge and readmission for those with further admissions as well as the total days as inpatient in 1996-2001 were calculated.

Statistical analyses

To analyse risk factors for being homeless, multiple logistic regression analysis was applied with living situation after discharge from a psychiatric hospital (homeless vs. other situation) as dependent variable. Because the risk of homelessness significantly varies with demographic factors such as age, gender, educational level, urbanicity, marital status and living situation at admission, we controlled for these variables. In order to evaluate the extent to which clinical characteristics of the inpatient treatment contribute to the risk of homelessness, we used a stepwise procedure in which variables were fitted in stages. We first included the 'type of psychiatric disorder' in the model. Psychiatric diagnoses were grouped into 9 categories (8 categories of Fx-diagnoses without an additional F1-diagnosis, and a further category indicating a dual diagnosis). Diagnostic categories are mutually exclusive. Psychotic disorder (F2) was used as the reference category. In a second step, further patient characteristics and measures of the inpatient treatment (Swiss vs. foreign nationality; first admission vs. readmission; severity of disorder; improvement of clinical symptomatology; regular vs. nonregular discharge situation) were considered for inclusion. Odds ratios and their 95% confidence intervals are presented; the confidence intervals are calculated from Wald statistics. Based on the subset of risk factors included in the final model, discriminant analysis was used to evaluate the ability to predict homelessness correctly by the model. All statistical analyses were carried out using the SPSS 11.5 software package.

Table 1 Sample characteristics of homeless and patients with permanent accommodation

	Living situation at discharge				
	Homeless n = 269		With permanent		
			accommodation ^a $n = 26,092$		
	n	%	%	р	
Socio-demographic measures					
Gender, male	194	72.1	48.4	***	
Age (Mean; SD)		32.0 (9.7)	45.1 (18.6)	***	
Educational level			, , , , ,	***	
No diploma	13	4.8	3.2		
Basic education (grade 9)	114	42.4	26.1		
Apprenticeship	88	32.7	43.5		
Secondary/higher education	19	7.1	15.3		
Not known	35	13.0	12.0		
Source of income	22	12.2	20.2	***	
Occupation	33 14	12.3 5.2	30.3 13.7		
Parents, spouse, relatives Disability pension	14 49	18.2	15.7		
Social welfare benefits	124	46.1	15.7		
Old age pension; others	49	18.2	24.9		
Marital status				***	
Single	198	74.4	44.2		
Married; cohabitation	13	4.9	28.3		
Separated, divorced, widowed	55	20.7	27.5		
Place of residence, urban	156	58.0	49.5	**	
Citizenship, foreign country	57	21.2	16.8	n.s.	
Measures of index episode					
First admission life time	192	74.1	77.0	n.s.	
Diagnosis (ICD-10)	172	,	77.0	11.5.	
Organic disorders (F0)	2	0.7	9.4	***	
Alcohol-related disorders (F10)	25	9.3	12.5	n.s.	
Disorders related to illicit drug use (F11-F18)	47	17.5	6.3	***	
Multiple drug use (F19)	88	32.7	6.9	***	
Schizophrenia and other psychotic disorders (F2)	46	17.1	21.4	n.s.	
Affective disorders (F3)	15	5.6	24.0	***	
Neurotic and adjustment disorders (F4)	20	7.4	13.4	**	
Personality disorders (F6)	21 5	7.8 1.9	4.3 1.8		
Others (F5, F7-F9)				n.s. ***	
Dual diagnosis ^b	77	28.6	16.7		
Severity of disorder (0–6; Median)		4.0	4.0	n.s.	
Therapeutic measures Psychotherapy	122	40.4	42.5		
Psychopharmacotherapy	133 179	49.4 66.5	43.5 77.7	n.s. ***	
Vocational training, occupational therapy	76	28.3	18.6	***	
Ergotherapy, physiotherapy	128	47.6	59.2	***	
Support by social worker	52	19.3	12.9	**	
Compulsory admission	95	35.6	36.4	n.s.	
Compulsory medication	11	4.1	3.8	n.s.	
Seclusion	16	5.9	6.1	n.s.	
Discharge, not regular	145	54.7	18.2	***	
Clinical change during inpatient treatment (–3–+3; Median)	. 15	1.0	2.0	***	
Length of hospital stay (days; Median)		17.0	27.0	***	
Treatment/care after discharge	179	74.9	96.5	***	
	179	77.7	70.5		
Longitudinal measures		40.5	150.0	***	
Interval discharge-readmission ^c (days; Median)		48.5	150.0		
N of admissions 1995–2001	1.47	F4.6	71.0	***	
1	147	54.6 22.1	71.0		
2–3 4+	89 33	33.1 12.3	22.3 6.8		
4+ Time as inpatient 1995–2001 (days; Median)	23	41.0	39.0	n c	
Time as impatient 1999–2001 (days, Median)		41.0	37.0	n.s.	

