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Homelessness and the Length of Stay in Psychiatric Wards

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Abstract

Aims & methods: To study the effects of homelessness on length of stay in psychiatric wards. All 37 admissions of homeless people to an acute psychiatric service during the year 2005 were identified using the Carebase system. Admissions of homeless people were then compared to a random sample (of 62 admissions) from the total number of admission during 2005 (397 admissions).

Results: Homeless patients were more likely to be younger, male and single compared to the random sample. A significantly higher proportion of the homeless patients had the diagnosis of schizophrenia. The mean length of stay of the homeless patients was significantly higher; 112 days compared to 33 days for the random sample (almost 4 times).

Clinical implication: Homeless patients have significantly longer admissions than patients in general. This has implications in terms of costs, increased service use and greater risk of institutionalisation. This needs to be considered in planning residential and other community services for homeless psychiatric patients.

Introduction

With the deepening economic crisis and the current housing benefit curbs there are concerns that the homelessness of the mentally ill might become again an issue for psychiatric services [1]. Much research supports the view that homelessness is associated with psychiatric disorders and closure of psychiatric hospitals [2-4] and few studies oppose it [5,6]. Many worried that the closure of mental institutions would lead homeless psychiatric patients to become 'revolving door admissions'. Although since the nineties surveys on the mental health of homeless people almost disappeared from the literature studies on the admission of homeless patients to psychiatric ward continue to show that the problem of the homeless mentally ill is far from over. Appleby & Desai [7] in an analysis of admission to psychiatric wards in Chicago found that the rate of homelessness among psychiatric admissions had increased substantially over the 1980's and was even higher among applicants for hospitalization.

The long admissions of the homeless mentally ill continue to be a burden on psychiatric services. Sharon, et al. [8] looked at hospital-discharge data on 18,864 admissions of homeless adults to New York City's public general hospitals and compared it to other low-income adults to all general hospitals in New York City during 1992 and 1993. Of the admissions of homeless people, 51.5 percent were for treatment of substance abuse or mental illness, as compared with 22.8 percent for the other low-income patients. The homeless patients stayed 4.1 days, or 36 percent, longer per admission on average than the other patients, even after adjustments were made for differences in the rates of substance abuse and mental illness. The costs of the additional days per discharge averaged $4,094 for psychiatric patients. The authors concluded that homelessness is

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Table 1: Demographic features.

Demographic details	Homeless	Not homeless	Odds ratio (95%C.I.)
Age: 17-35 yrs*	63.9%	30.0%	4.0 (1.8-10)
36-45 yrs	25.0%	26.7%	0.9 (0.3-2.6)
46-55 yrs	8.3%	21.7%	0.3 (0.1-1.4)
> 56 yrs	2.8%	21.7%	0.1 (0.01-0.8)
Sex: Male	67.6%	50.0%	3.0 (0.9-5)
Female	32.4%	50.0%	
Marital Status:			
Married	10.8%	25.9%	0.3 (0.08-1.2)
Single*	73.0%	39.7%	4.0 (1.4-11.2)
Divorced	5.4%	22.4%	0.2 (0.03-1)
Widow/Widower	0.0%	3.4%	-
Separated	10.8%	8.6%	1.3 (0.3-6.1)

*Statistically significant at 5% level.

Table 2: Clinical features and history.

Diagnosis	Homeless	Random sample	Odds ratio (95% C.I.)
Schizophrenia*	(13) 37%	(7) 12%	4.5 (1.6-13)
Substance abuse	(13) 37%	(11) 18%	3 (0.9-8)
Affective disorders	(6) 17%	(18) 33%	0.5 (0.1-1.5)
Neurosis/Personality disorder	(3) 9%	(17) 29%	0.8 (0.001-3.5)
Others	0	(7) 12%	-

*Statistically significant at 5% level.

associated with substantial excess costs per hospital stay in New York City. Planning community services for the homeless should take in consideration the high costs of hospitalization in this population without such services. Adams, et al. [9] found that homeless veterans were more likely to be admitted to hospital when they presented with psychiatric and substance abuse diagnoses (79.9%), compared with housed veterans (29.1%).

However, not all studies found that homeless patients have longer hospital admissions. Lowens, et al. [10] compared 50 homeless men with a control group of non-homeless patients (matched by diagnosis). The median length of hospitalisation was 26 days with no significant differences between the two groups. Outpatient treatment was planned for only 16% of the homeless patients compared with 40% of the controls. Lauber, et al. [11] looked into admission to psychiatric hospitals between in 1996-2001 from a well-defined catchment area in Switzerland. They compared those who were homeless at discharge with other psychiatric inpatients. In contrast, to earlier studies they found that homeless patients at discharge had a shorter length of inpatient stay. They clearly has shortened the length of admission by discharging some patients (no numbers were given) back to homelessness. 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.

The current study aimed to describe the outcome (in terms of length of stay and discharge address) of the psychiatric admissions of patients with no fixed abode (NFA) status compared with home-based patients who were admitted to the Linden Centre at Chelmsford Essex during a period of one year.

Methods

All admissions to psychiatric wards at the North Essex Mental Health Partnership NHS Trust are entered into a computerized recording system 'Carebase'. All the admissions to the Linden Centre (which is the admission facility for the Central sector of the trust during the year 2005 were identified using the Carebase system. This audit was undertaken on all the NFA (no fixed abode) admissions to the Linden Centre over the year 2005 (January to December). All the 37 NFA admissions were included in this study and they were then compared to a random sample (of 62 admissions) from the total number of 397 admissions during 2005. A pre-designed questionnaire was used then to collect data from the case-notes of both the NFA sample and the random control sample.

