

Article

Cross-sectional survey of patients in receipt of long-term repeat prescriptions for antidepressant drugs in primary care

Gillian Cruickshank BSc MRPharmS PhD

Practice Pharmacist, Princes Street Surgery, Dundee, Scotland, UK

Steve MacGillivray RMN MA (Hons)

Senior Research Fellow, Alliance for Self Care Research, Tayside Institute for Health Studies, School of Social and Health Sciences, University of Abertay, Dundee, Scotland, UK

David Bruce MBChB DRCOG DCH MRCP DipMedEd

General Practitioner and Director of Postgraduate General Practice Education, Princes Street Surgery, Dundee, Scotland, UK

Anne Mather BSc MSc

Senior Mental Health Nurse, Advanced Intervention Service, Ninewells Hospital, Dundee, Scotland, UK

Keith Matthews MB ChB MRCPsych MD PhD

Professor of Psychiatry, Section of Psychiatry and Behavioural Sciences, Division of Pathology and Neuroscience, University of Dundee, Ninewells Hospital, Dundee, Scotland, UK

Brian Williams BSc PhD

Director of the Social Dimensions of Health Institute, University of Dundee, Scotland, UK

ABSTRACT

This cross-sectional survey describes the clinical characteristics of 92 patients from across 12 general medical practices, in receipt of a long-term repeat prescription of an antidepressant for the treatment of depression. Psychiatric diagnoses were determined using the Schedule for Clinical Assessment in Neuropsychiatry. Fifty-three participants (57.6%) failed to meet criteria for any psychiatric diagnosis (95% confidence interval (CI): 47.5-67.7%). Independent clinical assessments

based upon diagnoses and other clinical data indicated that 26 (31.0%) participants (95% CI: 28.9-49.7%) had no clear clinical reason for continued receipt of an antidepressant. Reasons for the continued use of antidepressants in this population require further investigation.

Keywords: antidepressant drug prescribing, depression, primary care, structured assessment

Introduction

At any point, approximately 10% of women and 7% of men are estimated to be suffering from a depressive disorder.^{1,2} Up to 30% of people suffer from a depressive disorder at some point in their life,³ with around 18% experiencing chronic symptoms.⁴

Research on major depressive disorder in secondary care settings indicates that the longer-term use of antidepressant medication is demonstrably beneficial for those who experience recurrent depressive disorder,⁵ or where there has been a prolonged,

severe and disabling episode.^{6,7} Although evidence exists to support the effectiveness of antidepressant medication among primary care patients,^{8,9} little is known regarding their actual longer-term clinical use within general practice settings. We therefore sought to describe the clinical characteristics of people receiving long-term prescriptions for antidepressant drug treatments in primary care, and assess whether such prescriptions were consistent with the contemporary evidence base and relevant clinical guidelines.

Method

Prior permission from the Tayside Research Ethics Committee was obtained.

Sample

Twelve general medical practices (GMPs) in Tayside were recruited from urban (7), semi-urban (4) and rural (1) settings. A total of 1257 individuals aged over 18 years and prescribed an antidepressant drug for more than 18 months were identified from the GMPs' prescribing databases. This represented 1.8% of the practice population ($n = 69\ 037$). A random sample of 442 potential participants was obtained after clinician-directed exclusions (for example, prescription of antidepressant drug for chronic pain). One hundred and twenty-three participants (27.8%) opted in to the study. Twenty-eight were subsequently excluded for three reasons: withdrawal of consent to participate (25), presence of significant cognitive impairment (2), and no longer prescribed an antidepressant (1). Ninety-two people were eventually interviewed.

Data collection

DSM-IV (Diagnostic and Statistical Manual of Mental Disorders) and ICD-10 (International Classification of Diseases) psychiatric diagnostic data were collected using the SCAN (Schedules for Clinical Assessment in Neuropsychiatry) structured interview version 2.1.¹⁰ Standardised observer rating scales for depression severity were completed (the HAM-D₁₇ (Hamilton Depression scale) and MADRS (Montgomery-Åsberg Depression Rating Scale)), and a detailed case note review was performed. In the absence of evidence-based guidelines for this particular patient group, an assessment of the appropriateness of a continued prescription requires a clinical judgement. In order to judge appropriateness of prescribing, a general practitioner (DB) and psychiatrist (KM) independently

examined data from case notes, DSM and ICD diagnoses for *both* representative episodes, and current health status, as well as symptom burden as quantified by the HAM-D₁₇ and MADRS scores. Subsequently, they indicated whether, in their judgement, current prescribing was 'appropriate', 'inappropriate', 'neither', or there was 'insufficient information to make a judgement'. Inter-rater agreement was then calculated. Participants were also asked to indicate their willingness to stop their antidepressant or change the dose.

Analysis

Data were analysed with SPSS version 12.0, using descriptive statistics and confidence intervals where appropriate. Diagnoses were analysed by DSM-IV criteria. Kappa coefficients were used to assess agreement between raters.

