

# Use of psychotropic medication among psychiatric out-patients with personality disorder<sup>†</sup>

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**Aims and method** This survey was conducted to ascertain the use of psychotropic medication in the treatment of patients with a primary diagnosis of personality disorder within a community mental health team. A sample of 113 patients were identified, their notes were reviewed, and details of current medications and diagnoses recorded.

**Results** Four-fifths of patients were prescribed at least one psychotropic medication. The most commonly prescribed medication class was antidepressant, comprising almost half of prescriptions. The total annual cost across 107 patients was £37 000.

**Clinical implications** Medication is commonly prescribed to people with personality disorder but more needs to be known about why prescriptions are started and stopped, what the benefits are, and how these are judged by patients and care teams.

**Declaration of interest** None.

Personality disorder is a contentious diagnostic category and therapeutic area which engenders significant debate about diagnostic criteria and validity.<sup>1</sup> The prevalence of personality disorder in a community sample was found to be 4.4%,<sup>2</sup> and prevalence in psychiatric hospitals can range from 36 to 67%.<sup>3</sup> The rate of borderline personality disorder in the general population is 2% but is about 20% in people receiving psychiatric in-patient care.<sup>4</sup> There is some evidence that medication can help in treating symptoms associated with personality disorder such as affective dysregulation and impulsive aggression.<sup>5</sup>

Much of the research evidence relates to borderline personality disorder, but a Cochrane review of pharmacological interventions for people with borderline personality disorder found little supportive evidence from high-quality trials, although the positive effect of antidepressants could be considerable.<sup>4</sup> Despite this lack of clear evidence, it has been found that medication was prescribed for in-patients with borderline personality disorder to a greater extent than for other psychiatric patients,<sup>6</sup> and patients – particularly those with borderline personality disorder – often exhibit suicidal attempts which may involve the use of prescribed medication.<sup>6</sup> Out-patients with borderline personality disorder were also found to have been prescribed a greater number and range of psychotropic medications compared with people with other types of personality disorder or no Axis II disorder,<sup>7</sup> and it has been reported that, in follow-up studies of patients with borderline personality disorder, over 75% had received polypharmacy at one point.<sup>8</sup>

Such patterns may change over time. One study found that the use of psychotropic medication increased slightly between 1998 and 2003 in patients with a diagnosis of

personality disorder associated with emotional instability: the use of atypical antipsychotics and selective serotonin reuptake inhibitors (SSRIs) increased but prescriptions of more conventional antipsychotics and benzodiazepines declined.<sup>9</sup> Despite these reports, there are surprisingly few surveys of routine prescribing for people with personality disorder and no clear guidelines on what should be prescribed.<sup>10</sup> The present study starts to fill this gap and helps to increase understanding of how mental healthcare services should respond constructively to personality disorder; its aims were to describe which medication was being prescribed to patients with a diagnosis of a personality disorder being seen by psychiatrists in a community mental health team, and to investigate the drug classes and doses used, the prevalence of polypharmacy and drug costs.

## Method

Patients with a primary diagnosis of personality disorder (ICD-10 codes F60–61, F21)<sup>11</sup> under the care of a community mental health team were identified by searching the Nottinghamshire Healthcare NHS Trust computer database and asking the consultants to identify such individuals. Only patients who were currently under the care of the consultant were included. Attempts were made to find and extract information from the notes of all 113 of the identified patients, relating to the period during which they had been under the care of the consultant. Gender and age were documented and the diagnosis, when clear from the notes, was recorded. In cases in which the patient was currently receiving psychotropic prescription medication, that prescription was recorded with information on dosage and duration. Historical changes in dosage of that formulation were also noted.

<sup>†</sup>See invited commentary, pp. 86–88, this issue

Prescriptions were categorised using *British National Formulary (BNF)* categories.<sup>12</sup> Data were analysed using the software R 2.4.0.<sup>13</sup> The analyses were exploratory and descriptive rather than inferential, the data being census data. The null hypothesis was that there would be no difference in the prescription of medications in relation to gender or classification of personality disorder.

## Results

Notes were incomplete for 9 of the 113 patients but sufficient data for analyses were located for all 113. Sixty-four (57%) patients were women and ages ranged from 19 to 67 years, with a mean of 39 years and median of 38 years. Men and women did not differ statistically significantly on age (Mann-Whitney test,  $P = 0.4$ ). Diagnosis was unclear in four cases. Data on the 113 patients contained 346 entries concerning drug, dose and time.