Data were entered on the Statistical Package for Social Sciences (SPSS). The same package was used to analyse the data using bivariate statistical techniques to compare the variables and outcomes of the two groups.

Results

Demographic features

There were many differences in the demographic features between the homeless patients and those patients from the random sample (Table 1).

The homeless patients were younger, their mean age was 36 years (SD = 11.5) compared to 42 years (SD = 13) (t test = -2.2, P = 0.03). in the random sample; 64% of the NFA patients were 35 years or under in age compared to only 30% of the random sample patients in this age group (Chi-square = 10, P = 0.001). A higher proportion of the homeless patients were male (68% compared to 50% of the random sample). The marital status of the homeless patients was more likely to be single (73% compared to 40% of the random sample patients) while the random sample were more likely to be married (26% compared to 11% of the homeless patients) or divorced (22% compared to 5% of the homeless patients).

Clinical presentation and history

There were significant differences in the clinical presentation of the two groups (Table 2). A significantly higher proportion of the homeless patients had a primary diagnosis of schizophrenia (37% compared to 12% of the random sample patients, Chi-square-8.6, P = 0.003, OR = 4.5). Substance abuse problems were the primary diagnosis for 29% of the homeless patients compared to 15% of the random sample patients. Primary diagnoses of neurotic and personality disorders (29% compared to 9% of the homeless patients) and affective disorders

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Table 3: Accommodation on admission and on discharge.

Accommdation	Homeless	Random sample	Odds ratio (C.I.)
On Admission:			
No fixed abode	**37 (100%)**	3 (5.2%)	
Private accomodation		22 (37.9%)	
Rented accomodation		9 (15.5%)	
Council accomodation		14 (24.1%)	
Bed and breakfast		4 (6.9%)	
Supported accomodation		6 (10.3%)	
On Discharge:			
No fixed abode	**10 (27.0%)**	**2 (3.4%)**	
Private accomodation	2 (5.4%)	23 (39.0%)	
Rented accomodation	1 (2.7%)	9 (15.3%)	
Council accomodation	10 (27.0%)	18 (30.5%)	
Bed and breakfast	1 (2.7%)	0	
Supported accomodation	12 (32.4%)	7 (11.9%)	

(33% compared with 17% in the homeless patients) were more frequent in the random sample patients.

Further questions on the presence or absence of substance misuse showed that 76% of homeless patients presented with alcohol problem compared to 58% of the random sample patients. Illicit drugs misuse was found in 60% of the homeless patients compared with 30% of the random sample patients. The most worrying finding was that 27% of the homeless patients misused prescribed drugs compared to 5% of the random sample patients.

The psychiatric history showed that the proportion of those who had no previous admissions was similar in the 2 groups (16% in the homeless patients compared to 18% in the random sample patients). However, 70.3% of the homeless patients had more than one admission compared to 52.4% of the random sample patients.

The mean length of stay of the homeless patients was significantly higher than that of the random sample. Homeless patients mean length of stay during the study year was 112 days (SD = 136.8) compared to 33 days (SD = 44.4) for the random sample patients (T = 4.1, P = 0.001, CI = 41.6-116.8).

Accommodation at admission and on discharge (Table 3)

On admission all the homeless patients had no fixed abode status compared to only 5.2% of the random sample patients. Prior to admission the random sample patients were housed in privately rented accommodation 38%, other rented accommodation in 16%, council accommodation in 24%, bed and breakfast accommodation in 7% and supported accommodation in 10%. On discharge, 27% of the homeless patients were discharged to no fixed abode status, 32% had moved to supported accommodation, 27% to council accommodation and 5.4% moved to private accommodation.

Discussion

Homeless patients admitted to the Linden centre in the year 2005 were compared in this study to a random sample of admissions of that same year. The homeless patients were younger, mostly male and single compared to the random sample. It was worrying to discover that a significantly higher proportion of the homeless patients had a diagnosis of schizophrenia. Homeless patients also have twice the rate of diagnosis of alcohol related problems. Contrary to common belief the homeless sample had a significantly lower prevalence of the diagnosis of personality disorder. Is this diagnostic picture coloured by the social class of the patients so that homeless patients are more likely to have the diagnosis of schizophrenia as used to happen in US in the 1950s (Hollingshead and Redlich, 1959) [12] This could more likely be explained by social drift of patients with schizophrenia and impaired functioning into poverty and homelessness [13]. A significantly higher proportion of the homeless patients had more than one admission. The length of admission was strikingly high in the homeless group (almost 4 times that of random sample). This may be the result of difficulties in finding suitable accommodation after discharge and the complexities of dealing with dual diagnoses- these two factors may also interact. This clearly has significant cost implications if homeless patients have more frequent and longer admissions. With the current financial crisis, this fact needs to be considered in planning residential and other community services for the homeless psychiatric patients as this will result in saving of the high costs involved in homeless people prolonged hospital admission.

The accommodation to which patients were discharged showed that almost a third of the homeless were discharged to homelessness. On further analysis, we found that 30% of those discharged to homelessness had the diagnosis of schizophrenia. Discharge to stressful environmental conditions is likely to lead to further relapse and to further hospital admissions. This human cost should also be considered making sure that adequate accommodation with flexible levels of support should be available in the community to ensure the adequate and effective treatment of homeless psychiatric patients both in hospital and in the community.

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