^a With permanent accommodation comprising: at home, in institution, others; ^b Substance use disorder plus any other F-diagnosis; ^c n = 7696 patients with a further admission: 7574 with permanent accommodation; 122 homeless (homeless: 83 males; 39 females)

^{*} P < 0.05; ** P < 0.01; *** P < 0.001; χ^2 tests, except for age (t test); severity of disorder, clinical change, length of hospital stay, interval discharge, time as inpatient (Mann Whitney test)

Results

Sample characteristics

Of the 28,204 persons receiving treatment in a psychiatric hospital in 1996–2001, the majority were discharged home (66%) or referred to another institution (20.7%). There were 269 patients (1% of all admissions) who were discharged without having a permanent accommodation, whereof 75 were women (27.9%) and 194 men (72.1%). The mean age at admission was 32.0 years (SD 9.7y) with a range from 18 to 70 years. 47.2% of the homeless group had no diploma or only a low education.

Comparison to other psychiatric patients

We compared the homeless patients with psychiatric patients living in other housing conditions before admission (Table 1). Among the homeless we found more males, younger people and people with low education. Few of them were living in an intimate relationship. The rate of homeless people living in an urban area was comparatively high. As compared to the group living at home, few homeless people had an income of their own and most of them received disability pension or social welfare benefits.

Homeless compared to other patients are more often affected by substance use disorders, especially multiple substance use (ICD-10 F19) and any form of illegal substance use (ICD-10 F11-18), but not alcohol use (ICD-10 F10). For personality disorders (ICD-10 F6), higher rates among homeless were also found. The number of patients with a dual diagnosis, i. e. a substance use disorder (ICD-10 F1) and a further psychiatric diagnosis (ICD-10 Fx), was by far higher in the homeless group compared to the others. With respect to psychotic disorders (ICD-10 F2), rates were comparable to people living in permanent accommodation. For affective (ICD-10 F3) and neurotic (ICD-10 F4) disorders lower rates among homeless could be detected. The degree of severity of disorder was 4 on average ('considerably ill') in both homeless and people living in permanent accommodation (Table 1).

Homeless people were as often compulsorily admitted as people with a permanent accommodation. The rate of previous admissions was also comparable in both groups. Regarding treatment measures during inpatient stay, homeless received less often psychopharmacotherapy, ergotherapy and physiotherapy, but more vocational training and occupational therapy as well as support by social workers. No difference could be detected between homeless and others regarding compulsory medication or seclusion.

Homeless people had a significantly shorter inpatient stay and were only mildly improved at discharge whereas in the other patient group the clinical situation has markedly improved. Discharge against medical advice in homeless was three times that of other patients, and aftercare was significantly less provided. The interval between discharge and readmission was shorter for homeless compared to the others.

Gender differences

Within the homeless group, women differ from men in several points (Table 2): psychotic disorders are less frequent and affective disorders are more frequent. During hospitalisation homeless women receive more often practical support and were less frequently secluded. Finally, they were more often (viz 2 out of 3 women) discharged against medical advice.

Regression analyses

The contribution of clinical variables and measures of the inpatient treatment in predicting the living situation after discharge was examined by multiple regression analysis. Effects of these variables were studied controlling for demographic factors (age, gender, educational level, urbanicity, marital status and living situation at admission). Adjusted odds ratios (OR) and 95% confidence intervals (CI) of the significant variables are given in Table 3.

Being homeless at discharge was best predicted by being homeless at admission. Not living in a relationship further increased the risk for being homeless at discharge more than three times. Beyond that, the risk of being homeless at discharge was strongly associated with distinct psychiatric diagnoses: ORs (ref.: patients with schizophrenia, ICD-10 F2) are markedly increased in patients with a diagnosis of multiple substance use (ICD-10 F19), in those with a dual diagnosis (any F-diagnosis combined with a substance use disorder) and in those with any form of illegal substance use (ICD-10 F11-18). No such effects were found for affective, neurotic and personality disorders (ICD-10 F3, F4 and F6) (Table 2).

Of the clinical variables further considered for prediction, clinical change during inpatient treatment and type of discharge entered the model, indicating that patients with regular discharge and improved psychiatric symptomatology were significantly less likely to be homeless (after controlling for effects of demographic variables and psychiatric diagnosis). We found no significant effects for severity of disorder, first vs. readmission as well as patients' nationality, neither when considering them as single variables nor when adjusting for effects of other risk factors.

With the subset of significant variables in the regression model, 83.2% of homeless and 80.9% of patients with permanent accommodation can be correctly classified.

