References


Prevalence, duration and indications for prescribing of antidepressants in primary care

SIR—Depression is thought to occur in 10% of the adult population in Britain at any one time [1]. In older people, the incidence of depression rises to 15% [2]. We know that the volume of antidepressants prescribed in English primary care, where most people receive treatment for depression, has increased substantially over recent years [3, 4], but there are no data on the prevalence of antidepressant prescribing at patient level and the extent of continuation of prescribing in individual patients. Guidelines suggest withdrawal of antidepressants after 6 months of effective treatment [5], but long-term prescribing (2 years or more) may be appropriate if the illness is chronic or relapsing. A more worrying reason for long-term prescribing would be difficulty with stopping antidepressants because of unpleasant withdrawal reactions. Patients may also remain on treatment by therapeutic momentum—because the prescriber does not suggest or attempt withdrawal or does not review the continuing need for the medicine.

We aimed to identify the frequency of antidepressant prescribing in a typical English Primary Care Trust, how long these medicines were prescribed for and the reasons for long-term prescribing.

Setting

North Bradford PCT has a population of about 94,000 in a socioeconomically mixed urban and suburban area. The population is predominantly white British. There are 12 general practices, of which 11 (population of 81,221 in 2002) have clinical databases that allow suitable searches and were included in the study.
**Method**

Each practice database was searched for antidepressant prescriptions (acute or repeat) issued in the quarters commencing April 2002 and April 2004. An antidepressant was defined as any drug appearing in British National Formulary (BNF) section 4.3: antidepressants. The 2002 cohort was addressed to identify those being prescribed antidepressants in the quarter commencing April 2004. Separate searches were made for tricyclic antidepressants (TCAs) (BNF section 4.3.1), selective serotonin reuptake inhibitors (SSRIs) (4.3.3) and ‘other antidepressants’ [e.g. venlafaxine (4.3.4)].

For the second phase of the study, we took a sample of 140 patients (representing 5% of those who had been prescribed an antidepressant in both 2002 and 2004) to answer questions about how long patients had been prescribed antidepressants, the reason for prescribing and whether a review occurred. We based our sample size on the proportion of those who been prescribed a TCA, rather than another type of antidepressant. In our population, that rate was 48%. Taking a sample of 140 patients would give a population estimate with 95% confidence intervals within 8% of the actual figure, which we interpreted as being sufficiently accurate.

A diagnosis was sought from information in general practitioner records and hospital letters. The number of consultations with the general practitioner over a 2-year period was recorded. Evidence was sought from each consultation as to whether this was for a mental health reason. Evidence was also sought as to whether the patient was under review by a psychiatrist. The first antidepressant ever prescribed for the individual, the final antidepressant prescribed (up to April 2004) and the number of drug or dose changes between these two time periods were recorded.

**Results**

**How many patients are prescribed antidepressants?**

The rates of antidepressant prescribing in 2002 and 2004 are summarised in Table 1. The prescribing rates among the practices did not change between 2002 and 2004. Four per cent of males and 9% females were prescribed an antidepressant in 2004. In total 72% of those prescribed an antidepressant were females.

**How long do patients continue to be prescribed antidepressants?**

Of those prescribed an antidepressant in 2002, 48% (2,711/5,648) (practice range 33–55%) were still prescribed one in 2004. The continuation rate varied by antidepressant type (TCA 48%, SSRI 36% and ‘other antidepressants’ 45%), with the SSRI rate significantly lower than that of TCAs and ‘other’ (Wilcoxon signed rank test $z = 2.93, P = 0.003$, and $z = 2.76, P = 0.006$, respectively).

The mean duration of prescribing of antidepressants for those who were prescribed antidepressants in both 2002 and 2004 for different indications ranged from 4.8 to 7.7 years (Table 2).

**What was the documented monitoring of antidepressant prescribing?**

The mean age of the 5% sample (140 patients) was 59 years and 72% (101/140) were female. This compares with 72% in the total population and an average age of 57 years.

