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Psychiatric morbidity and health service use among attendees at a winter shelter

AIMS AND METHOD

Homelessness is associated with raised psychiatric morbidity. Case records for 597 consecutive attendees at a winter shelter medical service were retrospectively reviewed to assess routine recording of psychiatric morbidity and to examine associations between current psychiatric symptoms and health service use.

RESULTS

Previous psychiatric morbidity was recorded in 36.0% of attendees, including 20.4% with comorbid substance misuse. Current psychiatric morbidity was recorded in 31.3% of attendees, and was associated with reduced total medication prescription, increased referral to other services and increased re-presentation to the shelter medical service.

CLINICAL IMPLICATIONS

Psychiatric morbidity was frequently recorded in this population. Current psychiatric symptoms were associated with increased health service use. Improved training of shelter staff should be instituted to increase engagement with mainstream mental health services.

Studies from around the world have repeatedly shown rates of depression, anxiety, substance misuse and psychosis which are several times higher in the homeless than in housed populations (Koegel *et al*, 1988; Fichter & Quadflieg, 2001; Han *et al*, 2003). Data from the UK suggest that 70–80% of homeless people have at least one lifetime psychiatric diagnosis, 30–50% report acute psychological distress and at least 20% show comorbid substance misuse and mental illness (Scott, 1993).

However, the impact of mental disorder on the provision of overall healthcare to this population is less clear. This study aimed to assess recording of psychiatric morbidity among attendees at the medical centres of open access winter shelters run by the homelessness charity Crisis. It also examined associations between the presence of current psychiatric symptoms and treatment received.

Method

The Crisis Open Christmas is a group of open access winter shelters available in London over the Christmas week, attended mainly by those living on the streets or in insecure accommodation such as hostels (see <http://www.crisis.org.uk/coc>). The shelter medical centres are staffed by volunteer clinicians and provide emergency medical care, primary healthcare and health education. Attendees are initially triaged by nurses, who use a standardised medical form to record demographic and housing information, usual sources of healthcare, past

medical and psychiatric history (specifically including asthma, diabetes, hypertension, tuberculosis, fits, alcohol misuse, drug misuse and mental health problems), smoking status, current medications and drug allergies. In addition, the presenting complaint is detailed. Definitive assessment and treatment is provided by the most appropriate member of the clinical team, for instance a physician, psychiatrist or nurse.

During November 2003, as part of a strategy to improve assessment and management of psychiatric disorder within the Crisis Open Christmas, medical records for attendees at the 2002 Crisis medical centres were examined. All attendees who had seen a doctor or nurse were eligible for inclusion in the study. Those who left the medical centre before details of the presenting complaint had been recorded were excluded.

Demographic information and data on reported lifetime and current mental health problems and substance misuse were extracted from the medical records. Details of illicit drugs used and previous psychiatric diagnoses were not required by the assessment schedule, but were often recorded by clinicians or could be inferred from reported medication. Where the current presentation included signs or symptoms of psychiatric illness or substance misuse, symptom type and diagnosis given were noted.

Outcomes of the consultation were defined as:

- immediate treatment offered
- referral to shelter substance misuse team



- acute referral to external medical, surgical or psychiatric facility
- later re-presentation to shelter medical service.

These outcomes were compared between those with and those without current psychiatric symptoms, using χ^2 tests to assess the statistical significance of findings. All data were analysed using SPSS version 10 for Windows.

Results

Of 649 attendees, 597 (92.0%) were eligible for inclusion, and 52 (8.0%) were excluded because they left before their presenting complaint had been recorded; 202 (33.8%) attended more than once. The mean age of attendees was 40 years (range 16–78, s.d.=12.9) and 83.8% of attendees were male. Data on ethnicity were absent in 28.8%; of those remaining, 85.6% identified themselves as British or White. Out of 597 attendees, 51.1% defined themselves as rough sleepers, 13.8% lived in hostels and 21.1% were housed.

Physical health

Reported physical illness was common, including 17.6% with registered disability, 26.0% asthma, 14.3% fits, 13.2% hypertension, 4.8% diabetes and 4.1% tuberculosis. Smoking was reported by 74.6%. At least one usual source of healthcare was reported by 75.4% of attendees, including 58.3% from a general practitioner or primary healthcare team for the homeless. There were 414 (69.3%) who gave information on current medication, of whom 198 (47.8%) were taking medication for physical health problems, 107 (25.8%) for mental health problems and 152 (36.7%) were taking no medication.