Table 2 Clinical characteristics of homeless admitted to psychiatric hospitals by gender

	Homeless at discharge			
	Males n = 194	Females n = 75		
	%	%	р	
Diagnosis (ICD-10)				
Organic disorders (F0)	1.0	0	n.s.	
Alcohol-related disorders (F10)	9.8	8.0	n.s.	
Disorders related to illicit drug use (F11-F18)	18.0	16.0	n.s.	
Multiple drug use (F19)	30.4	38.7	n.s.	
Schizophrenia and other psychotic disorders (F2)	20.1	9.3	*	
Affective disorders (F3)	3.1	12.0	**	
Neurotic and adjustment disorders (F4)	6.7	9.3	n.s.	
Personality disorders (F6)	9.8	2.7	n.s.	
Other (F5, F7-F9)	1.0	4.0	n.s.	
Dual diagnosis ^a	30.9	22.7	n.s.	
Therapeutic measures				
Psychotherapy	46.9	56.0	n.s.	
Psychopharmacotherapy	65.5	69.3	n.s.	
Vocational training, occupational therapy	26.3	33.3	n.s.	
Ergotherapy, physiotherapy	44.8	54.7	n.s.	
Support by social worker	16.0	28.0	*	
Compulsory admission	36.8	32.4	n.s.	
Compulsory medication	4.6	2.7	n.s.	
Seclusion	7.7	1.3	*	
Discharge, not regular	50.3	66.2	*	

^{*} P < 0.05; ** P < 0.01; *** P < 0.001

No statistical significant difference in any other measure

Table 3 Risk factors for homelessness in psychiatric inpatients

Risk factor	OR	95% CI	Sign.
Socio-demographic measures			
Living situation before admission, homeless	12.71	9.28-17.41	***
Marital status, single/separated	3.16	1.78-5.63	***
Educational level, low	1.69	1.30-2.21	***
Gender, male	1.66	1.24-2.23	***
Age	0.97	0.96-0.99	***
Place of residence, urban	1.32	1.02-1.72	*
Psychiatric diagnosis (ICD-10)			
Schizophrenia and other psychotic disorders (F2), no dual diagnosis	1.00		
Alcohol-related disorders (F10), no dual diagnosis	1.87	0.99-3.53	
Disorders related to illicit drug use (F11-F18), no dual diagnosis	1.96	1.12-3.42	*
Multiple drug use (F19), no dual diagnosis	3.29	2.01-5.39	***
Affective disorders (F3), no dual diagnosis	0.81	0.39-1.67	
Neurotic and adjustment disorders (F4), no dual diagnosis	0.99	0.50-1.97	
Personality disorders (F6), no dual diagnosis	2.05	0.98-4.31	
Others (F5, F7-F9), no dual diagnosis	0.46	0.16-1.37	
Dual diagnosis ^a	2.52	1.57-4.05	***
Discharge, not regular	2.38	1.79-3.18	***
Clinical change during hospital stay	0.63	0.54-0.72	***

Reference category: Homeless at discharge; n=256 (vs. with permanent accommodation; n=25,347) OR Odds ratio; CI 95 % confidence interval

Variables not selected (OR n.s.): First admission lifetime; severity of disorder; foreign citizenship

^{*} P < 0.05; ** P < 0.01; *** P < 0.001

^a Substance use disorders plus any other F-diagnosis

Discussion

To sum up, in this hospital based sample representative for a catchment area of 1.2m population in 1996-2001 we found 1% of all admissions to psychiatric inpatient treatment to be homeless at discharge. Of these 269 homeless, 28% were women. Homeless people compared to those living in other housing conditions were more often males, of younger age and with lower education, had more frequently a disability pension or were on social welfare benefit, lived more often in an urban area, and most of them did not live in an intimate relationship. Homeless were more frequently affected by substance use disorders, especially illegal substance use, or by personality disorders. Affective and neurotic disorders were less frequent. Homeless people were as often compulsorily admitted as other patients. During inpatient treatment they received less psychopharmacotherapy and ergotherapy, but more vocational training, occupational therapy and support by social workers. Homeless compared to other patients had a shorter inpatient stay and improved during hospitalisation only mildly. They were more frequently discharged against medical advice, aftercare was less provided and the interval between discharge and readmission was shorter.

The risk of being homeless at discharge was strongly associated with the living situation at admission and further increased in those with substance abuse disorders, especially multiple substance use or a dual diagnosis. Additionally, change in symptomatology during inpatient treatment and type of discharge were significant predictors indicating that patients with regular discharge and improved symptomatology are less likely to be homeless. No significant effects for illness severity, first vs. readmission and patients' nationality were found.