### Table 1. Antidepressant prescribing in 11 general practices: 2002 and 2004

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total population</td>
<td>Patients on antidepressants</td>
</tr>
<tr>
<td>All patients</td>
<td>81,221</td>
<td>5,648</td>
</tr>
<tr>
<td>Patients aged &lt;75 years</td>
<td>73,795</td>
<td>4,631</td>
</tr>
<tr>
<td>Patients aged 75+ years</td>
<td>7,426</td>
<td>1,017</td>
</tr>
</tbody>
</table>

### Table 2. Indication for patients prescribed an antidepressant in both 2002 and 2004 (phase 2 sample)

<table>
<thead>
<tr>
<th>Indication</th>
<th>Number of subjects $n = 140$ (%)</th>
<th>Mean duration of treatment (years)</th>
<th>Antidepressant type at 2002 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>62 (44)</td>
<td>4.8</td>
<td>Tricycles 28 (32)</td>
</tr>
<tr>
<td>Anxiety/depression</td>
<td>24 (17)</td>
<td>6.8</td>
<td>Tricycles 15 (17)</td>
</tr>
<tr>
<td>Anxiety</td>
<td>9 (7)</td>
<td>7.4</td>
<td>Tricycles 7 (8)</td>
</tr>
<tr>
<td>Pain</td>
<td>14 (10)</td>
<td>5.0</td>
<td>Tricycles 14 (16)</td>
</tr>
<tr>
<td>Insomnia</td>
<td>5 (4)</td>
<td>4.0</td>
<td>Tricycles 5 (6)</td>
</tr>
<tr>
<td>Other</td>
<td>13 (9)</td>
<td>6.0</td>
<td>Tricycles 7 (8)</td>
</tr>
<tr>
<td>No documented indication</td>
<td>13 (9)</td>
<td>7.7</td>
<td>Tricycles 11 (13)</td>
</tr>
<tr>
<td>Total</td>
<td>140 (100)</td>
<td></td>
<td>Tricycles 87 (100)</td>
</tr>
</tbody>
</table>
The mean number of general practitioner consultations was 11 over the 2-year period April 2002 to June 2004 (range 1–53). All subjects had at least one consultation with their general practitioner in the 2-year period. Despite this, 21% (30/140) [22/87 (25%) TCAs and 8/53 (15%) SSRIs] had no documented mental health consultation with either a general practitioner or psychiatrist during the 2-year period. Thirteen patients [13/140 (9%)] had no documented diagnosis and none of these patients had mental health consultations despite seeing the general practitioner eight times on average in 2 years (range 3–29); these patients were all prescribed TCAs. Patients with no documented review tended to have treatment prescribed for longer, 7.2 years compared with 5.4 years with review (t = 2.55, P = 0.12). Fifty four per cent (76/140) had no medicine or dose changes since initiation [46/76 TCAs (60%); 24/74 SSRIs (32%) and 6/74 ‘other antidepressants’ (8%)]. They were also older (68.4 years versus 57.4 years; t = 3.00, P = 0.003).

Discussion

We found high rates of antidepressant prescribing in primary care and high rates of long-term prescribing. Our data underestimate prescription rates for adults because the denominator includes children, who are rarely prescribed antidepressants. We are confident that the data do not contain discontinued prescriptions, because each practice has robust systems to address this. There are no national comparisons, but we have no reason to believe our sample is untypical of UK prescribing. A study from Italy [6] found that during a 12-month period, about 9.5% of the population aged 65 years and over were dispensed an antidepressant prescription. Lawreson et al. [7] found that over a 4-year period (between 1991 and 1996), 9.8% of the UK population received a prescription at some time for an antidepressant. The duration of prescribing was only studied up to 100 days after the first prescription; at 6 weeks, less than 50% of patients were still receiving an antidepressant prescription. Wilson et al. [8] found that 11% of a depressed population of older people were prescribed an antidepressant. Our study suggests that the rate of prescribing in England is now much higher and the number of long-term users may be greater than previously thought.

The mean duration of antidepressant prescribing in the cohort that was prescribed an antidepressant drug in both 2002 and 2004 was 5.7 years. Patients with no documented diagnosis tended to have been prescribed an antidepressant for even longer and have no documented mental health consultations. This suggests that these patients were having no review of their continuing need for the medicine.

The mean number of general practitioner consultations (11 over the 2-year period) is similar to the general UK population [9]. Although not all consultations were for a mental health reason, clearly any consultation would offer an opportunity for an antidepressant review. Yet despite all patients having an opportunity for a review, a fifth had no documented mental health consultations and nearly one in ten had no documented diagnosis. These results show that a high proportion of patients stay on antidepressants because of ‘therapeutic momentum’—the doctor appears not to suggest or attempt withdrawal and does not review the continuing need.