Past psychiatric history

Information on previous mental illness, excess alcohol use and illicit drug use was missing for 13.2, 10.7 and 12.2% of attendees respectively. Of the remainder, 209 (39.1%; 95% CI 35.0–43.3) reported excess alcohol use, 186 (35.4%; CI 31.3–39.5) illicit drug use and 187 (36.0%; CI 31.9–40.2) mental health problems. Of the 506 for whom information was available on all three, 103 (20.4%; CI 16.9–23.9) reported comorbid substance misuse and mental health problems. Details of specific drugs recorded ($n=127$) and psychiatric history ($n=128$) are given in Table 1.

There were 107 attendees (25.8% of those giving information on medication) who reported currently prescribed psychotropic medication, including 26 using antipsychotics (6.3%); 47 (7.9%) were recorded as known to psychiatric or substance misuse services, although this information was not routinely requested.

Current symptoms and association with outcomes

There were 187 attendees (31.3%, 95% CI 27.6–35.0) who had current psychiatric signs or symptoms recorded during at least one consultation. As shown in Table 2,

Table 1. Details of lifetime drug misuse ($n=127$) and past psychiatric history ($n=128$)

	Attendees <i>n</i> (%)
Drug	
Opiates	88 (69.3)
Cocaine	45 (35.4)
Cannabis	22 (17.3)
Other	14 (11.1)
Multiple	38 (29.9)
Psychiatric history	
Depression	77 (60.1)
Suicidal thoughts/acts	22 (17.2)
Anxiety disorder	16 (12.5)
Psychosis	32 (25.0)
Other	9 (7.0)

Table 2. Presenting symptoms ($n=187$) and diagnoses given ($n=137$)

	Attendees <i>n</i> (%)
Symptom	
Physical	115 (62.5)
Intoxication/withdrawal/detoxification request	53 (28.8)
Low mood/anxiety	35 (19.0)
Medication request	24 (13.0)
Social problems	22 (12.0)
Suicidal thoughts/acts	11 (6.0)
Psychotic symptoms	11 (6.0)
Other psychiatric symptoms	13 (7.1)
Diagnosis	
Drug intoxication/withdrawal/misuse	36 (26.3)
Alcohol intoxication/withdrawal/misuse	29 (21.2)
Physical complications of substance misuse	20 (14.6)
Psychosis	10 (7.3)
Depression/anxiety	9 (6.6)
Other psychiatric disorder	8 (5.8)
Physical disorder	25 (18.2)

both presenting complaints and diagnoses given in these attendees were predominantly related to physical disorder or substance misuse. Diagnosis of depression and anxiety was unusual.

Table 3 shows highly significant associations between current psychiatric morbidity and outcome of the Crisis Open Christmas consultation. These include increases in initial non-pharmacological management (assessment and reassurance, healthcare advice, or referral to shelter Samaritan service), referral to the shelter substance misuse team, referrals to hospital (medical and psychiatric) and re-presentation to the shelter medical centre. Overall, this represents an increased use of healthcare resources.

Discussion

This large, cross-sectional study is unusual in focusing on psychiatric morbidity routinely recorded during primary care consultations among a predominantly homeless population. Recorded prevalence of both lifetime and



Table 3. Outcome according to presence of current psychiatric morbidity

	No current morbidity (n=410)	Current morbidity (n=187)	χ^2	P
	n (%)			
Immediate treatment				
Non-pharmacological management	84 (20.4)	87 (47.0)	44.37	< 0.001
Psychotropic medication	1 (0.2)	12 (6.5)	23.37	< 0.001
Other medication	303 (73.5)	80 (43.2)	50.97	< 0.001
Dressing/stitch removal	24 (5.8)	6 (3.2)	0.46	0.50
Left early	4 (1.0)	5 (2.7)	2.61	0.11
Referral				
Shelter substance misuse team	0 (0.0)	28 (15.1)	67.02	< 0.001
Acute hospital referral	10 (2.4)	21 (11.4)	20.83	< 0.001
Re-presentation	129 (31.3)	73 (39.5)	3.79	0.05

current psychiatric morbidity was high, and current symptoms were associated with increased health service use.

Recorded rates of lifetime and current psychiatric morbidity in this study are comparable to those seen in previous research using self-report measures (Scott, 1993; Gill *et al*, 1996), although use of observer report, longitudinal measures and diagnostic instruments is known to be associated with higher recorded rates of disorder in this population (Goldfinger *et al*, 1996). As in other studies (Bridges & Goldberg, 1985; Feldman *et al*, 1987), many attendees with psychiatric morbidity presented with physical symptoms or acute problems related to substance misuse. Depression and anxiety were rarely diagnosed, and a diagnosis of substance misuse was frequently not followed by referral to substance misuse services, suggesting that important opportunities for intervention were missed.