## Diagnoses

Of the 113 patients, 2 had an ICD-10 diagnosis of schizotypal disorder (F21) but no F60 diagnosis. These patients were included because schizotypal disorder is part of Axis II in DSM-IV.<sup>14</sup> Four patients were identified by the consultants as having a personality disorder, but there was no specific diagnosis on computer records or file review. These patients were assigned a working diagnosis of 'personality disorder not otherwise specified' (F60.9). In total, 17 (15%) patients had more than one personality disorder diagnosis from ICD-10, and 63 (56%) patients had a diagnosis of emotionally unstable personality disorder. Six patients had Axis I comorbidity which might have influenced prescribing. Two of these patients had a diagnosis of schizophrenia, one had a diagnosis of delusional disorder and three had

comorbid diagnoses of bipolar affective disorder. These six patients were excluded from further analysis of the data-set.

## Medication

Twenty-two patients (21%) were not taking any psychotropic medication. Of the other 85 patients, 2 were receiving intramuscular depot medication. Forty-five different preparations were being prescribed, two of which were variants of the same drug, venlafaxine: regular and modified release. The analysis of the patient sample according to number of drugs prescribed is shown in Table 1.

The preparations were from 11 *BNF* categories,<sup>12</sup> but 4 were different antidepressant categories. The list of current prescriptions for patients without Axis I disorders ( $n = 85$ ) was anti-epileptic ( $n = 7$ ), antimanic ( $n = 7$ ), antimuscarinic ( $n = 2$ ), antipsychotic ( $n = 38$ ), antidepressant ( $n = 72$ ), beta-blocker ( $n = 1$ ) anxiolytic ( $n = 8$ ) and hypnotic ( $n = 16$ ). Of the 151 prescriptions, 6 were above *BNF* recommended doses,<sup>12</sup> although for 3 of these the dose was below the *BNF* limit for exceptional circumstances (Table 2). For all 24 patients prescribed anxiolytic or hypnotic medication, end dates were unclear, contravening *BNF* advice that these medications are for short-term use only.<sup>12</sup> The longest such prescription was for nitrazepam, which had been ongoing for 6 years 4 months.

## Cost

The mean monthly cost of these prescriptions per patient, based on the patient's current prescription, was £26.48 if the patients who were not prescribed medication were included and £33.33 each month if restricted to those patients who were prescribed medication. The total annual cost for the 107 patients was £36 935.

**Table 1** Polypharmacy rates

	Number of drugs prescribed				
	One	Two	Three	Four	Five
Patients, $n$	42	25	14	3	1
Percentage of sample, % (95% CI) <sup>a</sup>	39 (31–49)	23 (16–32)	13 (8–21)	3 (1–8)	1 (0.05–5)
Percentage of patients on medication, % (95% CI) <sup>b</sup>	49 (39–60)	29 (21–40)	16 (10–26)	4 (1–10)	1 (0.06–6)

a. Sample size  $n = 107$ .

b. Patients on medication  $n = 85$ .

**Table 2.** Medication exceeding *British National Formulary* limits

Drug	Prescribed dose	Dose, mg		Patients, $n$
		Maximum recommended dose <sup>a</sup>	Maximum dose in exceptional circumstances <sup>a</sup>	
Amitriptyline	300	200	200	1
Dosulepin	225	150	225	2
Mirtazapine	60	45	45	1
Trazodone	400	300	600	1
Zopiclone	15	7.5	7.5	1

a. *British National Formulary* recommendation.<sup>12</sup>

## Discussion

In this study the most common personality disorder in patients being seen by a community mental health team was emotionally unstable personality disorder. Some patients included in this study were felt by the clinician to meet or have met the criteria for several personality disorders. The majority of patients with a primary diagnosis of personality disorder were prescribed at least one psychotropic medication. Over half of the patients who were prescribed medication were receiving more than one psychotropic drug. The most commonly prescribed classes of medication were antidepressants and antipsychotics. Within the antidepressant categories prescribed, SSRIs were the most commonly used. This may relate to their improved side-effect profile and the clinician's concerns about the safety of the medication if the patient takes an overdose. Indeed, the draft guidelines on borderline personality disorder from the National Institute for Health and Clinical Excellence (NICE) suggest that safety in overdose, as well as low addictive properties, minimal potential for misuse and low side-effect profile, should be taken into account when choosing a drug for people with borderline personality disorder.<sup>15</sup>

The majority of prescriptions were within *BNF* limits. The main concern was the longer-term use of hypnotic and anxiolytic medications where these prescriptions were not always regularly reviewed. However, the total cost of the medication usage was high given the current lack of evidence on the effectiveness of these drugs.