Results

Sixty-one (66.3%) study participants were female and 31 (33.1%) male. Mean age was 58 years (see Table 1). There was no significant difference in age between men and women; 29% received a tricyclic

Table 1 Demographic and clinical characteristics

Characteristic ($n = 92$)	
Sex	<i>n</i> (%)
Female	61 (66.3)
Male	31 (33.7)
Mean age (years)	58.27
Percentage on tricyclic antidepressant	29
SCAN-derived current DSM-IV diagnosis	<i>n</i> (%)
No psychiatric diagnoses	53 (57.6)
Phobias	29 (31.5)
Depressive disorder	27 (29.3)
Drug dependence (excluding nicotine)	15 (16.3)
Sleep disorders	10 (10.9)
Psychosis	3 (3.3)
Other mood disorder	3 (3.3)
Anxiety	2 (2.2)
Obsessive-compulsive disorder (OCD)	2 (2.2)

antidepressant and 71% other types of antidepressants.

The majority of participants (57.6%; 95% confidence interval (CI) 47.5–67.7%) were found not to meet criteria for *any* current DSM-IV diagnosis (see Table 1). Anxiety-related diagnoses, including phobias and obsessive-compulsive disorder (OCD), were most common (35.9%; 95% CI 26.1–45.7%). Fewer than one-third (29.3%) of participants met criteria for a diagnosis of a depressive disorder; 13% of participants had a major depressive disorder, 3% had dysthymia, and 6% had bipolar depression. The mean age of those with a DSM-IV diagnosis was 54.8 years compared to 60.1 years for those with no psychiatric diagnosis ($P = 0.03$).

Of the 53 people with no DSM-IV diagnosis, 41 (77.4%) also had no evidence of significant depressive symptoms according to the HAM-D₁₇. Similar results were found using the MADRS: 35 (66.0%) scored within the healthy population range (see Table 2).

Clinician judgement of the appropriateness of long-term antidepressant therapy

Agreement between raters was high ($\kappa = 0.78$). The general practitioner (GP) rater judged 52 (62.7%) people were receiving an antidepressant appropriately and 29 (34.9%) inappropriately, compared to 51 (61.4%) and 29 (34.9%), respectively for the psychiatrist. Both clinicians agreed that 26 of the 83

patients (31.3%; 95% CI 19.3–43.3%) were receiving an inappropriate drug treatment in the light of their current and previous diagnoses and available clinical data contained within the primary care case notes. There was agreement that 47 participants (56.6%; 95% CI 45.9–67.3%) were appropriately receiving an antidepressant.

Of the 26 adjudged to be inappropriately receiving an antidepressant, none were found to have severe depression on the HAM-D₁₇ or MADRS, and just one had moderate depression (see Table 2). Nineteen (73.1%) did not meet criteria for any relevant DSM-IV diagnosis. It was considered possible that some participants might have met criteria for a diagnosis of recurrent depressive disorder. DSM-IV does not allow for this diagnosis, but ICD-10 does. However, examination of the SCAN data revealed that *none* of these participants met criteria for such an ICD-10 diagnosis.

Attitudes among those on 'inappropriate' prescriptions

Thirteen (50.0%) of the 26 people considered to be receiving an antidepressant without strong clinical indication, reported that, if asked by their GP, they would be likely to stop taking their antidepressant. Nineteen (73.1%) said that they would agree to change their antidepressant, 13 (50.0%) would increase the dose, and 15 (60.0%) would agree to a reduction in the dose.

Table 2 HAM-D₁₇ and MADRS scores

	All participants ^a (<i>n</i> = 89)	Participants with no DSM-IV psychiatric disorder (<i>n</i> = 53)	Participants agreed as not requiring an antidepressant (<i>n</i> = 26)
HAM-D₁₇			
Mean, <i>n</i> (95% CI)	7.4 (6.1–8.7)	4.5 (3.3–5.7)	5.1 (2.7–5.3)
No or minimal depression, <i>n</i> (%)	51 (57)	41 (77)	19 (73)
Mild depression, <i>n</i> (%)	28 (32)	11 (21)	7 (27)
Moderate depression, <i>n</i> (%)	10 (11)	1 (1.9)	0
Severe depression	0	0	0
MADRS			
Mean <i>n</i> (95% CI)	9.5 (6.4–12.6)	5.7 (4.0–7.4)	6.5 (4.1–8.9)
Normal, <i>n</i> (%)	42 (47)	35 (66)	15 (57)
Mild depression, <i>n</i> (%)	32 (36)	17 (32)	10 (39)
Moderate depression, <i>n</i> (%)	15 (17)	1 (2)	1 (4)
Severe depression	0	0	0

^a HAM-D₁₇ and MADRS were not available for three participants.

Discussion

The paucity of syndromal diagnoses and the absence of significant depressive symptoms among a large proportion of our sample may, of course, be due to the effectiveness of the drug treatments themselves. Current National Institute for Health and Clinical Excellence (NICE) guidance, issued since this study was conducted, recommends that maintenance treatment should be re-evaluated, taking into account age, co-morbid conditions, and other risk factors in the decision to continue antidepressant treatment beyond two years.¹¹ Since our study found few reasons for continuation among a significant proportion of patients at 18 months, it is likely that the figure would be even higher at two years.