Overall, few psychotropic medications were prescribed, as the Crisis Open Christmas medical service does not dispense benzodiazepines, atypical antipsychotics or antidepressants. Given the known association between physical and psychological morbidity in the homeless (Gill *et al*, 1996; Desai & Rosenheck, 2005), the association between current psychiatric morbidity and reduced overall medication prescription at the Crisis Open Christmas is surprising. However, increased rates of both acute referral outside the shelter and re-presentation within the shelter demonstrate that the high level of health need typically found in homeless people with mental illness is associated with increased health service use, particularly for acute services (Stein & Gelberg, 1997).

Although the large sample size and small number of attendees excluded because of lack of information are important strengths of the study, there are also some limitations. As a retrospective study, it relied on good-quality data having been collected during routine clinical practice, and levels of missing data were of concern for some items. No diagnostic measures were used, and the true prevalence of psychiatric disorder in the sample is therefore unknown. The unusual service context of the study also means that generalisation may be difficult,

although the demographic similarity between this and previous samples of homeless people in Britain is encouraging. Finally, since these data are cross-sectional, the impact of the high incidence and remission rates of mental illness in the homeless is unclear (Fichter & Quadflieg, 2005). Further longitudinal data are therefore essential to inform service planning.

Although previous studies have explored both clinical and economic aspects of different models of service provision for homeless people with mental illness (Rosenheck, 2000), the challenge of creating an initial engagement with services remains. In this context, opportunities to identify and treat mental health problems must be taken whenever possible. Interventions within the shelter environment have the potential to increase engagement with mainstream services (Bradford *et al*, 2005), and this is particularly important for the Crisis Open Christmas, which operates for only 1 week per year. The impact of mental health training for shelter staff has received little attention (Vamvakas & Rowe, 2001), but this study suggests that improved training of Crisis staff in the detection and management of mental health problems should be instituted, and its impact be systematically evaluated. Such training should aim to increase engagement with mainstream mental health services as the first step towards reducing the burden of psychiatric morbidity in this vulnerable group.

Declaration of interest

M.H. worked as an unpaid volunteer in the Crisis Open Christmas medical service.

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Antipsychotic prescribing patterns in care homes and relationship with dementia

AIMS AND METHOD

To determine the prescribing patterns for antipsychotics in care homes for the elderly, a cross-sectional study was carried out using data from the intervention group of a randomised controlled trial of medication review in care homes.

RESULTS

Of 331 residents studied, 67 (20%) were prescribed an antipsychotic (70% atypical); 57 of these (85%) did not have a diagnosis of a psychotic disorder. The antipsychotic prescribing rate was 32% (46 out of 146) for those with dementia and 10% (17 out of 174) for those without dementia. A quarter (82 out of 331)

had received a medication review by the general practitioner in the preceding 12 months.

CLINICAL IMPLICATIONS

One-fifth of residents were prescribed an antipsychotic with little evidence of review. Systems should ensure residents' treatment is reviewed regularly.

The use of antipsychotics by care home residents has been of concern for many years. In the USA, the prescription of antipsychotics to up to 55% of nursing home residents led to the introduction, in the Omnibus Reconciliation Act 1987, of legal restrictions on the use of these drugs (Lee *et al*, 2004). In the UK, antipsychotic prescribing rates to care home residents ranging from 24 to 28% have been reported (McGrath & Jackson, 1996; Passmore *et al*, 1996; Osborne *et al*, 2002; Fahey *et al*, 2003). Many of the residents of these homes have Alzheimer's disease or other forms of dementia, and treatment of behavioural and psychological symptoms of dementia may be one reason for use of these drugs. However, there is only limited evidence for their efficacy for behavioural and psychological symptoms despite the widespread use (Schneider *et al*, 1990; *Drugs and Therapeutics Bulletin*, 2003; Lee *et al*, 2004). A recent systematic review concluded that further evidence is

required before these drugs can be endorsed (Lee *et al*, 2004).

Antipsychotics are associated with significant harm, including an increased risk of falls (Evans, 2003) and long-term cognitive decline (Wisniewski *et al*, 1994; McShane *et al*, 1997). After concerns about cardiac safety, the Committee on Safety of Medicines placed restrictions on the prescribing of thioridazine and sertindole; droperidol was discontinued by the manufacturer (Medicines and Healthcare Products Regulatory Agency, 1999, 2000, 2001). An increased risk of ischaemic stroke has been associated with atypical antipsychotic use in elderly patients with dementia (Medicines and Healthcare Products Regulatory Agency, 2004), and this led the Committee on Safety of Medicines to issue guidance that risperidone and olanzapine should not be used for treating behavioural symptoms of dementia. A more recent study suggests that the risk of ischaemic stroke is