The draft NICE guidelines on borderline personality disorder were published during the submission of this paper, and recommend that drug treatment should not be used for the core disorder or for individual symptoms of the disorder.<sup>15</sup> The guidelines also advise that prescribers should take into account the psychological role of prescribing and the impact that prescribing decisions might have on the therapeutic relationship and the overall care plan.<sup>15</sup>

In many cases the treatment of personality disorder is focused on the symptoms, and the use of multiple psychotropic medications may be due to the symptom clusters observed. In one study, symptoms of impulsive-behavioural dyscontrol predicted the use of antipsychotics and anticonvulsants. It was suggested that prescribers might be influenced by considerations such as the presence of comorbidity and the level of functional impairment.<sup>16</sup> It seems likely that some prescribing for people with personality disorder is simply to treat associated or concurrent Axis I disorders. However, it may also be that some prescribing is part of a transaction of attachment or support that may have no pharmacological value at all and may sometimes be suspected to be of low pharmacological value by one or both parties. It would appear that surveys and more detailed qualitative studies might throw useful light on this, ideally linked with double-blind discontinuation studies.

What was unclear in our study was the prevalence of comorbidity and the effectiveness of treatment. There is evidence that drug treatment can improve symptoms, but we need to be cautious when prescribing because of the risk of a countertransference response.<sup>8</sup>

The limitations of this survey were that in most cases no formal diagnosis of personality disorder was made using a recognised diagnostic instrument such as the Interna-

tional Personality Disorder Examination, and it may also be that some patients with a diagnosis of personality disorder were missed. The survey was limited to patients within a particular community mental health team, and did not take into account people who were not known to mental health services with a possible diagnosis of personality disorder. It may be that patients with personality disorder who are seen in secondary services are those who are more likely to require medication for their symptoms or who have Axis I comorbidity.

In conclusion, this study helps towards the understanding of what is prescribed in routine practice within community mental health teams. However, it does not encompass the reasons that medications might have been started or discontinued, or what the perceived benefits of the medications were by both patients and clinicians.

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## COMMENTARY

# Treating personality disorder in community mental health teams

Commentary on . . . Use of psychotropic medication among psychiatric out-patients with personality disorder<sup>†</sup>

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**Summary** Although personality disorders are prevalent conditions and the cause of considerable morbidity, their management remains controversial. The rationale for using psychotropic medication in these conditions is poorly articulated and its evidence base is weak. Nonetheless, psychiatrists continue to prescribe medication for this group as the accompanying paper makes clear. What is less clear is their reason for doing so, as there are frequent co-occurring conditions that might justify the use of medication in their own right. If the field is to progress, there is no substitute for well-designed randomised controlled trials and these ought to be a priority in the setting of any research agenda.

**Declaration of interest** None.

The recent National Institute for Health and Clinical Excellence (NICE) guidance on the role of medication, especially for borderline personality disorder, has provoked not only comment but concern among practitioners as the recommendations were unusually trenchant (i.e. medication should not be used routinely for this condition).<sup>1</sup> What are clinicians to make of this guidance and how will it affect their practice? More generally, what is the practice in prescribing for personality disorder within community mental health teams (CMHTs)?

It is probably fair to say that we simply do not know the answer to this last question as few National Health Service (NHS) trusts systematically collect good-quality treatment data on their patients, and fewer still interrogate such data and publish it. Hence, the report from Baker-Glenn and her colleagues on the use of psychotropic medication for those with a primary diagnosis of personality disorder in a community mental health team is especially welcome.<sup>†</sup> The authors found that for the 107 patients considered, 77% had been prescribed at least one psychotropic medication. Not surprisingly, in almost half of the sample the most commonly prescribed medication was an antidepressant.

The total annual cost across the 107 patients (6 were excluded) was almost £37 000. An important point implied by the authors is that their sample comprised those who were actively seeking treatment (e.g. 56% had a diagnosis of emotionally unstable personality disorder), whereas it is characteristic of many of those with personality disorder to reject treatment.<sup>2</sup> Hence that ‘iceberg’ of unmet need among those with personality disorder who, despite significant morbidity, either never seek mental health interventions, or having sought them are summarily rejected, cannot be addressed by this survey – an omission candidly acknowledged by the authors.

Before making some general observations, it is worth commenting on one point which, to this reader at least, is unclear from the survey – and that is length of time during which the survey occurred. Although the authors state that this was based on the time ‘during which they [the patients] had been under the care of the consultant’, this, unfortunately, does not take us very much forward and it raises the following problem – the individual could have developed an Axis I condition in the past for which the medication might have been appropriately instituted. As comorbidity is the rule rather than the exception in those with personality disorder,<sup>3</sup> with major depression being especially prevalent, it could have been the case that the prescribing of an

<sup>†</sup>See original paper, pp. 83–86, this issue.