If approximately one-third of patients on long-term antidepressant therapy in primary care have no identifiable clinical justification for their prescription, then cessation strategies may need to be considered. However, identifying potential candidates for cessation may be problematic since the identifying formal diagnoses and quantifying symptom burden is time consuming.

This study has identified a potentially large population of patients who may benefit from alteration, or cessation, of their antidepressant therapy. This, we believe, further strengthens the case for a chronic disease-management approach to depression in primary care.¹² The challenge to clinical practice is to ensure that patients on long-term antidepressant therapy benefit from regular and structured assessments. This would allow patients and practitioners to make rational decisions regarding the need for continuation of their medication.

Study strengths and limitations

To our knowledge, this is the first study that has used a structured psychiatric diagnostic assessment (SCAN) together with validated symptom burden rating scales to establish robust diagnoses and symptom burden among patients prescribed long-term antidepressant medication in primary care.

We recruited from 12 volunteer practices in a single region rather than a national sample. Our response rate of 21% was perhaps influenced by the insistence of the local ethics committee that we permit clinician 'screening' at the level of the GMP and that we should use an 'opt-in' procedure that has the potential to lead to sampling bias.¹³ In our study, individuals with no psychiatric morbidity and who were amenable to changes in treatment may have been more likely to participate in the study. GPs believed that complex and patient-specific factors relating to past

clinical history and current social/clinical circumstances may appropriately account for some prescribing decisions. We acknowledged this possibility through independent examination of notes alongside all available diagnostic and symptom reporting. However, consideration of such idiosyncratic factors necessarily precludes the formulation of *a priori* criteria, and draws on clinical judgement. This may be regarded as both a strength and potential weakness of the study.

REFERENCES

- 1 Dowrick C, Casey P, Dalgard O *et al*. Outcomes of Depression International Network (ODIN). Background, methods and field trials. ODIN Group. *British Journal of Psychiatry* 1998;172:359–63.
- 2 Ayuso-Mateos JL, Vazquez-Barquero JL, Dowrick C *et al*. Depressive disorders in Europe: prevalence figures from the ODIN study. *British Journal of Psychiatry* 2001;179:308–16.
- 3 Mann A. *Depression and Anxiety in Primary Care: the epidemiological evidence. The prevention of depression and anxiety*. London: HMSO, 1992.
- 4 Lloyd KR, Jenkins R and Mann A. Long-term outcome of patients with neurotic illness in general practice. *BMJ* 1996;313(7048):26–8.
- 5 Edwards G. Long term pharmacotherapy of depression. *BMJ* 1998;316(7139):1180–1.
- 6 Thompson C and Thompson CM. The prescription of antidepressants in general practice: a critical review. *Human Psychopharmacology* 1989;4:91–102.
- 7 Kupfer DJ, Frankl E, Perel JM *et al*. Five-year outcome for maintenance therapies in recurrent depression. *Archives of General Psychiatry* 1992;49:769–73.
- 8 Arroll B, Ogston S, Reid I *et al*. Efficacy and tolerability of tricyclic antidepressants and SSRIs compared with placebo in primary care treated depression. A meta-analysis. *Annals of Family Medicine* 2005;3:449–56.
- 9 MacGillivray SA, Reid I, Sullivan F *et al*. Meta-analysis of the efficacy and tolerability of selective serotonin reuptake inhibitors compared with tricyclic antidepressants in primary care treated depression. *BMJ* 2003;326:1014.
- 10 World Health Organization. *SCAN: schedules for clinical assessment in neuropsychiatry, version 2.0*. Geneva: Psychiatric Publishers, International/American Psychiatric Press Inc, 1994.
- 11 National Institute for Health and Clinical Excellence. *Depression. Management of depression in primary and secondary care*. London: National Institute for Health and Clinical Excellence, 2004.
- 12 Kendrick T. Depression management clinics in general practice? *BMJ* 2000;320:527–8.
- 13 Junghans C, Feder G, Hemmingway H, Timmis A and Jones M. Recruiting patients to medical research: double blind randomised trial of 'opt-in' versus 'opt-out' strategies. *BMJ* 2005;331:940–3.

FUNDING

The study was funded by the Chief Scientist Office, Scottish Executive and was conducted independently by the authors.

CONFLICTS OF INTEREST

KM has received research funding from GlaxoSmithKline and Cyberonics Inc and honoraria associated with lecturing and/or travel from Eli Lilly, Wyeth, Medtronic and Bristol Myers, and has accepted consultancy fees and/or hospitality from Lundbeck and ANS Inc. SM has received research funding from

GlaxoSmithKline and Bristol Myers and honoraria associated with lecturing and travel from Novartis and Eli Lilly.

ADDRESS FOR CORRESPONDENCE

Dr David Bruce, Princes Street Surgery, Princes Street, Dundee, Tayside, Scotland DD2 6DG. Email: David.Bruce@nes.scot.nhs.uk

Received 28 April 2008

Accepted 9 October 2008