Methodological issues

Before discussing the results of this study, we must acknowledge some strength and weaknesses of this analysis. Since homelessness was assessed by self-reports, the estimated rates might be biased downwards (Herman et al. 1998). By including hospitalised persons, only the most severely mentally ill among homeless people were assessed (e.g. Herrman et al. 1989). This, too, is likely to result in an underestimation of the prevalence of homeless with mental disorder. Underestimation particularly pertains to homeless men, since women use more psychiatric in- and outpatient services (Fichter et al. 1996, 1999). However, some strength can be mentioned: to our knowledge this is the first study to address features of psychiatric inpatient treatment provided to homeless people. Moreover, the data used derive from an entire mixed urban-rural catchment area and cover a 6-year period and, thus, are representative for a catchment area over a considerable time period.

Predictors of homelessness at discharge

Of course, it is not surprising that the living situation at admission is a strong predictor for homelessness at discharge. Even after controlling for this effect and other demographic factors, clinical characteristics were found to further increase the risk: among the clinical diagnoses those related to substance use are the most important. This is comparable to other findings (Fichter and Quadflieg 1999; Herrman et al. 1989; Kovess, Mangin 1999; Munoz et al. 2002). But it makes clear that the status of 'homelessness' is very difficult to alter especially in times of significant reductions in length of inpatient treatment. The risk of being homeless at discharge is additionally explained by low clinical improvement and discharge against medical advice. This also points to the fact that collaboration with homeless patients is not easy. It is remarkable that the number of previous admissions does not predict homelessness. Regarding characteristics of the inpatient episode (as well as most of the socio-demographic variables), we did not find significant differences between first admitted homeless and those with previous admissions (data not shown, but on request from the authors). Thus, risk of later homelessness is influenced by the clinical course during inpatient treatment rather than illness chronicity or illness severity.

Homeless people at disadvantage in psychiatric inpatient treatment

This study reveals that homeless people compared to other patients only partly receive the same therapeutic measures (e.g. psychotherapy). They benefit less regularly from 'feel-good' therapies such as physiotherapy or ergotherapy whereas therapies unpopular among inpatients such as vocational training or occupational therapy were more often prescribed. Only two of three homeless people received psychopharmacotherapy.

Our data do not allow drawing causal conclusions. A possible interpretation of these results might be that homeless people are less compliant in therapeutic settings and, thus, they finally use less therapeutic measures. There are only few studies and none specifically dealing with inpatient treatment to analyse this. Compliance with and adherence to therapy are problems especially in homeless people with mental illness (Dobscha et al. 1999; Tulsky et al. 2004). However, together with the shorter length of inpatient stay, the little clinical improvement and less intense aftercare provided to these patients, this is likely to be an expression of health care inequalities and not of lower severity of illness. Additionally, the overall time as inpatients (homeless people are more frequently admitted, but stay shorter) and the legal status of admission (compulsory vs. voluntary) are similar to those found in other patients. This, too, points to health care inequalities rather than decreased access to care. In other words, homeless people must not be forced into psychiatric hospitalisation, but find the way by themselves, yet, use inpatient treatment even more often than other patients. However, the treatment these people receive is not comparable to that of other patients and they leave inpatient care without remarkable improvement. Not only outpatient care (Koegel et al. 1999), but also inpatient treatment thus must be regarded as insufficient for homeless.

Gender differences

Our data reveal a gender difference with males more likely to be homeless than females, however, do not explain the reasons for this difference. It might be due to gender-different coping strategies and social functioning which mostly results in better outcomes for females compared to males (Stein and Gelberg 1995). With respect to clinical diagnoses, male homeless are more often affected by psychotic disorders whereas females have more affective disorders. The difference in schizophrenia is likely to be due to the better course of illness reported for women, especially with respect to social functioning (Usall et al. 2002). The gender difference in social functioning might also explain why females receive (or seek) more often support from social workers. Higher prevalence of affective disorders in homeless females in our sample corresponds to that found in the general population (Kessler et al. 1994; Koegel et al. 1999). Besides the differences in diagnostic distribution homeless women are also obviously affected by inequalities of care. As a group of considerable size they cannot be neglected when discussing homelessness and implementing services for these people.

Clinical implications

The present results have implications for inpatient care: clinicians must pay special attention to patients who have no permanent accommodation at admission and to those with a substance use disorder. These patients are at a markedly increased risk to become homeless at discharge (again). Regarding characteristics of the clinical course of homeless inpatients – low improvement during inpatient stay, less therapeutic measures received, earlier discharge and no aftercare – the requirements are twofold: firstly, during inpatient treatment professionals should focus on measures that enhance the compliance of the homeless to achieve the best possible clinical improvement. Secondly, a rigorous discharge planning beginning the day of admission is necessary in these patients.

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