We analysed the duration of prescription by drug type. Despite a concern that SSRIs can cause discontinuation reactions and can be difficult to stop [10], we found that patients who were prescribed TCAs were more likely to have them prescribed for 2 years or more. This may be because the TCAs were being prescribed for indications other than depression and anxiety [26 (30%) of TCA and only 6 (14%) SSRIs prescriptions were prescribed for pain, insomnia or other reasons that were not anxiety or depression (Table 2)] and also because more patients who were prescribed TCAs had not had a review [(22/87) TCA versus (8/53) SSRIs].

There are many possible explanations for the high rates of long-term antidepressant prescribing. First, this may merely reflect a high prevalence of intractable long-term depression disorders. Second, patients may remain on antidepressants long term, because either the doctor is failing to review treatment or the patients wish to remain on long-term treatment even when they are no longer indicated.

We have shown that the level of long-term prescribing of antidepressants is much higher than previous studies suggest [6–8] and half of these people receiving treatment for more than 2 years seems high. We have prima facie evidence that some of this long-term prescribing may be inappropriate. Antidepressants are not trivial medicines and have potentially serious adverse effects and interactions. Long-term prescribing therefore needs to be justified. Such prescribing may be appropriate, but further work on the timing, benefits, hazards and outcome of antidepressant withdrawal would clarify this.

In the arena of antidepressant prescribing, our data confirm the previous evidence [11] that general practitioners do not consistently review long-term medication. We cannot say whether un-reviewed long-term prescribing is patient led, happens by doctor default or whether patient and doctor conspire (perhaps implicitly) not to take the risk of withdrawal. We suggest that doctors discuss the withdrawal of antidepressants with patients at least annually and that it would be good practice to record this transaction.

Key points

- Little is known about how many individuals are prescribed antidepressants and for how long or whether long-term prescribing is appropriate.
- This study demonstrates that a large proportion of the older population are prescribed antidepressants, and nearly half are prescribed antidepressants for more than 2 years.
- Further work is required to demonstrate the reasons for long-term prescribing.

Acknowledgements

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Conflict of interest statement

None of the authors have any conflicts of interest. The corresponding author has had full access to all the data in the study and has final responsibility for the decision to submit for publication.

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Validity and reliability of the Edmonton Frail Scale

SIR—Age is broadly recognised to confer a risk for adverse health outcomes, but it is an insensitive and non-specific measure for use in individual decision-making. Frailty has emerged to take its rightful place as a better measure for over a decade [1]. Despite general consensus that the concept of frailty is clinically useful, the lack of agreement on its definition and the challenge of its measurement by front-line health providers mean that frailty remains only ‘heir apparent’ to chronological age as a criterion to select older persons at risk [2].

Frailty is multidimensional, heterogeneous and unstable, thus distinguishing it from disability or ageing alone [3]. Rather, it is widely conceived of as a state of vulnerability. Frailty is measured in many ways, including ‘rules based’ instruments, summative impairment lists and algorithms derived from clinical judgement [4–6]. However much these tools might have advanced research in frailty, most are impractical for bedside screening by front-line providers because they require the multidimensional clinical data that constitute a comprehensive geriatric assessment (CGA) and/or require special training. Often, neither is available to the primary care providers who care for these patients. Furthermore, previously validated frailty assessments are time-consuming, making them impractical in more volume-driven settings, such as primary care physician’s office. We therefore developed and tested a brief and user-friendly screening interview for frailty in seniors commonly encountered by geriatricians in both the inpatient and outpatient settings.

Methods

Our objective was to assess the validity and reliability of the Edmonton Frail Scale (EFS) in a sample referred for CGA (Table 1). All patients aged 65+ years were approached for informed consent; exclusions were only for communication barriers (deafness, blindness or the need for translation), problems with manual dexterity or previous enrolment in our study. Patients were a referral population for CGA seen during July 2000 in acute care wards, rehabilitation units, day hospitals and outpatient clinics in Edmonton, Alberta, a major Canadian metropolitan centre (population one million).

A lay research assistant who had no formal medical training collected demographical and medical data and then administered the EFS [7]. The EFS samples 10 domains; the maximum score is 17 and represents the highest level of frailty. Two domains are tested using performance-based items: the Clock test [8] for cognitive impairment and the ‘Timed Get Up and Go’ [9] for balance and mobility. The other domains are mood, functional independence, medication use, social support, nutrition, health attitudes, continence, burden of medical illness and quality of life (all standard historical items in geriatric assessment).

All patients had a minimum of 1 h specialist CGA, which included a personal and informant history, a physical